

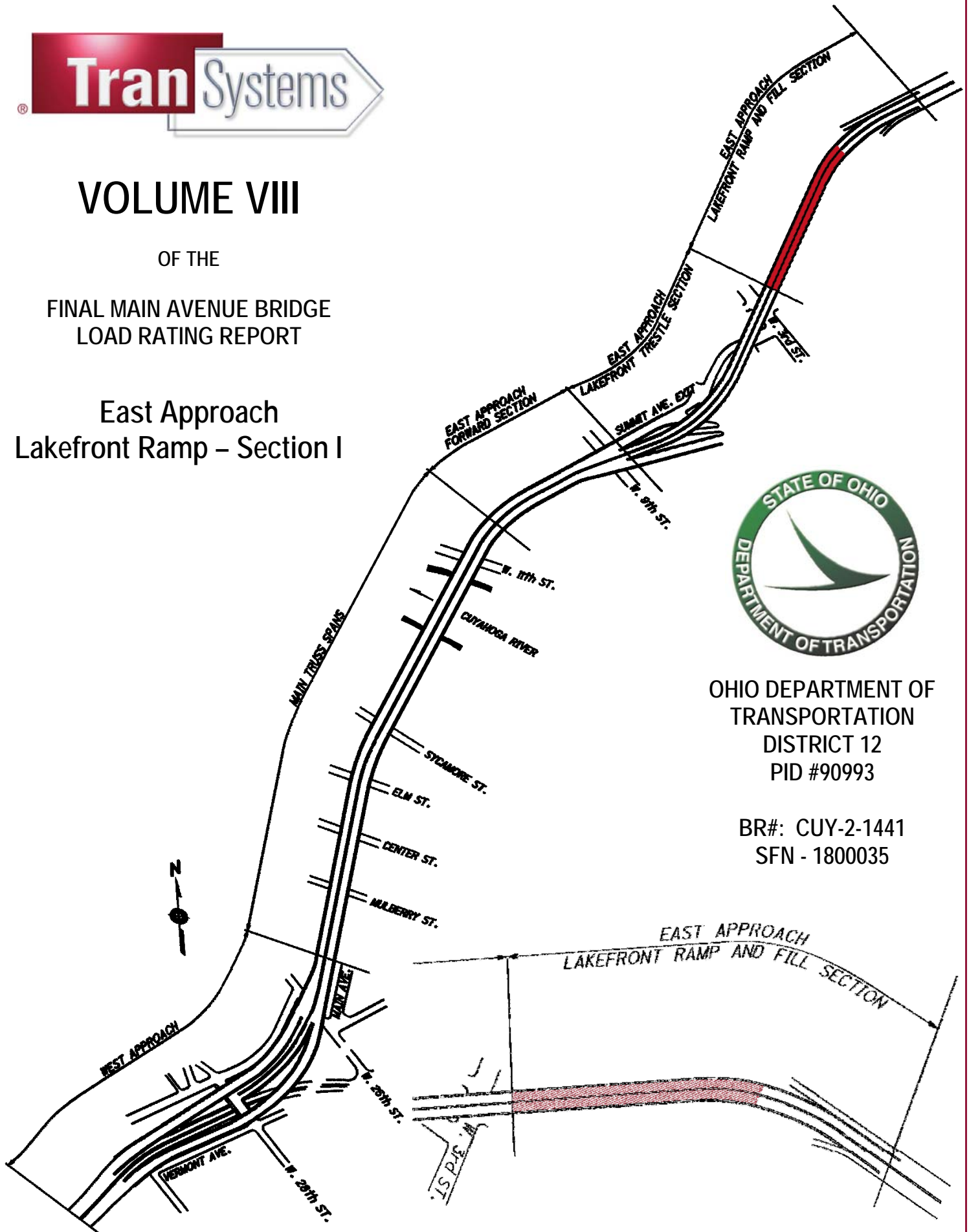


# VOLUME VIII

OF THE

FINAL MAIN AVENUE BRIDGE  
LOAD RATING REPORT

## East Approach Lakefront Ramp - Section I



OHIO DEPARTMENT OF  
TRANSPORTATION  
DISTRICT 12  
PID #90993

BR#: CUY-2-1441  
SFN - 1800035

## Volume VIII - Section Description

The CUY-2-1441 (Main Avenue) Bridge carries four to six lanes of State Route 2 traffic for 6580 feet through downtown Cleveland, over numerous local streets, RTA railroad tracks, Norfolk Southern/CSX railroad tracks and the Cuyahoga River. The bridge was fabricated and erected from 1938 to 1940. The West Approach, Main Truss Spans, and East Approach – Forward sections were opened to traffic on October 6, 1939; and the Lakefront Trestle and Lakefront Ramp were opened to traffic in 1940. The bridge was closed for a major rehabilitation project from April 13, 1991 to October 6, 1992. Work included replacing and widening of the deck, updating safety features, improving the drainage system, installing new floor system members, and strengthening or replacing deteriorated sections. The Main Avenue Bridge consists of five distinct sections (West Approach, Main Truss Spans, East Approach – Forward Section, East Approach – Lakefront Trestle, East Approach – Lakefront Ramp Section) of varying structure types within each secti

The Lakefront Ramp carries four lanes of traffic, beginning at West 3<sup>rd</sup> Street, continuing over the RTA and the Norfolk Southern/CSX railroad tracks, and terminating at the southeast entrance to Cleveland Browns Stadium. The superstructure consists of 3 riveted, built-up steel plate girders with rolled steel floorbeams and stringers. There are 19 stringer units with up to 10-span continuous stringers. The stringer span length is typically about 6'-0". The girders span between 138'-0" and 271'-0". The piers are steel-encased concrete.





---

**TABLE OF CONTENTS**  
**Lakefront Ramp – Section I**

Section I Summary ..... 1

    Deck ..... 4

    Stringers ..... 26

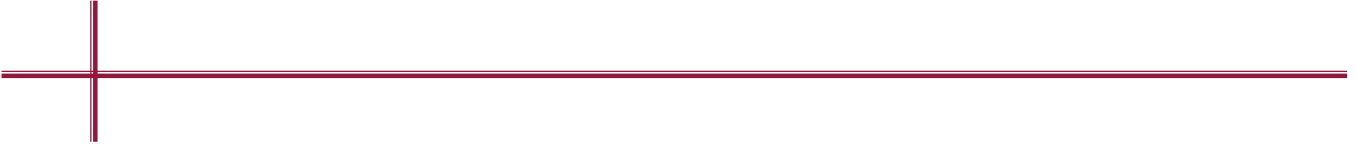
    Floorbeams ..... 329

    Girders Truck Train Loading ..... 682

    Girders Single Truck Loading ..... 809

    Columns ..... 1179

    Fatigue ..... 1212



**This Page Intentionally Left Blank**



## BRIDGE LOAD RATING SUMMARY REPORT

**CUY-2-1441**

### EAST APPROACH - LAKEFRONT RAMP

SFN	BRIDGE NUMBER	DISTRICT
1800035	CUY-2-1441	12
ORIGINAL CONSTRUCTION YEAR	REHABILITATION YEAR	OVERALL STRUCTURE LENGTH (FT)
1938 - 1940	1991 - 1992	6580
<b>FEATURE INTERSECTED:</b>	NUMEROUS LOCAL STREETS, RTA RAILROAD TRACKS AND THE CUYAHOGA RIVER	
<b>SPECIAL ASSUMPTIONS &amp; COMMENTS</b>		
<b>RATING &amp; ANALYSIS OPTION:</b>		
<b>LOAD RATING PURPOSE:</b>	LOAD RATING FOR FUTURE REHABILITATION RECOMMENDATIONS	
<b>RATING SOFTWARE:</b>	STAAD, CONSYS, MATHCAD	
<b>BASIS OF ANALYSIS:</b>	EXISTING PLANS AND FIELD MEASUREMENTS	
<b>METHOD OF ANALYSIS:</b>	LOAD FACTOR	
<b>DESIGN LOADING (ORIGINAL):</b>	H20-33	
<b>STRUCTURE RATING SUMMARY</b>		
LOADING & RATING TYPE	RATING FACTOR - RF (ROUNDED TO 2 DECIMAL POINTS)	RATING LOAD
INVENTORY CURRENT DESIGN	0.54	HS10.8
OPERATING CURRENT DESIGN	0.90	
OHIO LEGAL - 2F1	1.45	<b>OHIO LEGAL LOADS OVERALL MINIMUM RATING FACTOR</b>
OHIO LEGAL - 3F1	1.48	1.45
OHIO LEGAL - 4F1	1.72	<b>OHIO LEGAL LOADS OVERALL CONTROLLING TRUCK</b>
OHIO LEGAL - 5C1	1.48	3F1 & 5C1
RATED BY, PE#	REVIEWED BY, PE#	REPORT DATE
David Hoff, PE	Rodolfo Hutchinson, EIT	6/22/2012
AGENCY/FIRM	PHONE NUMBER	EMAIL
TranSystems	216-861-1780	<a href="mailto:ctquion@transystems.com">ctquion@transystems.com</a>

## East Approach - Lakefront Ramp Section I

**CUY-2-1441 Load Rating Analysis**  
**Main Ave Bridge**

Calculated: CTG  
 Checked: RAH

As-Built Controlling Rating Factor Summary							
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating
Deck	Deck	1.05	1.75	2.80	3.29	4.00	3.29
Stringers	Unit 19 Interior	0.54	0.90	1.45	1.70	2.07	1.70
	Units 12, 15, 16, 17 Int.	0.67	1.11	1.80	1.48	1.72	1.48
Floorbeam	Unit 5, FB40	1.27	2.13	3.51	2.48	2.63	2.45
	Bracket Unit 12, FB99	1.02	1.71	2.83	1.98	2.08	1.96
	Bracket Unit 14, FB112	1.01	1.69	2.89	2.04	2.19	2.01
Girder	North Girder Span 3	0.83	1.38	5.70	3.79	3.25	2.53
	South Girder Span 3	0.99	1.66	5.39	3.57	3.09	2.41
	South Girder Span 4	1.11	1.85	11.35	7.40	6.31	4.37
	South Girder Span 2	1.49	2.48	7.98	5.33	4.60	3.69
Girder (Truck Train)	South Girder Span 2	0.88	1.46	---	---	---	1.84
Column	Pier 38	---	---	284.13	185.32	157.90	---
Column (Truck Train)	Pier 38	13.14	21.95	---	---	---	28.10

As-Inspected Controlling Rating Factor Summary							
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating
Deck	Deck	1.05	1.75	2.80	3.29	4.00	3.29
Stringers	Unit 19 Interior	0.54	0.90	1.45	1.70	2.07	1.70
	Units 12, 15, 16, 17 Int.	0.67	1.11	1.80	1.48	1.72	1.48
Floorbeam	Unit 5, FB40	1.27	2.13	3.51	2.48	2.63	2.45
	Bracket Unit 12, FB99	1.02	1.71	2.83	1.98	2.08	1.96
	Bracket Unit 14, FB112	1.01	1.69	2.89	2.04	2.19	2.01
Girder	North Girder Span 3	0.83	1.38	5.70	3.79	3.25	2.53
	South Girder Span 3	0.99	1.66	5.39	3.57	3.09	2.41
	South Girder Span 2	1.00	1.66	10.17	6.64	5.66	3.91
	South Girder Span 4	1.35	2.25	7.22	4.82	4.16	3.33
Girder (Truck Train)	South Girder Span 2	0.88	1.46	---	---	---	1.84
Column	Pier 38	---	---	284.13	185.32	157.90	---
Column (Truck Train)	Pier 38	13.14	21.95	---	---	---	28.10

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 Inventory	0.54	19.44	HS10.8
HS20 Operating	0.90	32.40	HS18.0
2F1	1.45	21.75	145%
3F1	1.48	34.04	
4F1	1.72	46.44	
5C1	1.48	59.20	
Fatigue	-30.0 years remaining		



## **RATING ANALYSIS ASSUMPTIONS**

- Deck Rating : For the deck analysis assume a continuous Deck (between girder bays)
- Composite Loads: The Steel beams are non-composite structural members since there are no shear connectors between the steel beams and the deck; never the less assume that the DL composite load (i.e. barriers) and wearing surface are evenly distributed on all girders.
- For Fatigue take all riveted members as class "D" (Floor beams between Girders and @ overhangs). Main Girders are also Riveted members therefore use Class "D" description for Fatigue; besides these two, there is a welded connection between the Fascia and the Floor Beams at the Overhang with a Fillet Weld, this one also is defined as a class "D". The age in years of the Floor beams and Main girders components is 71.
- Fascia Stringers are continuous members connected with field splices at the end of their units. For the sake of simplicity, take the boundary condition at the begin and end of each Fascia unit (Fascias 1 or 2) as simply supported when doing the fascia members longitudinal analysis. The fascia reactions due to DL and LL (fascia assumed as being supported by the overhang Floor beams) will be used for the rating of the overhang floor beams.
- Assume the stringers are continuous members, simply supported at the end of their units.
- Multiple presence factors for Live Loads are taken into consideration only when Lever rule is used (i.e. main girders).
- Assume the Floor Beams (interior ones) are rigidly connected with the main girders. The vehicle LL acting on the interior Floor Beams is being transfered from the deck thru the interior stringer reactions (represented as point loads located at third points along the interior Floor Beams).
- The three main girders are being divided in different segments; North and South divided in 34 different segments meanwhile the center girder is divided in 32 different segments.
- The girders are analyzed under 2 train loadings (long span rating approach since at least one span on each girder is > 200'): HS20 TT with fixed axle spacing (additional adjacent single HS20 vehicle with variable axle spacing included) & OH5C1 TT (additional single OH5C1 vehicle also included). The HS20 TT under Inventory and operating Rating while the OH5C1 TT under Operating rating only. Additionally, rating was performed using (single) vehicles OH2F1, OH3F1 and OH4F1 under Operating.
- The fatigue analysis with the HS15 vehicle is performed at every point along the girders where there is a geometric transition (difference in thickness and size between the steel girder's cover plates).
- Single vehicles analized with CONSYS (single vehicle run from begin to end of bridge); train vehicles analized with STAAD PRO Live Load Generator by Adding maximum possible number of train vehicles on each span that contributes to worst case scenario (see hand calcs and sketches).
- The substructure consist in Composite Columns (concrete columns confined within a steel box). The Column is assumed as "short column" therefore ignoring any bending effect. The total axial strength of the column is equal to the contribution of the steel casing and the concrete material within the steel box. The columns are rated under HS20 TT (@ Inv. and Operating with an additional single HS20 Adjacent Truck); OH5C1 TT (with additional OH5C1 single vehicle at operating) and the 3 other remaining legal trucks OH2F1, OH3F1 and OH4F1 (these last three as single vehicles @ operating level). The Centrifugal effect due to LL was ignored since the only curved portion along section "I" starts right at the location of Pier 40 therefore it's influence on the pier # 40 is minimal.

# CONCRETE DECK SUMMARY SHEET

## East Approach - Section I

**CUY-2-1441 Load Rating Analysis**  
**Main Ave Bridge**

Calculated: RAH 3/14/2012  
Checked: DBH 3/14/2012

As-Built Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
CIP Deck	Unit 16	1.05	1.75	2.80	3.29	4.00	3.29	n/a

As-Inspected Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
CIP Deck	Unit 16	1.05	1.75	2.80	3.29	4.00	3.29	n/a

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 Inventory	1.05	37.80	HS21.0
HS20 Operating	1.75	63.00	HS35.0
2F1	2.80	42.00	280%
3F1	3.29	75.67	
4F1	4.00	108.00	
5C1	3.29	131.60	
Fatigue	0.00 years remaining		

**Reinforced Concrete Deck Rating** **CRITICAL SECTION AT UNIT 16 WHICH HAS THE LONGEST SPACING BETWEEN THE FASCIA 1 AND THE NORTH GIRDER (EQUAL TO 9.91')**

**Analysis and Rating References**

1. AASHTO, *Manual for Bridges Evaluation, 2010.*
2. AASHTO, *Standard Specifications for Highway Bridges, 2002.*
3. *Ohio DOT BDM*

**Structure Data:**

Deck Exterior Span (Fascia):  $S_{ext} := 9.91\text{ft} - 4\text{in} = 9.58\text{ft}$  (Sheet 537 Rehab Plans) & AASHTO 3.24.1.1

Deck Interior Span (Stringer):  $S_{int} := 6.5\text{ft} - 3.04\text{in} = 6.25\text{ft}$  (Sheet 537 Rehab Plans) & AASHTO 3.24.1.1

Deck Cantilever Overhang:  $S_{overhang} := 3\text{ft} + 7.25\text{in} = 3.6\text{ft}$  (Sheet 503 Rehab Plans)

Deck Thickness:  $T_{deck} := 6.75\text{in}$

Integral Wearing Surface:  $IWS := 0\text{in}$

Asphalt Wearing Surface Thickness:  $AWS := 1.25\text{in}$

Sidewalk Width:  $Sidewidth := 0\text{ft}$

Sidewalk Thickness:  $Sidethick := 0\text{in}$  Depth above deck thickness

Rail Type: 1'-9" Barrier (Enter Rail Type Number Here)

Rail Width:  $Railwidth := 1.75\text{ft}$

Date Re-Built: 1994 (Enter Rehab Date Here)

Concrete 28-Day Compressive Strength:  $f_c := 4500\text{psi}$  Sheet G9 Rehab Plans

Reinforcing Steel Yield Strength:  $f_y := 60\text{ksi}$  Sheet G7 Rehab Plans

Deck Top Reinforcement Cover:  $DTR_{cover} := 1.75\text{in} + \frac{6}{2.8}\text{in} = 2.1\text{in}$  Sheet 537 Rehab Plans  
 (To Centroid of Reinforcement)

Deck Bottom Reinforcement Cover:  $DBR_{cover} := 1\text{in} + \frac{5}{2.8}\text{in} = 1.3\text{in}$  Sheet 537 Rehab Plans  
 (To Centroid of Reinforcement)

Overhang Top Reinforcement Cover:  $DOR_{cover} := 1.75\text{in} + \frac{6}{2.8}\text{in} = 2.1\text{in}$  Sheet 537 Rehab Plans  
 (To Centroid of Reinforcement)

Deck Top Reinforcement Area:  $As_{DTR} := \frac{12}{7} \cdot 0.44\text{ft} \cdot \frac{\text{in}^2}{\text{ft}} = 0.8\text{in}^2$

Percent Effective:  $DTR\%_{eff} := 1.0$

Deck Bottom Reinforcement Area:  $As_{DBR} := \frac{12}{7} \cdot 0.31\text{ft} \cdot \frac{\text{in}^2}{\text{ft}} = 0.5\text{in}^2$

Percent Effective:  $DBR\%_{eff} := 1.0$

Overhang Top Reinforcement Area:  $As_{over} := \frac{12}{7} \cdot 0.44\text{ft} \cdot \frac{\text{in}^2}{\text{ft}} = 0.8\text{in}^2$

Percent Effective:  $DOR\%_{eff} := 1.0$

## **Dead Load Data:**

Unit Weight of Concrete:

$$\text{ConcWt} := 117 \cdot \frac{\text{lb}}{\text{ft}^3} \text{ (Sheet G9 rehab plans)}$$

Unit Weight of Asphalt Wearing Surface:

$$\text{AWSWt} := 150 \cdot \frac{\text{lb}}{\text{ft}^3} \text{ (Sheet G7 rehab plans)}$$

Rail Weight (Barrier):

$$\text{RailWt}_{\text{barrier}} := 462 \cdot \frac{\text{lb}}{\text{ft}}$$

Rail Weight (Median):

$$\text{RailWt}_{\text{median}} := 499 \cdot \frac{\text{lb}}{\text{ft}}$$

Additional Uniform Load on Deck:

$$\text{auld} := 0 \cdot \frac{\text{lb}}{\text{ft}^2}$$

Additional Line Load on Deck:  
(applied between curbs)

$$\text{alld} := 0 \cdot \frac{\text{lb}}{\text{ft}}$$

Location of Deck Line Load:

$$\text{ldll} := 0 \cdot \text{ft}$$

Additional Line Load on Deck Overhang:

$$\text{allo} := 0 \cdot \frac{\text{lb}}{\text{ft}}$$

Location of Deck Overhang Line Load:

$$\text{loll} := 0 \cdot \text{ft}$$



**Dead Load Moments:**

**Deck Interior Spans:**

b := 12·in

Mdead<sub>int\_pos</sub> := 0.333kip·ft

Max. Pos. Dead Load Mom.  
@ interior Bays (Unfactored )  
due to Deck + WS + Barrier  
(CONSYS).Between Stringer  
4 & the South Girder.

Mdead<sub>int\_neg</sub> := 1.762kip·ft

Max. Neg. Dead Load Mom.  
@ interior Bays (Unfactored )  
due to Deck + WS + Barrier  
(CONSYS).Between Fascia  
and South Girder.

**Deck Cantilever Overhang:**

Mdead<sub>over</sub> := 1.762kip·ft

Max. Neg. Dead Load Mom.  
@ Overhang (Unfactored )  
due to Deck + WS + Barrier  
(CONSYS).At Fascia.

**Live Load Moments:**

Impact Factor:

I := 1.30

Wheel Loads:

P2F1 := 10kip (Ohio 2F1, Ref. 3, Figure 903)

P3F1 := 8.5kip (Ohio 3F1, Ref. 3, Figure 903)

P4F1 := 7kip (Ohio 4F1, Ref. 3, Figure 903)

P5C1 := 8.5kip (Ohio 5C1, Ref. 3, Figure 903)

PHS20 := 16kip (HS-20, Ref. 3, Figure 901)

**Deck Interior Span:**

$S := \frac{9.572\text{ft} + 6.25\text{ft}}{2}$

S = 7.9 ft

Ref. 2 Sect. 3.24.5.1. Rehab Plans  
Sheet 503. \*

Distribution Factor:

$DF := \frac{S + 2\cdot\text{ft}}{32} = 0.31 \text{ ft}$

Continuity Factor:

CF := 0.8 (If slab is continuous over 3 or more supports.)

Live Load Plus Impact Moment:

Mlive2F1d := I·DF·CF·P2F1 = 3.2·kip·ft

Mlive3F1d := I·DF·CF·P3F1 = 2.7·kip·ft

Mlive4F1d := I·DF·CF·P4F1 = 2.3·kip·ft

Mlive5C1d := I·DF·CF·P5C1 = 2.7·kip·ft

MliveHS20d := I·DF·CF·PHS20 = 5.2·kip·ft

\*THE MAXIMUM POSITIVE DL MOMENT (UNFACTORED DUE TO BARRIER+DECK+WS) WAS FOUND ON THE INTERIOR BAY BETWEEN STRINGER 4 AND THE SOUTH GIRDER; THE MAXIMUM NEGATIVE DL MOMENT (UNFACTORED) FOUND AT THE EXTERIOR GIRDERS; THEREFORE AN AVERAGE SPAN WAS USED TO OBTAIN THE DISTRIBUTION FACTORS FOR THE LL AT THE INTERIOR BAYS. SPACING BETWEEN STRINGERS IS 6.25' & BETWEEN FASCIA 1 & THE NORTH GIRDER (UNIT 16) IS 9.572'.(BASED ON AASHTO MANUAL 3.24.1 THE SPAN BEAMS WILL BE THE CLEAR DISTANCE BETWEEN TOP FLANGES + HALF OF THE TOP FLANGE WIDTH.

**Deck Cantilever Overhang:**

$$SO := 3\text{ ft} + 7.25\text{ in} = 3.6\text{ ft}$$

Distance to Wheel Load From Rail:

$$WLC := 1\text{ ft} \quad (\text{Place Wheel 1 foot from rail. Ref. 2, Sect. 3.24.2.1})$$

Distance to Wheel Load From Support:

$$X := SO - \text{Sidewidth} - \text{Railwidth} - WLC = 0.9\text{ ft}$$

$$\overset{\text{ww}}{X} := \text{if}(X \leq 0\text{ ft}, 0\text{ ft}, X) = 10.3\text{ in} \quad (\text{Ref. 2, Sect. 3.24.5})$$

Distribution Width:

$$E := 0.8 \cdot X + 3.75\text{ ft} = 4.4\text{ ft}$$

Live Load Plus Impact Moment:

$$M_{\text{live2F1o}} := \frac{I \cdot X \cdot P_{2F1} \cdot 1\text{ ft}}{E} = 2.5\text{ kip}\cdot\text{ft}$$

$$M_{\text{live3F1o}} := \frac{I \cdot X \cdot P_{3F1} \cdot 1\text{ ft}}{E} = 2.13\text{ kip}\cdot\text{ft}$$

$$M_{\text{live4F1o}} := \frac{I \cdot X \cdot P_{4F1} \cdot 1\text{ ft}}{E} = 1.75\text{ kip}\cdot\text{ft}$$

$$M_{\text{live5C1o}} := \frac{I \cdot X \cdot P_{5C1} \cdot 1\text{ ft}}{E} = 2.13\text{ kip}\cdot\text{ft}$$

$$M_{\text{liveHS20o}} := \frac{I \cdot X \cdot P_{HS20} \cdot 1\text{ ft}}{E} = 4.01\text{ kip}\cdot\text{ft}$$

**Total Factored Moments:**

Inventory

$$\gamma := 1.3 \quad \beta_{\text{dead}} := 1.0 \quad \beta_{\text{live}} := \frac{5}{3} = 1.67$$

Deck Interior Spans:

$$Mu_{2F1d} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{int\_pos}}} + \beta_{\text{live}} \cdot M_{\text{live2F1o}}) = 7.4\text{ kip}\cdot\text{ft}$$

$$Mu_{3F1d} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{int\_pos}}} + \beta_{\text{live}} \cdot M_{\text{live3F1o}}) = 6.4\text{ kip}\cdot\text{ft}$$

$$Mu_{4F1d} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{int\_pos}}} + \beta_{\text{live}} \cdot M_{\text{live4F1o}}) = 5.3\text{ kip}\cdot\text{ft}$$

$$Mu_{5C1d} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{int\_pos}}} + \beta_{\text{live}} \cdot M_{\text{live5C1o}}) = 6.4\text{ kip}\cdot\text{ft}$$

$$Mu_{\text{HS20d}} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{int\_pos}}} + \beta_{\text{live}} \cdot M_{\text{liveHS20o}}) = 11.6 \frac{\text{kip}}{\text{ft}}$$

Deck Cantilever Overhang:

$$Mu_{2F1o} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{over}}} + \beta_{\text{live}} \cdot M_{\text{live2F1o}}) = 7.7\text{ kip}\cdot\text{ft}$$

$$Mu_{3F1o} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{over}}} + \beta_{\text{live}} \cdot M_{\text{live3F1o}}) = 6.9\text{ kip}\cdot\text{ft}$$

$$Mu_{4F1o} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{over}}} + \beta_{\text{live}} \cdot M_{\text{live4F1o}}) = 6.1\text{ kip}\cdot\text{ft}$$

$$Mu_{5C1o} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{over}}} + \beta_{\text{live}} \cdot M_{\text{live5C1o}}) = 6.9\text{ kip}\cdot\text{ft}$$

$$Mu_{\text{HS20o}} := \gamma \cdot (\beta_{\text{dead}} \cdot M_{\text{dead}_{\text{over}}} + \beta_{\text{live}} \cdot M_{\text{liveHS20o}}) = 11\text{ kip}\cdot\text{ft}$$

## **Section Capacities:**

(Ref. 2, Section 8.16.3.2)

Deck Interior Spans:

Effective Deck Width:

$$b = 12 \cdot \text{in}$$

**Deck Top Reinforcement Cover:**

$$A_{\text{stop}} := A_{\text{sDTR}} = 0.75 \cdot \text{in}^2$$

Effective Depth:

$$d := T_{\text{deck}} - \text{DTR}_{\text{cover}} = 4.6 \cdot \text{in}$$

Tension Force in Reinforcement:

$$T := A_{\text{stop}} \cdot f_y = 45.3 \cdot \text{kip}$$

Depth of Stress Block:

$$a := \frac{T}{0.85 \cdot f_c \cdot b} = 1 \cdot \text{in}$$

Capacity Reduction Factor:

$$\phi := 0.9 \quad (\text{Ref. 2, Sect. 8.16.1.2})$$

Section Moment Strength:

$$\phi M_n := \phi \cdot T \cdot \left( d - \frac{a}{2} \right) = 14 \cdot \text{kip} \cdot \text{ft}$$

Effective Section Moment Strength:

$$\phi M_{n\text{topre}} := \phi M_n \cdot \text{DTR}\% \text{eff}$$

$$\phi M_{n\text{topre}} = 14 \cdot \text{kip} \cdot \text{ft}$$

**Bottom of Deck Reinforcement:**

$$A_{\text{bot}} := A_{\text{sDBR}} = 0.53 \cdot \text{in}^2$$

Effective Depth:

$$d := T_{\text{deck}} - \text{DBR}_{\text{cover}} - \text{IWS} = 5.4 \cdot \text{in} \quad d = 5.4 \cdot \text{in}$$

Tension Force in Reinforcement

$$T := A_{\text{bot}} \cdot f_y = 31.9 \cdot \text{kip} \quad T = 31885.7 \cdot \text{lbf}$$

Depth of Stress Block

$$a := \frac{T}{0.85 \cdot f_c \cdot b} = 0.7 \cdot \text{in} \quad a = 0.7 \cdot \text{in}$$

Capacity Reduction Factor:

$$\phi := 0.9$$

Section Moment Strength:

$$\phi M_n := \phi \cdot T \cdot \left( d - \frac{a}{2} \right) \quad \phi M_n = 12172.8 \cdot \text{ft} \cdot \text{lbf}$$

Effective Section Moment Strength:

$$\phi M_{n\text{botre}} := \phi M_n \cdot \text{DBR}\% \text{eff}$$

$$\phi M_{n\text{botre}} = 12172.8 \cdot \text{ft} \cdot \text{lbf}$$

**Deck Cantilever Overhang Reinforcement:**  $A_s := A_{\text{cover}} = 0.75 \cdot \text{in}^2$

Effective Depth:  $d := T_{\text{deck}} - D_{\text{ORcover}} \quad d = 4.6 \cdot \text{in}$

Tension Force in Reinforcement  $T := A_s \cdot f_y \quad T = 45257.1 \cdot \text{lbf}$

Depth of Stress Block  $a := \frac{T}{0.85 \cdot f_c \cdot b} \quad a = 1 \cdot \text{in}$

Capacity Reduction Factor:  $\phi := 0.9$

Section Moment Strength:  $\phi M_n := \phi \cdot T \cdot \left( d - \frac{a}{2} \right) = 14 \cdot \text{kip} \cdot \text{ft}$

Effective Section Moment Strength:  $\phi M_{n\text{doverre}} := \phi M_n \cdot \text{DOR\%eff}$

$$\phi M_{n\text{doverre}} = 14 \cdot \text{kip} \cdot \text{ft}$$

### Live Load Rating:

$$i := 1..5$$

#### Rating Factors:

$$A1 := \gamma \cdot \beta_{\text{dead}} = 1.3$$

$$A2_{\text{inv}} := \gamma \cdot \beta_{\text{live}} = 2.17$$

$$A2_{\text{oper}} := \gamma \cdot 1.0 = 1.3$$

#### Rating Vehicles

	$W_i :=$	$Ld_i :=$	$Lo_i :=$
OH2F1	15·ton	Mlive2F1d	Mlive2F1o
OH3F1	23·ton	Mlive3F1d	Mlive3F1o
OH4F1	27·ton	Mlive4F1d	Mlive4F1o
OH5C1	40·ton	Mlive5C1d	Mlive5C1o
HS-20	36·ton	MliveHS20d	MliveHS20o

#### Deck Interior Spans:

#### Deck Top Reinforcement:

$$C := \phi M_{n\text{dtopre}} = 14 \cdot \text{kip} \cdot \text{ft}$$

$$D := M_{\text{dead}_{\text{int\_neg}}} = 1.8 \cdot \text{kip} \cdot \text{ft}$$

$$R_{\text{Finv}_i} := \frac{C - A1 \cdot D}{A2_{\text{inv}} \cdot Ld_i} \quad R_{\text{Foper}_i} := \frac{C - A1 \cdot D}{A2_{\text{oper}} \cdot Ld_i} \quad D_{\text{topRTinv}_i} := \frac{R_{\text{Finv}_i} \cdot W_i}{\text{ton}} \quad D_{\text{topRToper}_i} := \frac{R_{\text{Foper}_i} \cdot W_i}{\text{ton}}$$

#### Rating Vehicles

	$R_{\text{Finv}_i} =$	$R_{\text{Foper}_i} =$	$D_{\text{topRTinv}_i} =$	$D_{\text{topRToper}_i} =$
OH2F1	1.681	2.802	25.221	42.035
OH3F1	1.978	3.297	45.497	75.829
OH4F1	2.402	4.003	64.855	108.091
OH5C1	1.978	3.297	79.125	131.876
HS-20	1.051	1.751	37.832	63.053



**Deck Bottom Reinforcement:**

$$C := \phi Mnd_{botre} = 12.2 \cdot \text{kip} \cdot \text{ft}$$

$$D := Mdead_{int\_pos} = 0.3 \cdot \text{kip} \cdot \text{ft}$$

$$R_{Finv}_i := \frac{C - A1 \cdot D}{A2_{inv} \cdot Ld_i}$$

$$R_{Foper}_i := \frac{C - A1 \cdot D}{A2_{oper} \cdot Ld_i}$$

$$DbotRT_{inv}_i := \frac{R_{Finv}_i \cdot W_i}{\text{ton}}$$

$$DbotRT_{oper}_i := \frac{R_{Foper}_i \cdot W_i}{\text{ton}}$$

**Rating Vehicles**

	$R_{Finv}_i =$	$R_{Foper}_i =$	$DbotRT_{inv}_i =$	$DbotRT_{oper}_i =$
OH2F1	1.682	2.804	25.233	42.054
OH3F1	1.979	3.298	45.518	75.863
OH4F1	2.403	4.005	64.884	108.139
OH5C1	1.979	3.298	79.161	131.935
HS-20	1.051	1.752	37.849	63.081

**Deck Cantilever Reinforcement:**

$$C := \phi Mnd_{overre} = 14 \cdot \text{kip} \cdot \text{ft}$$

$$D := Mdead_{over} = 1.8 \cdot \text{kip} \cdot \text{ft}$$

$$R_{Finv}_i := \frac{C - A1 \cdot D}{A2_{inv} \cdot Lo_i}$$

$$R_{Foper}_i := \frac{C - A1 \cdot D}{A2_{oper} \cdot Lo_i}$$

$$DoverRT_{inv}_i := \frac{R_{Finv}_i \cdot W_i}{\text{ton}}$$

$$DoverRT_{oper}_i := \frac{R_{Foper}_i \cdot W_i}{\text{ton}}$$

**Rating Vehicles**

	$R_{Finv}_i =$	$R_{Foper}_i =$	$DoverRT_{inv}_i =$	$DoverRT_{oper}_i =$
OH2F1	2.162	3.604	32.435	54.058
OH3F1	2.544	4.24	58.51	97.517
OH4F1	3.089	5.148	83.404	139.006
OH5C1	2.544	4.24	101.756	169.594
HS-20	1.351	2.252	48.652	81.087

**Live Load Rating Summary:**

$$RT_{inv}_i := DtopRT_{inv}_i$$

$$RT_{oper}_i := DtopRT_{oper}_i$$

(Place controlling variable in RTinv and RTooper.)

**Rating Vehicles**

	$RT_{inv}_i =$	$RT_{oper}_i =$
OH2F1	25.2	42
OH3F1	45.5	75.8
OH4F1	64.9	108.1
OH5C1	79.1	131.9
HS-20	37.8	63.1

**AASHTO HS20-44 LOADING**

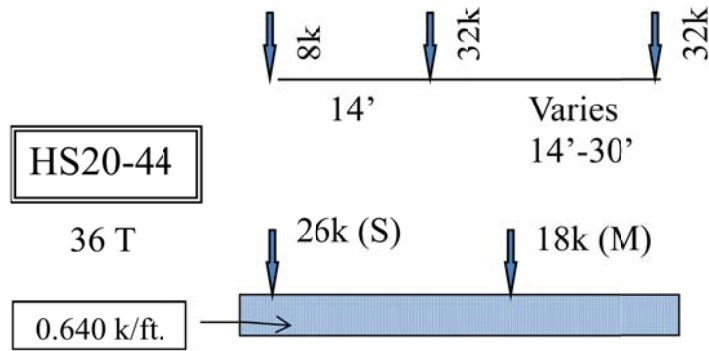


Figure 901  
12 of 1221

<b>OHIO LEGAL LOADS</b>		
<b>Load Designation</b>	<b>Load Configuration</b>	<b>Gross Weight</b>
2F1		15 Tons
3F1		23 Tons
4F1		27 Tons
5C1		40 Tons

Figure 903  
13 of 1221

Id            Dead Loads (Deck) Unfactored  
Type        Static

Factors        1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	0	0	0
	0.36	-0.004	-0.024	0	
	0.721	-0.017	-0.047	0	
	1.081	-0.038	-0.071	0	
	1.442	-0.068	-0.095	0	
	1.802	-0.107	-0.119	0	
	2.162	-0.154	-0.142	0	
	2.523	-0.209	-0.166	0	
	2.883	-0.273	-0.19	0	
	3.244	-0.346	-0.213	0	
2	0	-0.427	-0.237/	0	-0.553
	0.957	-0.156	0.252	0	
	1.914	0.056	0.189	0	
	2.872	0.207	0.126	0	
	3.829	0.298	0.064	0	
	4.786	0.329	0.001	0	
	5.743	0.299	-0.062	0	
	6.7	0.209	-0.125	0	
	7.658	0.059	-0.188	0	
	8.615	-0.151	-0.251	0	
3	0	-0.422	-0.314/	0	-0.562
	0.625	-0.28	0.207	0	
	1.25	-0.164	0.166	0	
	1.875	-0.073	0.124	0	
	2.5	-0.008	0.083	0	
	3.125	0.031	0.042	0	
	3.75	0.044	0.001	0	
	4.375	0.032	-0.04	0	
	5	-0.006	-0.081	0	
	5.625	-0.069	-0.122	0	
4	0	-0.159	-0.163/	0	-0.358
	0.625	-0.05	0.153	0	
	1.25	0.033	0.112	0	
	1.875	0.09	0.071	0	
	2.5	0.122	0.03	0	
	3.125	0.128	-0.011	0	
	3.75	0.108	-0.052	0	
	4.375	0.062	-0.093	0	
	5	-0.009	-0.135	0	
	5.625	-0.106	-0.176	0	
5	0	-0.229	-0.217/	0	-0.425
	0.625	-0.111	0.167	0	



## SECTION I

## CONSYS

## Deck+Barrier+WS Combined Unfact

	1.25	-0.02	0.126	0	
	1.875	0.046	0.085	0	
	2.5	0.086	0.044	0	
	3.125	0.101	0.003	0	
	3.75	0.09	-0.039	0	
	4.375	0.053	-0.08	0	
	5	-0.01	-0.121	0	
	5.625	-0.098	-0.162	0	
6	0	-0.212	-0.203/	0	-0.409
	0.625	-0.096	0.165	0	
	1.25	-0.006	0.124	0	
	1.875	0.059	0.083	0	
	2.5	0.098	0.042	0	
	3.125	0.111	0.001	0	
	3.75	0.099	-0.04	0	
	4.375	0.061	-0.082	0	
	5	-0.003	-0.123	0	
	5.625	-0.093	-0.164	0	
7	0	-0.208	-0.205/	0	-0.405
	0.625	-0.096	0.159	0	
	1.25	-0.009	0.118	0	
	1.875	0.052	0.077	0	
	2.5	0.087	0.036	0	
	3.125	0.096	-0.005	0	
	3.75	0.08	-0.047	0	
	4.375	0.038	-0.088	0	
	5	-0.029	-0.129	0	
	5.625	-0.123	-0.17	0	
8	0	-0.242	-0.211/	0	-0.438
	0.625	-0.113	0.186	0	
	1.25	-0.01	0.144	0	
	1.875	0.068	0.103	0	
	2.5	0.119	0.062	0	
	3.125	0.145	0.021	0	
	3.75	0.146	-0.02	0	
	4.375	0.12	-0.061	0	
	5	0.069	-0.102	0	
	5.625	-0.008	-0.143	0	
9	0	-0.11	-0.185/	0	-0.29
	0.509	-0.065	0.072	0	
	1.017	-0.037	0.038	0	
	1.526	-0.026	0.005	0	
	2.035	-0.033	-0.029	0	
	2.544	-0.056	-0.062	0	
	3.052	-0.096	-0.096	0	
	3.561	-0.153	-0.129	0	
	4.07	-0.228	-0.163	0	
	4.578	-0.319	-0.196	0	
10	0	-0.427	-0.230/	0	-0.467

## SECTION I

## CONSYS

## Deck+Barrier+WS Combined Unfact

0.36	-0.346	0.213	0	
0.721	-0.273	0.19	0	
1.081	-0.209	0.166	0	
1.442	-0.154	0.142	0	
1.802	-0.107	0.119	0	
2.162	-0.068	0.095	0	
2.523	-0.038	0.071	0	
2.883	-0.017	0.047	0	
3.244	-0.004	0.024	0	
3.604	0	0	0	0

Id            Dead Loads (WS) Unfactored  
Type        Static

Factors        1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	0	0	0
	0.36	0	0	0	
	0.721	0	-0.003	0	
	1.081	-0.002	-0.009	0	
	1.442	-0.007	-0.014	0	
	1.802	-0.013	-0.02	0	
	2.162	-0.021	-0.026	0	
	2.523	-0.031	-0.031	0	
	2.883	-0.043	-0.037	0	
	3.244	-0.058	-0.042	0	
2	0	-0.074	-0.048/	0	-0.119
	0.957	-0.013	0.056	0	
	1.914	0.034	0.041	0	
	2.872	0.066	0.026	0	
	3.829	0.084	0.011	0	
	4.786	0.087	-0.004	0	
	5.743	0.077	-0.019	0	
	6.7	0.052	-0.034	0	
	7.658	0.012	-0.049	0	
	8.615	-0.041	-0.064	0	
3	0	-0.109	-0.078/	0	-0.139
	0.625	-0.074	0.051	0	
	1.25	-0.045	0.041	0	
	1.875	-0.023	0.031	0	
	2.5	-0.006	0.022	0	
	3.125	0.004	0.012	0	
	3.75	0.008	0.002	0	
	4.375	0.007	-0.008	0	
	5	-0.001	-0.018	0	
	5.625	-0.015	-0.027	0	
4	0	-0.035	-0.037/	0	-0.083
	0.625	-0.01	0.036	0	
	1.25	0.01	0.026	0	
	1.875	0.023	0.016	0	
	2.5	0.03	0.007	0	
	3.125	0.031	-0.003	0	
	3.75	0.026	-0.013	0	
	4.375	0.015	-0.023	0	
	5	-0.002	-0.032	0	
	5.625	-0.026	-0.042	0	
5	0	-0.055	-0.052/	0	-0.102
	0.625	-0.027	0.04	0	

## SECTION I

## CONSYS

## Deck+Barrier+WS Combined Unfact

	1.25	-0.005	0.03	0	
	1.875	0.011	0.02	0	
	2.5	0.02	0.011	0	
	3.125	0.024	0.001	0	
	3.75	0.021	-0.009	0	
	4.375	0.013	-0.019	0	
	5	-0.002	-0.029	0	
	5.625	-0.023	-0.038	0	
6	0	-0.05	-0.048/	0	-0.097
	0.625	-0.023	0.039	0	
	1.25	-0.001	0.029	0	
	1.875	0.014	0.02	0	
	2.5	0.023	0.01	0	
	3.125	0.026	0	0	
	3.75	0.023	-0.01	0	
	4.375	0.014	-0.02	0	
	5	-0.001	-0.029	0	
	5.625	-0.022	-0.039	0	
7	0	-0.05	-0.049/	0	-0.097
	0.625	-0.023	0.038	0	
	1.25	-0.002	0.028	0	
	1.875	0.012	0.019	0	
	2.5	0.021	0.009	0	
	3.125	0.024	-0.001	0	
	3.75	0.02	-0.011	0	
	4.375	0.01	-0.02	0	
	5	-0.006	-0.03	0	
	5.625	-0.028	-0.04	0	
8	0	-0.056	-0.050/	0	-0.102
	0.625	-0.026	0.043	0	
	1.25	-0.002	0.033	0	
	1.875	0.015	0.023	0	
	2.5	0.027	0.013	0	
	3.125	0.032	0.004	0	
	3.75	0.031	-0.006	0	
	4.375	0.024	-0.016	0	
	5	0.011	-0.026	0	
	5.625	-0.008	-0.035	0	
9	0	-0.033	-0.045/	0	-0.077
	0.509	-0.019	0.024	0	
	1.017	-0.009	0.016	0	
	1.526	-0.003	0.008	0	
	2.035	-0.001	0	0	
	2.544	-0.003	-0.008	0	
	3.052	-0.009	-0.016	0	
	3.561	-0.019	-0.024	0	
	4.07	-0.033	-0.032	0	
	4.578	-0.052	-0.04	0	
10	0	-0.074	-0.048/	0	-0.096

## SECTION I

## CONSYS

## Deck+Barrier+WS Combined Unfact

0.36	-0.058	0.042	0	
0.721	-0.043	0.037	0	
1.081	-0.031	0.031	0	
1.442	-0.021	0.026	0	
1.802	-0.013	0.02	0	
2.162	-0.007	0.014	0	
2.523	-0.002	0.009	0	
2.883	0	0.003	0	
3.244	0	0	0	
3.604	0	0	0	0

Id Dead Loads (Barriers) Unfactored  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	0	0	0
	0.36	0	0	0	
	0.721	0	0	0	
	1.081	-0.095	-0.462	0	
	1.442	-0.262	-0.462	0	
	1.802	-0.428	-0.462	0	
	2.162	-0.595	-0.462	0	
	2.523	-0.761	-0.462	0	
	2.883	-0.928	-0.462	0	
	3.244	-1.094	-0.462	0	
2	0	-1.261	-0.462/	0	-0.636
	0.957	-1.094	0.174	0	
	1.914	-0.928	0.174	0	
	2.872	-0.762	0.174	0	
	3.829	-0.595	0.174	0	
	4.786	-0.429	0.174	0	
	5.743	-0.263	0.174	0	
	6.7	-0.096	0.174	0	
	7.658	0.07	0.174	0	
	8.615	0.236	0.174	0	
3	0	0.403	+0.174/	0	0.256
	0.625	0.352	-0.082	0	
	1.25	0.301	-0.082	0	
	1.875	0.249	-0.082	0	
	2.5	0.198	-0.082	0	
	3.125	0.147	-0.082	0	
	3.75	0.096	-0.082	0	
	4.375	0.045	-0.082	0	
	5	-0.006	-0.082	0	
	5.625	-0.057	-0.082	0	
4	0	-0.108	-0.082/	0	-0.104
	0.625	-0.094	0.022	0	
	1.25	-0.081	0.022	0	
	1.875	-0.067	0.022	0	
	2.5	-0.053	0.022	0	
	3.125	-0.039	0.022	0	
	3.75	-0.025	0.022	0	
	4.375	-0.011	0.022	0	
	5	0.003	0.022	0	
	5.625	0.017	0.022	0	
5	0	0.03	+0.022/	0	0.029
	0.625	0.026	-0.007	0	

## SECTION I

## CONSYS

## Deck+Barrier+WS Combined Unfact

	1.25	0.022	-0.007	0	
	1.875	0.017	-0.007	0	
	2.5	0.013	-0.007	0	
	3.125	0.008	-0.007	0	
	3.75	0.004	-0.007	0	
	4.375	0	-0.007	0	
	5	-0.005	-0.007	0	
	5.625	-0.009	-0.007	0	
6	0	-0.014	-0.007/	0	-0.013
	0.625	-0.01	0.006	0	
	1.25	-0.006	0.006	0	
	1.875	-0.002	0.006	0	
	2.5	0.001	0.006	0	
	3.125	0.005	0.006	0	
	3.75	0.009	0.006	0	
	4.375	0.013	0.006	0	
	5	0.016	0.006	0	
	5.625	0.02	0.006	0	
7	0	0.024	+0.006/	0	0.023
	0.625	0.013	-0.017	0	
	1.25	0.003	-0.017	0	
	1.875	-0.008	-0.017	0	
	2.5	-0.019	-0.017	0	
	3.125	-0.029	-0.017	0	
	3.75	-0.04	-0.017	0	
	4.375	-0.05	-0.017	0	
	5	-0.061	-0.017	0	
	5.625	-0.072	-0.017	0	
8	0	-0.082	-0.017/	0	-0.079
	0.625	-0.044	0.062	0	
	1.25	-0.005	0.062	0	
	1.875	0.034	0.062	0	
	2.5	0.073	0.062	0	
	3.125	0.112	0.062	0	
	3.75	0.15	0.062	0	
	4.375	0.189	0.062	0	
	5	0.228	0.062	0	
	5.625	0.267	0.062	0	
9	0	0.306	+0.062/	0	0.37
	0.509	0.149	-0.308	0	
	1.017	-0.008	-0.308	0	
	1.526	-0.164	-0.308	0	
	2.035	-0.321	-0.308	0	
	2.544	-0.478	-0.308	0	
	3.052	-0.634	-0.308	0	
	3.561	-0.791	-0.308	0	
	4.07	-0.948	-0.308	0	
	4.578	-1.104	-0.308	0	
10	0	-1.261	-0.308/	0	-0.77

## SECTION I

## CONSYS

## Deck+Barrier+WS Combined Unfact

0.36	-1.094	0.462	0	
0.721	-0.928	0.462	0	
1.081	-0.761	0.462	0	
1.442	-0.595	0.462	0	
1.802	-0.428	0.462	0	
2.162	-0.262	0.462	0	
2.523	-0.095	0.462	0	
2.883	0	0	0	
3.244	0	0	0	
3.604	0	0	0	0



Id	MAX COMBINED UNFACTORED DL MOMENTS (Kip-ft)	
Type	Static	
Factors	1	
Span	Location (ft)	Moment (kft)
1	0	0
	0.36	-0.004
	0.721	-0.017
	1.081	-0.135
	1.442	-0.337
	1.802	-0.548
	2.162	-0.77
	2.523	-1.001
	2.883	-1.244
	3.244	-1.498
2	0	-1.762
	0.957	-1.263
	1.914	-0.838
	2.872	-0.489
	3.829	-0.213
	4.786	-0.013
	5.743	0.113
	6.7	0.165
	7.658	0.141
	8.615	0.044
3	0	-0.128
	0.625	-0.002
	1.25	0.092
	1.875	0.153
	2.5	0.184
	3.125	0.182
	3.75	0.148
	4.375	0.084
	5	-0.013
	5.625	-0.141
4	0	-0.302
	0.625	-0.154
	1.25	-0.038
	1.875	0.046
	2.5	0.099
	3.125	0.12
	3.75	0.109
	4.375	0.066
	5	-0.008
	5.625	-0.115
5	0	-0.254
	0.625	-0.112

## SECTION I

## CONSYS

## Deck+Barrier+WS Combined Unfact

	1.25	-0.003
	1.875	0.074
	2.5	0.119
	3.125	0.133
	3.75	0.115
	4.375	0.066
	5	-0.017
	5.625	-0.13
6	0	-0.276
	0.625	-0.129
	1.25	-0.013
	1.875	0.071
	2.5	0.122
	3.125	0.142
	3.75	0.131
	4.375	0.088
	5	0.012
	5.625	-0.095
7	0	-0.234
	0.625	-0.106
	1.25	-0.008
	1.875	0.056
	2.5	0.089
	3.125	0.091
	3.75	0.06
	4.375	-0.002
	5	-0.096
	5.625	-0.223
8	0	-0.38
	0.625	-0.183
	1.25	-0.017
	1.875	0.117
	2.5	0.219
	3.125	0.289
	3.75	0.327
	4.375	0.333
	5	0.308
	5.625	0.251
9	0	0.163
	0.509	0.065
	1.017	-0.054
	1.526	-0.193
	2.035	-0.355
	2.544	-0.537
	3.052	-0.739
	3.561	-0.963
	4.07	-1.209
	4.578	-1.475
10	0	-1.762

## SECTION I

## CONSYS

## Deck+Barrier+WS Combined Unfact

0.36	-1.498
0.721	-1.244
1.081	-1.001
1.442	-0.77
1.802	-0.548
2.162	-0.337
2.523	-0.135
2.883	-0.017
3.244	-0.004
3.604	0

POS Max int	0.333 kip-ft
NEG Max int	-1.762 kip-ft
NEG Max Over	-1.762 kip-ft

# STRINGERS SUMMARY SHEET

## East Approach - Section I

**CUY-2-1441 Load Rating Analysis**  
**Main Ave Bridge**

Calculated: RAH 6/7/2012  
Checked: DBH 6/7/2012

As-Built Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
Stringer	Unit 1	1.00	1.65	2.73	2.18	2.54	2.18	n/a
Stringer	Unit 2	1.43	2.38	3.81	4.49	5.45	4.49	n/a
Stringer	Unit 5	1.80	3.01	4.81	5.66	6.87	5.66	n/a
Stringer	Unit 9	1.31	2.19	3.53	3.37	4.00	3.36	n/a
Stringer	Unit 10	1.45	2.42	3.87	4.55	5.53	4.55	n/a
Stringer	Unit 11	1.21	2.03	3.25	3.82	4.64	3.82	n/a
Stringer	Units 12,15,16,17	0.67	1.11	1.80	1.48	1.72	1.48	n/a
Stringer	Unit 13	0.55	0.91	1.46	1.72	2.08	1.72	n/a
Stringer	Unit 14	0.54	0.90	1.45	1.70	2.07	1.70	n/a
Stringer	Unit 18	0.55	0.91	1.46	1.72	2.08	1.72	n/a
Stringer	Unit 19	0.54	0.90	1.45	1.70	2.07	1.70	n/a

As-Inspected Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
Stringer	Unit 1	1.00	1.65	2.73	2.18	2.54	2.18	n/a
Stringer	Unit 2	1.43	2.38	3.81	4.49	5.45	4.49	n/a
Stringer	Unit 5	1.80	3.01	4.81	5.66	6.87	5.66	n/a
Stringer	Unit 9	1.31	2.19	3.53	3.37	4.00	3.36	n/a
Stringer	Unit 10	1.45	2.42	3.87	4.55	5.53	4.55	n/a
Stringer	Unit 11	1.21	2.03	3.25	3.82	4.64	3.82	n/a
Stringer	Units 12,15,16,17	0.67	1.11	1.80	1.48	1.72	1.48	n/a
Stringer	Unit 13	0.55	0.91	1.46	1.72	2.08	1.72	n/a
Stringer	Unit 14	0.54	0.90	1.45	1.70	2.07	1.70	n/a
Stringer	Unit 18	0.55	0.91	1.46	1.72	2.08	1.72	n/a
Stringer	Unit 19	0.54	0.90	1.45	1.70	2.07	1.70	n/a

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 Inventory	0.54	19.44	HS10.8
HS20 Operating	0.90	32.40	HS18.0
2F1	1.45	21.75	145%
3F1	1.48	34.04	
4F1	1.72	46.44	
5C1	1.48	59.20	
Fatigue			



Made By CTG  
Checked By DWC

Date 6/20/2012  
Date 6/20/2012

Job No. P402110046

Calculations For **CUY-2-1441**

---

### Revisions to Stringer Analysis

- ◆ Isolated continuous stringers have copes over intermediate supports. Because the stringers are not full depth in these locations, the full negative moment cannot develop.
- ◆ Per discussion with ODOT May 29, 2012, any continuous stringer that is coped over intermediate supports should be re-analyzed as simply supported.
- ◆ Calculations for the revised stringers are included on the following page(s) and have replaced the previous rating calculations.

**Section I**

**Stringer & Loadings**



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**The following stringers have controlling configurations.**

Plan Unit	Type	No. Spans	Span Length
1	W8 x 40 (Rolled Full Length)	4	6.5'; 6.25'; 6.25'; 6'
2	W10 x 39 (Coped @ Support)	9	6.25 ft
5	W12 x 40 (Coped @ Support)	9	3 X 4.88'; 5 X 6.08'; 6.06'
9	W12 x 40 (Rolled Full Length)	12	4 X 4.88'; 4 X 4.92'; 4 X 4.88'
10	W10 x 39 (Coped @ Support)	9	6.17 ft
11	W8 x 40 (Coped @ Support)	7	6.19 ft
12	W6 x 25 (Rolled Full Length)	6	6.17 ft
13	W6 x 25 (Coped @ Support)	6	6.17 ft
15	W6 x 25 (Rolled Full Length)	6	6.17 ft
14	W6 x 25 (Coped @ Support)	6	4.92'; 6.14'; 6.15'; 2 X 6.21'; 6.19'
18	W6 x 25 (Coped @ Support)	6	6.17 ft
19	W6 x 25 (Coped @ Support)	6	6.17'; 3 X 6.21'; 5.74'; 3.07'

**No stringers found in Section "I" have noteworthy deficiencies.**

**Analyze coped stringers as simply supported; all other stringers considered as continuous along full length of unit.**

All stringers with Mom. distribution factor =  $S / 5.5$       DF =  $1.18 \times \text{wheel (multi-lanes)}$  =  $0.591 \times \text{Lane}$

For Shear the D.F. (maximums located at support) is =  $0.538 \times \text{Lane}$

Stringer Spacing (typ.)      6.50 ft

**Dead Loads:**

**DC1:**

Slab =            6.75 in.            Span =            6.5 ft            Lightweight Deck Concrete =            0.117 k/ft  
DC1 =            0.428 k/ft

**DW:**

Wearing Surface =            1.25 in            Gutter to Gutter =            55.75 ft  
Wearing Surface Concrete =            0.15 k/cf  
No Stringers =            9

DW =            0.097 k/ft

**DC2:**

Barrier =            0.462 k/ft            No of Barriers =            2  
Median =            0.499 k/ft            No of medians =            1  
No Stringers =            9

DC2 =            0.158 k/ft

Impact (Inv. & Op.)=            30 %            (All units)            Impact (Fatigue)=            15 %            (All units)

**Analysis Loads:**

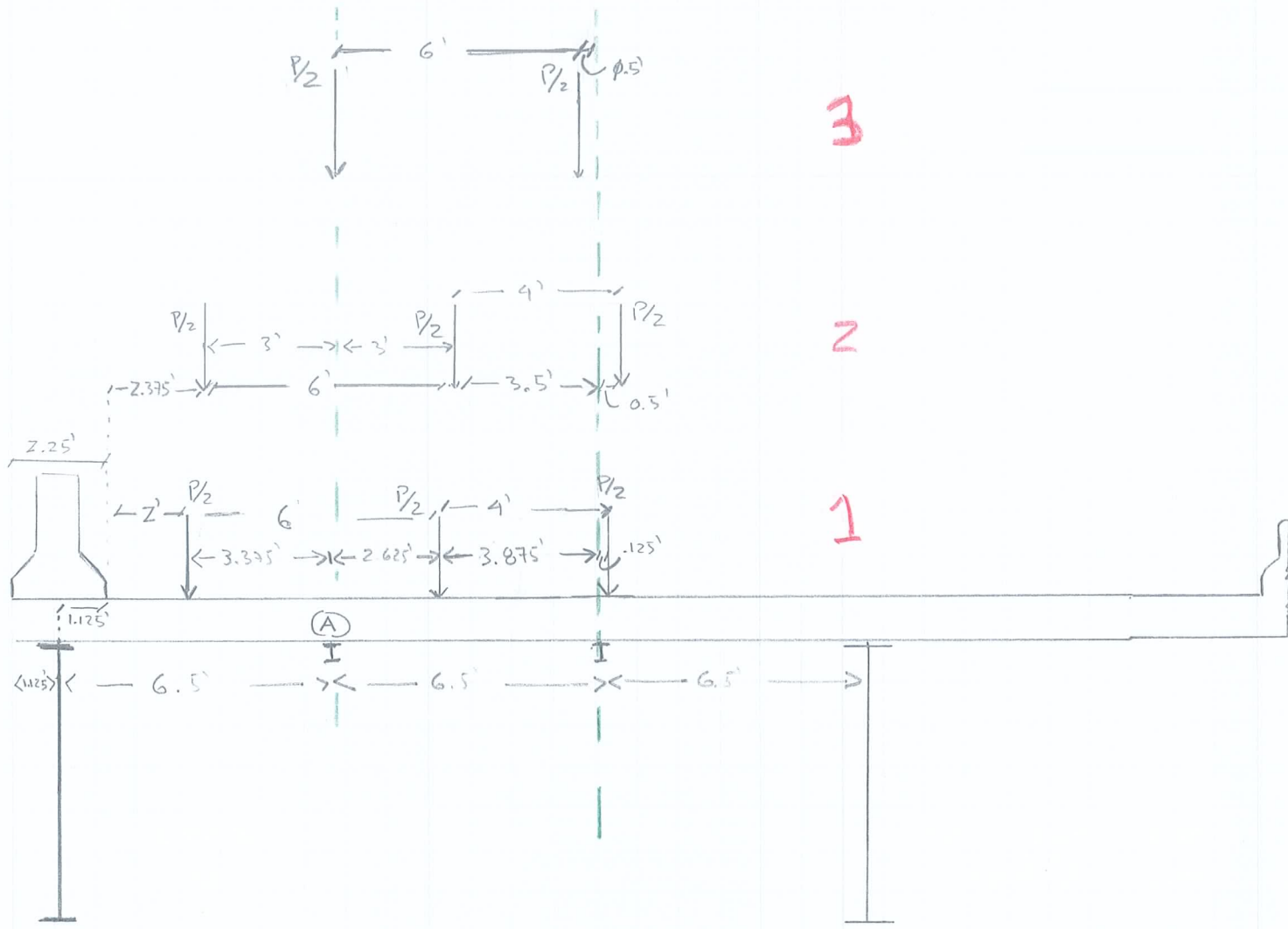
Unit	Stringer	Slab	W.S.	Barrier	Self Wt	Total (plus 10% misc.)
1	W8 x 40	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.040 k/ft	0.795 k/ft
2	W10 x 39	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.039 k/ft	0.794 k/ft
5	W12X40	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.040 k/ft	0.795 k/ft
9	W12 x 40	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.040 k/ft	0.795 k/ft
10	W10 x 39	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.039 k/ft	0.794 k/ft
11	W8 x 40	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.040 k/ft	0.795 k/ft
12	W6 x 25	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.025 k/ft	0.778 k/ft
13	W6 x 25	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.025 k/ft	0.778 k/ft
15	W6 x 25	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.025 k/ft	0.778 k/ft
14	W6 x 25	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.025 k/ft	0.778 k/ft
18	W6 x 25	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.025 k/ft	0.778 k/ft
19	W6 x 25	0.43 k/ft	0.10 k/ft	0.16 k/ft	0.025 k/ft	0.778 k/ft

**For Sketch, See next Page.** (Distribution Factor)

# INTERIOR STRINGERS

Distribution Factor for Moment:  $\frac{L}{5.5} = \frac{6.5}{5.5(2)} = 0.591$  per Lane

Distribution Factor for Shear (Max Shear @ Joists Supports):



$$\begin{aligned}
 1: R_A &= \frac{(2' + 1.125') \frac{P}{2}}{6.5'} + \frac{\frac{P}{2} (3.875')}{6.5'} = 0.538 \\
 2: R_A &= \frac{\frac{P}{2} (2.375' + 1.125') + \frac{P}{2} (3.5')}{6.5'} = 0.538 \\
 3: R_A &= \frac{P}{2} + \frac{\frac{P}{2} (0.5')}{6.5'} = 0.538
 \end{aligned}$$

SAME  $\therefore DF = 0.538$   
Shear

**Section I**

**STRINGERS RATING**



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**STRINGERS AS BUILT.No significant Degradation Found on Stringers. Rate AB Condition Only.**

Stringer Unit #	Beam Type	Stringer Unit #	Beam Type	Stringer Unit #	Beam Type
1	W8X40	10	W10X39	15	W6X25
2	W10X39	11	W8X40	14	W6X25
5	W12X40	12	W6X25	18	W6X25
9	W12X40	13	W6X25	19	W6X25

Stringer Unit #	Unfactored DL Shear (Kip) @ Support 2	Unfactored DL Shear (Kip) @ Support 3	Unfactored DL Shear (Kip) @ Support 4	Unfactored DL Shear (Kip) @ Support 6	Unfactored DL Shear (Kip) @ Support 7	Unfactored DL Shear (Kip) @ Critical Support (Coped)	Unfactored + DL Mom. (kip-ft)	Unfactored - DL Mom. (kip-ft)	AB Mom. Capacity (kip-ft) Fy*Sx	AB Shear Capacity (kip) 0.58*Fy*Av
1	3.118		2.91				2.627		105.260	53.590
2						2.48	3.877		124.080	162.330
5						2.414	3.670		150.810	174.800
9	2.347		1.966				1.470		150.810	66.950
10						2.450	3.778		124.080	162.330
11						2.457	3.803		105.260	161.370
12,15 16,17	2.917		2.454				2.316		49.86	36.55
13						2.450	3.778		49.86	103.45
14						2.460	3.827		49.86	98.44
18						2.450	3.778		49.86	96.77
19						2.465	3.827		49.86	100.11

Stringer Unit #	Factored LL Mom (Kip-ft) HS-20 Truck Inv.:	Factored LL Mom (Kip-ft) HS-20 Lane Inv.:	Factored LL Mom (Kip-ft) HS-20 Truck Op.:	Factored LL Mom (Kip-ft) HS-20 Lane Op.:	Factored LL Mom (Kip-ft) OH2F1 Truck Op.:	Factored LL Mom (Kip-ft) OH3F1 Truck Op.:	Factored LL Mom (Kip-ft) OH4F1 Truck Op.:	Factored LL Mom (Kip-ft) OH5C1 Truck Op.:	Factored LL Mom (Kip-ft) HS-15 Fatigue.: 1.0*1.0*(LL+IM)*DF. IM=1.15 DF=0.591
	1.3*1.67*(LL+IM)*DF. IM=1.3 DF=0.591	1.3*1.67*(LL+IM)*DF. IM=1.3 DF=0.591	1.3*1.0*(LL+IM)*DF. IM=1.3 DF=0.591	1.3*1.0*(LL+IM)*DF. IM=1.3 DF=0.591	1.3*1.0*(LL+IM)*DF. IM=1.3 DF=0.591	1.3*1.0*(LL+IM)*DF. IM=1.3 DF=0.591	1.3*1.0*(LL+IM)*DF. IM=1.3 DF=0.591	1.3*1.0*(LL+IM)*DF. IM=1.3 DF=0.591	
1	72.70	44.08	43.53	26.40	26.40	22.62	18.72	23.04	21.72
2	83.40	52.12	49.94	31.21	31.21	26.53	21.84	26.53	Not Required
5	81.13	50.57	48.58	30.28	30.36	25.81	21.25	25.81	Not Required
9	53.13	32.40	31.82	19.40	20.29	17.39	14.40	17.03	16.24
10	82.33	51.39	49.30	30.77	30.81	26.19	21.56	26.19	Not Required
11	82.60	51.57	49.46	30.88	30.91	26.28	21.64	26.28	Not Required
12,15 16,17	69.30	41.95	41.50	25.12	25.27	21.49	17.72	22.06	20.74
13	82.33	51.39	49.30	30.77	30.81	26.19	21.56	26.19	Not Required
14	82.87	51.76	49.62	30.99	31.01	26.36	21.70	26.36	Not Required
18	82.33	51.39	49.30	30.77	30.81	26.19	21.56	26.19	Not Required
19	82.87	51.76	49.62	30.99	31.01	26.36	21.71	26.36	Not Required



Section I

STRINGERS RATING



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Stringer Unit #	Factored LL Shear (Kip)	Factored LL Shear (Kip)	Factored LL Shear (Kip)	Factored LL Shear (Kip)	Factored LL Shear (Kip)	Factored LL Shear (Kip)	Factored LL Shear (Kip)	Factored LL Shear (Kip)	Factored LL Shear (Kip) HS-15 Fatigue.: 1.0*1.0*(LL+IM)*DF. IM=1.15 DF=0.538
	HS-20 Truck Inv.: 1.3*1.67*(LL+M)*DF. IM=1.3 DF=0.538	HS-20 Lane Inv.: 1.3*1.67*(LL+M)*DF. IM=1.3 DF=0.538	HS-20 Truck Op.: 1.3*1.0*(LL+M)*DF. IM=1.3 DF=0.538	HS-20 Lane Op.: 1.3*1.0*(LL+M)*DF. IM=1.3 DF=0.538	OH2F1 Truck Op.: 1.3*1.0*(LL+M)*DF. IM=1.3 DF=0.538	OH3F1 Truck Op.: 1.3*1.0*(LL+M)*DF. IM=1.3 DF=0.538	OH4F1 Truck Op.: 1.3*1.0*(LL+M)*DF. IM=1.3 DF=0.538	OH5C1 Truck Op.: 1.3*1.0*(LL+M)*DF. IM=1.3 DF=0.538	
1	50.01	43.76	29.95	26.20	18.18	22.76	19.48	22.76	14.95
2	48.54	42.47	29.07	25.43	18.17	20.99	17.28	20.99	Not Required
5	48.54	42.39	29.07	25.39	18.17	20.71	17.06	20.71	Not Required
9	49.15	42.73	29.43	25.59	18.25	18.96	15.96	19.00	14.88
10	48.54	42.42	29.07	25.40	18.17	20.86	17.18	20.86	Not Required
11	48.54	42.45	29.07	25.42	18.17	20.89	17.20	20.89	Not Required
12,15	50.15	43.61	30.03	26.12	18.18	22.18	19.04	22.18	14.95
16,17									
13	48.54	42.44	29.07	25.41	18.17	20.86	17.18	20.86	Not Required
14	48.54	42.45	29.07	25.42	18.17	20.93	17.23	20.93	Not Required
18	48.54	42.44	29.07	25.41	18.17	20.86	17.18	20.86	Not Required
19	48.54	42.45	29.07	25.42	18.17	20.93	17.23	20.93	Not Required
Stringer Unit #	Shear (RF) HS-20 Truck Inv.	Shear (RF) HS-20 Lane Inv.	Shear (RF) HS-20 Truck Op.	Shear (RF) HS-20 Lane Op.	Shear (RF) OH2F1 Truck Op.	Shear (RF) OH3F1 Truck Op.	Shear (RF) OH4F1 Truck Op.	Shear (RF) OH5C1 Truck Op.	
1	1.00	1.13	1.65	1.89	2.73	2.18	2.54	2.18	
2	3.28	3.75	5.47	6.26	8.76	7.58	9.21	7.58	
5	3.54	4.05	5.91	6.76	9.45	8.29	10.06	8.29	
9	1.31	1.50	2.19	2.50	3.53	3.37	4.00	3.36	
10	3.28	3.75	5.47	6.26	8.76	7.63	9.26	7.63	
11	3.26	3.73	5.44	6.22	8.71	7.57	9.19	7.57	
12,15	0.67	0.75	1.11	1.25	1.80	1.48	1.72	1.48	
16,17									
13	2.07	2.36	3.45	3.95	5.52	4.81	5.84	4.81	
14	1.96	2.24	3.28	3.75	5.24	4.55	5.53	4.55	
18	1.93	2.21	3.22	3.68	5.15	4.49	5.45	4.49	
19	2.00	2.28	3.33	3.81	5.33	4.63	5.62	4.63	
Stringer Unit #	Mom (RF) HS-20 Truck Inv.	Mom (RF) HS-20 Lane Inv.	Mom (RF) HS-20 Truck Op.	Mom (RF) HS-20 Lane Op.	Mom (RF) OH2F1 Truck Op.	Mom (RF) OH3F1 Truck Op.	Mom (RF) OH4F1 Truck Op.	Mom (RF) OH5C1 Truck Op.	
1	1.40	2.31	2.34	3.86	3.86	4.50	5.44	4.42	
2	1.43	2.28	2.38	3.81	3.81	4.49	5.45	4.49	
5	1.80	2.89	3.01	4.82	4.81	5.66	6.87	5.66	
9	2.80	4.60	4.68	7.67	7.34	8.56	10.34	8.74	
10	1.45	2.32	2.42	3.87	3.87	4.55	5.53	4.55	
11	1.21	1.95	2.03	3.25	3.25	3.82	4.64	3.82	
12,15	0.68	1.12	1.13	1.86	1.85	2.18	2.64	2.12	
16,17									
13	0.55	0.87	0.91	1.46	1.46	1.72	2.08	1.72	
14	0.54	0.87	0.90	1.45	1.45	1.70	2.07	1.70	
18	0.55	0.87	0.91	1.46	1.46	1.72	2.08	1.72	
19	0.54	0.87	0.90	1.45	1.45	1.70	2.07	1.70	

H&S 20 TRUCK

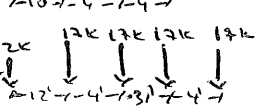
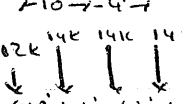
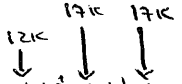
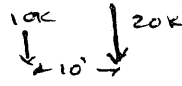
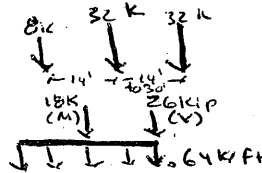
H&S 20 LANE

OH 2FI

OH 3FI

OH 4FI

OH 5CI



CASE

(1)

(2)

(3)

(4)

(5)

(6)

\* ALL Moments in table in kip-ft (Shear in Kips)

\* (1) in the table (below) all LL shears (V) & Moments (M) are without IM, DF & UNFACTORED (SAME WITH DEAD LOADS)  
Coped Stringers Condition for Shear & Mom (S. apply Sup)

Unit	DEAD LOADS	Span Length ft	CASE (1)	CASE (2)	CASE (3)	CASE (4)	CASE (5)	CASE (6)
2	V: 2.48 M: 3.877	6.25'	Shear: 31.97 Moment: 50	V: 27.97 M: 31.25	V: 19.98 M: 31.25	V: 23.09 M: 26.56	V: 19.01 M: 21.87	V: 23.09 M: 26.56
5	V: 2.414 M: 3.67	6.08'	V: 31.97 M: 48.64	V: 27.92 M: 30.32	V: 19.98 M: 30.4	V: 22.78 M: 25.84	V: 18.76 M: 21.28	V: 22.78 M: 25.84
10	V: 2.45 M: 3.778	6.17'	V: 31.97 M: 49.36	V: 27.94 M: 30.81	V: 19.98 M: 30.85	V: 22.945 M: 26.22	V: 18.896 M: 21.59	V: 22.94 M: 26.22
11	V: 2.457 M: 3.803	6.19'	V: 31.97 M: 49.52	V: 27.96 M: 30.92	V: 19.98 M: 30.95	V: 22.98 M: 26.307	V: 18.92 M: 21.665	V: 22.98 M: 26.307
13	V: 2.45 M: 3.778	6.17'	V: 31.97 M: 49.36	V: 27.95 M: 30.81	V: 19.98 M: 30.85	V: 22.94 M: 26.22	V: 18.896 M: 21.59	V: 22.94 M: 26.22
14	V: 2.46 M: 3.827	6.21'	V: 31.97 M: 49.68	V: 27.96 M: 31.03	V: 19.98 M: 31.05	V: 23.02 M: 26.39	V: 18.95 M: 21.73	V: 23.02 M: 26.39
18	V: 2.45 M: 3.778	6.17'	V: 31.97 M: 49.36	V: 27.948 M: 30.81	V: 19.98 M: 30.85	V: 22.94 M: 26.22	V: 18.896 M: 21.59	V: 22.94 M: 26.22
19	V: 2.465 M: 3.827	6.21'	V: 31.97 M: 49.68	V: 27.96 M: 31.03	V: 19.98 M: 31.05	V: 23.02 M: 26.393	V: 18.95 M: 21.735	V: 23.02 M: 26.393

Id Dead Loads (WS+Deck+Beam+Barriers)  
 Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-2.043
	0.65	1.16	1.527	0	
	1.3	1.985	1.01	0	
	1.95	2.474	0.494	0	
	2.6	2.627	-0.022	0	
	3.25	2.445	-0.538	0	
	3.9	1.928	-1.054	0	
	4.55	1.075	-1.57	0	
	5.2	-0.113	-2.086	0	
	5.85	-1.637	-2.602	0	
2	0	-3.496	-3.118/	0	-5.805
	0.625	-1.972	2.19	0	
	1.25	-0.758	1.694	0	
	1.875	0.146	1.198	0	
	2.5	0.739	0.702	0	
	3.125	1.023	0.205	0	
	3.75	0.996	-0.291	0	
	4.375	0.659	-0.787	0	
	5	0.012	-1.283	0	
	5.625	-0.945	-1.78	0	
3	0	-2.212	-2.276/	0	-4.605
	0.625	-0.911	1.833	0	
	1.25	0.079	1.336	0	
	1.875	0.759	0.84	0	
	2.5	1.129	0.344	0	
	3.125	1.189	-0.152	0	
	3.75	0.939	-0.649	0	
	4.375	0.378	-1.145	0	
4	0	-3.164	-2.634/	0	-5.543
	0.6	-1.561	2.433	0	
	1.2	-0.244	1.956	0	
	1.8	0.787	1.48	0	
	2.4	1.532	1.004	0	
	3	1.991	0.527	0	
	3.6	2.165	0.051	0	
	4.2	2.052	-0.426	0	
	4.8	1.654	-0.902	0	
	5.4	0.97	-1.378	0	
6	-0.000/	-1.855/	0	-1.855	

SECTION I  
 UNIT 1  
 STRINGERS

Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moir	Corr. Moir	Deflect(max)
1	0	0	32.476	-2.525	32.476	0	0	0
	0.65	18.562	28.557	-3.442	28.557	18.562	0	0.02
	1.3	31.936	24.566	-7.434	24.566	31.936	0	0.03
	1.95	40.191	20.611	-11.389	20.611	40.191	0	0.05
	2.6	43.583	16.763	-15.237	16.763	43.583	0	0.05
	3.25	42.55	13.092	-18.908	13.092	42.55	0	0.05
	3.9	37.715	9.67	-22.329	9.67	37.715	0	0.05
	4.55	29.883	6.568	-25.432	6.568	29.883	0	0.04
	5.2	20.209	3.886	-28.114	3.886	20.209	0	0.03
	5.85	9.989	1.707	-30.292	1.707	9.989	0	0.01
2	0	4.178	0.643	-3.396	32.858	0	-1.174	0
	0.625	10.849	29.491	-2.509	30.499	10.239	0	0.01
	1.25	20.699	27.501	-4.499	27.501	20.699	0	0.02
	1.875	28.999	24.035	-7.965	24.035	28.999	0	0.03
	2.5	34.216	20.251	-11.749	20.251	34.216	0	0.04
	3.125	35.804	16.3	-15.7	16.3	35.804	0	0.04
	3.75	33.589	12.331	-19.669	12.331	33.589	0	0.04
	4.375	27.775	8.494	-23.506	8.494	27.775	0	0.03
	5	19.778	5.163	-26.837	5.163	19.778	0	0.02
	5.625	10.173	2.306	-29.694	4.416	3.057	0	0.01
3	0	5.817	4.416	-1.168	31.98	0	-0.1	0
	0.625	10.211	29.664	-2.336	29.664	10.211	0	0.01
	1.25	19.81	26.776	-5.224	26.776	19.81	0	0.02
	1.875	28.483	23.179	-8.821	23.469	27.583	0	0.03
	2.5	34.052	19.317	-12.683	19.88	32.655	0	0.04
	3.125	35.98	15.34	-16.66	16.144	34.488	0	0.04
	3.75	34.112	11.4	-20.6	12.397	32.886	0	0.04
	4.375	28.668	7.649	-24.351	8.774	27.988	0	0.03
	5	20.273	5.409	-26.591	5.409	20.273	0	0.02
	5.625	10.558	2.44	-29.56	3.462	2.234	0	0.01
4	0	4.397	3.462	-0.733	32.187	0	-1.312	0
	0.6	9.516	30.238	-1.762	30.381	8.744	0	0.01
	1.2	19.097	28.021	-3.979	28.077	18.831	0	0.02
	1.8	27.979	25.338	-6.662	25.402	27.713	0	0.03
	2.4	35.2	22.222	-9.778	22.429	34.457	0	0.04
	3	39.616	18.795	-13.205	19.153	38.541	0	0.04
	3.6	40.507	15.122	-16.878	15.625	39.3	0	0.04
	4.2	37.313	11.271	-20.729	11.895	36.188	0	0.04
	4.8	29.631	7.308	-24.692	8.014	28.783	0	0.03
	5.4	17.221	3.299	-28.701	4.032	16.781	0	0.01

6 0 2.908 -32.649 2.908 0 0 0

Minimums table:

Span	Location	Moment(kN)	Corr. Shear	Corr. Shear	Shear (kN)	Corr. Mom	Corr. Mom	Deflect(mm)
1	0	0	32.476	-2.525	-2.525	0	0	0
	0.65	-1.641	0	-2.525	-4.064	18.158	0	0
	1.3	-3.282	0	-2.525	-8.076	31.101	0	-0.01
	1.95	-4.923	0	-2.525	-11.983	39.034	0	-0.01
	2.6	-6.565	0	-2.525	-15.733	42.295	0	-0.02
	3.25	-8.206	0	-2.525	-19.273	41.363	0	-0.02
	3.9	-9.847	0	-2.525	-22.552	36.849	0	-0.02
	4.55	-11.488	0	-2.525	-25.516	29.502	0	-0.02
	5.2	-13.129	0	-2.525	-28.146	20.042	0	-0.01
	5.85	-14.77	0	-2.525	-30.407	9.319	0	-0.01
2	0	-21.785	4.416	-22.552	-32.151	0	-1.191	0
	0.625	-19.025	4.416	0	-3.396	2.056	0	-0.01
	1.25	-16.329	3.077	0	-5.523	20.679	0	-0.02
	1.875	-14.433	2.382	0	-8.912	28.389	0	-0.02
	2.5	-12.972	2.18	0	-12.542	33.21	0	-0.02
	3.125	-11.948	1.059	0	-16.282	34.703	0	-0.02
	3.75	-11.614	0.004	0	-19.999	32.759	0	-0.02
	4.375	-11.892	0	-1.182	-23.561	27.6	0	-0.02
	5	-12.801	0	-3.396	-26.837	19.778	0	-0.01
	5.625	-14.923	0	-3.396	-29.694	10.173	0	-0.01
3	0	-17.238	3.462	-19.999	-31.98	0	-0.1	0
	0.625	-15.074	3.462	0	-3.925	2.706	0	-0.01
	1.25	-12.911	3.462	0	-5.224	19.81	0	-0.01
	1.875	-11.464	1.376	0	-8.821	28.483	0	-0.02
	2.5	-10.687	1.029	0	-12.683	34.052	0	-0.02
	3.125	-10.632	0	-0.253	-16.66	35.98	0	-0.02
	3.75	-11.424	0	-1.487	-20.6	34.112	0	-0.02
	4.375	-12.816	0	-2.519	-24.351	28.668	0	-0.02
	5	-14.466	0	-3.925	-27.762	20.249	0	-0.01
5.625	-16.919	0	-3.925	-30.68	9.835	0	-0.01	
4	0	-19.372	22.429	-3.925	-32.936	0	-1.311	0
	0.6	-15.705	2.908	0	-1.762	9.516	0	-0.01
	1.2	-13.96	2.908	0	-3.979	19.097	0	-0.01
	1.8	-12.215	2.908	0	-6.662	27.979	0	-0.02
	2.4	-10.47	2.908	0	-9.778	35.2	0	-0.02
	3	-8.725	2.908	0	-13.205	39.616	0	-0.02
	3.6	-6.98	2.908	0	-16.878	40.507	0	-0.01
	4.2	-5.235	2.908	0	-20.729	37.313	0	-0.01
	4.8	-3.49	2.908	0	-24.692	29.631	0	-0.01
	5.4	-1.745	2.908	0	-28.701	17.221	0	0
	6	0	2.908	-32.649	-32.649	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.525	-32.515
2	4.039	-33.18

3	5.585	-32
4	4.195	-33.176
5	2.908	-32.689

Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.813	-2.129	27.813	0	0	0
	0.65	11.279	17.144	-0.856	24.155	15.701	0	0.01
	1.3	19.354	14.472	-3.528	20.558	26.726	0	0.02
	1.95	24.34	11.858	-6.142	17.098	33.342	0	0.03
	2.6	26.429	9.333	-8.667	13.816	35.922	0	0.03
	3.25	25.888	6.925	-11.075	10.751	34.942	0	0.03
	3.9	23.062	4.665	-13.335	7.944	30.98	0	0.03
	4.55	18.372	2.582	-15.418	5.432	24.715	0	0.02
	5.2	12.327	0.941	-17.059	3.254	16.922	0	0.02
	5.85	6.049	0.641	-17.359	1.448	8.471	0	0.01
2	0	2.676	0.412	-2.175	28.463	0	-2.892	0
	0.625	6.44	16.969	-1.031	26.007	7	-1.815	0.01
	1.25	12.402	16.141	-1.859	23.208	15.955	-0.847	0.01
	1.875	17.4	13.844	-4.156	20.144	22.87	-0.195	0.02
	2.5	20.522	11.402	-6.598	16.929	27.179	0	0.02
	3.125	21.523	8.898	-9.102	13.671	28.593	0	0.02
	3.75	20.34	6.408	-11.592	10.477	27.094	0	0.02
	4.375	17.098	4.004	-13.996	7.455	22.934	0	0.02
	5	12.136	2.2	-15.8	4.709	16.625	0	0.01
	5.625	6.48	1.096	-16.904	4.056	3.156	0	0.01
3	0	4.168	2.938	-1.063	28.72	0	-1.864	0
	0.625	6.533	16.934	-1.066	25.999	6.859	-1.438	0.01
	1.25	12.219	15.805	-2.195	23.299	15.543	-0.553	0.01
	1.875	17.14	13.915	-4.085	20.298	22.424	0	0.02
	2.5	20.313	11.496	-6.504	17.111	26.846	0	0.02
	3.125	21.415	8.994	-9.006	13.85	28.438	0	0.02
	3.75	20.335	6.486	-11.514	10.627	27.111	0	0.02
	4.375	17.15	4.048	-13.952	7.551	23.051	0	0.02
	5	12.139	2.135	-15.865	4.729	16.712	0	0.01
	5.625	6.277	0.994	-17.006	3.098	2.053	0	0.01
4	0	2.817	2.218	-0.47	28.661	0	-2.632	0
	0.6	5.785	17.291	-0.709	26.597	6.109	-1.622	0.01
	1.2	11.652	17.012	-0.988	24.446	14.832	-0.684	0.01
	1.8	17.189	15.251	-2.749	21.996	22.46	-0.057	0.02
	2.4	21.445	13.195	-4.805	19.294	28.291	0	0.02
	3	23.975	10.968	-7.032	16.382	31.733	0	0.03
	3.6	24.403	8.6	-9.4	13.307	32.307	0	0.03
	4.2	22.424	6.118	-11.882	10.111	29.637	0	0.02
	4.8	17.8	3.551	-14.449	6.838	23.455	0	0.02
	5.4	10.359	0.927	-17.073	3.531	13.597	-0.037	0.01

6            0            2.413    -27.692            2.413            0            0            0

Minimums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.813	-2.129	-2.129	0	0	0
	0.65	-1.069	0	-1.645	-3.529	14.742	-0.012	0
	1.3	-2.139	0	-1.645	-6.867	25.414	0	-0.01
	1.95	-3.208	0	-1.645	-10.172	32.081	0	-0.01
	2.6	-4.278	0	-1.645	-13.399	34.925	0	-0.01
	3.25	-5.347	0	-1.645	-16.503	34.244	0	-0.01
	3.9	-6.416	0	-1.645	-19.439	30.453	0	-0.01
	4.55	-7.486	0	-1.645	-22.161	24.093	0	-0.01
	5.2	-8.565	0	-1.881	-24.621	15.826	-0.594	-0.01
2	5.85	-14.534	0	-11.964	-26.771	6.441	-1.675	0
	0	-24.081	15.856	-16.581	-28.817	0	-2.91	0
	0.625	-15.298	10.62	0	-3.039	1.896	0	-0.01
	1.25	-10.568	0.687	0	-4.818	17.037	0	-0.01
	1.875	-10.142	0.683	0	-7.661	23.379	0	-0.01
	2.5	-9.715	0.683	0	-10.744	27.382	0	-0.01
	3.125	-9.288	0.683	0	-13.963	28.623	0	-0.01
	3.75	-8.861	0.683	0	-17.21	26.942	0	-0.01
	4.375	-8.434	0.683	0	-20.377	22.448	0	-0.01
3	5	-8.273	0	-3.651	-23.354	15.524	-0.546	-0.01
	5.625	-13.289	0	-12.302	-26.029	6.832	-1.434	0
	0	-21.963	15.409	-15.444	-28.678	0	-1.864	0
	0.625	-13.307	12.257	0	-3.608	2.901	0	0
	1.25	-8.339	3.653	0	-4.711	16.713	0	-0.01
	1.875	-8.295	0	-0.297	-7.483	23.011	0	-0.01
	2.5	-8.481	0	-0.297	-10.528	27.128	0	-0.01
	3.125	-8.666	0	-0.297	-13.738	28.564	0	-0.01
	3.75	-8.851	0	-0.297	-17.005	27.085	0	-0.01
4	4.375	-9.037	0	-0.297	-20.216	22.734	-0.006	-0.01
	5	-9.283	0	-3.279	-23.262	15.834	-0.637	-0.01
	5.625	-14.14	0	-10.37	-26.026	6.992	-1.586	0
	0	-22.859	16.526	-15.624	-28.433	0	-2.627	0
	0.6	-14.114	11.979	0	-1.499	8.096	0	0
	1.2	-9.03	1.977	0	-3.334	16.003	0	-0.01
	1.8	-7.899	1.881	0	-5.526	23.208	0	-0.01
	2.4	-6.77	1.881	0	-8.038	28.937	0	-0.01
	3	-5.642	1.881	0	-10.834	32.501	0	-0.01
	3.6	-4.514	1.881	0	-13.875	33.3	0	-0.01
	4.2	-3.385	1.881	0	-17.124	30.824	0	-0.01
	4.8	-2.257	1.881	0	-20.542	24.65	0	0
	5.4	-1.128	1.881	0	-24.089	14.453	0	0
	6	0	2.413	-27.692	-27.692	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.129	-27.846
2	3.596	-31.205



3	5.397	-30.571
4	3.736	-30.8
5	2.413	-27.692

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	19.975	-1.484	19.975	0	0	0
	0.65	11.349	17.46	-2.54	17.46	11.349	0	0.01
	1.3	19.438	14.953	-5.047	14.953	19.438	0	0.02
	1.95	24.396	12.511	-7.489	12.511	24.396	0	0.03
	2.6	26.434	10.167	-9.833	10.167	26.434	0	0.03
	3.25	26.117	8.036	-11.964	8.036	26.117	0	0.03
	3.9	23.627	6.058	-13.942	6.058	23.627	0	0.03
	4.55	19.308	4.244	-15.756	4.244	19.308	0	0.02
	5.2	13.676	2.63	-17.37	2.63	13.676	0	0.02
	5.85	7.348	1.256	-18.744	1.256	7.348	0	0.01
2	0	2.611	0.402	-2.122	19.986	0	-0.057	0
	0.625	7.173	17.785	-2.215	18.432	6.781	0	0.01
	1.25	12.924	16.548	-3.452	16.548	12.924	0	0.01
	1.875	17.743	14.43	-5.57	14.43	17.743	0	0.02
	2.5	20.756	12.161	-7.839	12.161	20.756	0	0.02
	3.125	21.97	9.972	-10.028	9.972	21.97	0	0.02
	3.75	21.097	7.748	-12.252	7.748	21.097	0	0.02
	4.375	18.204	5.577	-14.423	5.749	16.985	0	0.02
	5	13.574	3.549	-16.451	4.012	12.414	0	0.01
	5.625	7.715	1.75	-18.25	2.819	4.632	0	0.01
3	0	3.636	2.76	-0.73	19.657	1.584	0	0
	0.625	7.952	18.18	-1.82	18.18	7.952	0	0.01
	1.25	13.737	16.371	-3.629	16.371	13.737	0	0.01
	1.875	18.276	14.334	-5.666	14.469	17.128	0	0.02
	2.5	21.071	12.158	-7.842	12.425	20.409	0	0.02
	3.125	21.847	9.933	-10.067	10.09	21.555	0	0.02
	3.75	20.554	7.748	-12.252	7.748	20.554	0	0.02
	4.375	17.492	5.483	-14.517	5.688	17.368	0	0.02
	5	12.679	3.816	-16.184	3.816	12.679	0	0.01
	5.625	7.028	2.19	-17.81	2.19	7.028	0	0.01
4	0	2.71	2.133	-0.452	19.99	0	-0.063	0
	0.6	7.103	18.685	-1.315	18.899	5.948	0	0.01
	1.2	13.033	17.285	-2.715	17.513	11.936	0	0.01
	1.8	18.256	15.653	-4.347	15.876	17.321	0	0.02
	2.4	22.223	13.827	-6.173	14.018	21.536	0	0.02
	3	24.474	11.842	-8.158	11.971	24.088	0	0.03
	3.6	24.636	9.735	-10.265	9.766	24.562	0	0.03
	4.2	22.618	7.435	-12.565	7.541	22.426	0	0.02
	4.8	17.989	5.009	-14.991	5.28	17.664	0	0.02
	5.4	10.488	2.52	-17.48	2.964	10.221	0	0.01

6            0            1.679    -19.975       1.679            0            0            0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	19.975	-1.484	-1.484	0	0	0
	0.65	-0.965	0	-1.484	-3.042	11.023	0	0
	1.3	-1.929	0	-1.484	-5.389	18.995	0	-0.01
	1.95	-2.894	0	-1.484	-7.666	24.051	0	-0.01
	2.6	-3.859	0	-1.484	-9.862	26.358	0	-0.01
	3.25	-4.824	0	-1.484	-12.046	25.852	0	-0.01
	3.9	-5.788	0	-1.484	-14.095	23.03	0	-0.01
	4.55	-6.753	0	-1.484	-15.947	18.439	0	-0.01
	5.2	-7.718	0	-1.484	-17.571	12.63	0	-0.01
	5.85	-8.683	0	-1.484	-18.933	6.243	0	0
2	0	-13.616	2.76	-14.095	-19.991	0	-0.071	0
	0.625	-11.891	2.76	0	-2.215	7.173	0	-0.01
	1.25	-10.181	1.952	0	-3.874	12.916	0	-0.01
	1.875	-8.962	1.952	0	-5.767	17.616	0	-0.01
	2.5	-7.766	1.898	0	-7.839	20.756	0	-0.01
	3.125	-6.58	1.898	0	-10.176	21.689	0	-0.01
	3.75	-6.645	0	-0.782	-12.361	20.311	0	-0.01
	4.375	-7.259	0	-1.09	-14.423	18.204	0	-0.01
	5	-8.001	0	-2.122	-16.451	13.574	0	-0.01
	5.625	-9.327	0	-2.122	-18.25	7.715	0	0
3	0	-10.654	12.425	-2.122	-19.718	1.293	0	0
	0.625	-9.291	2.133	0	-2.453	1.691	0	0
	1.25	-8.008	1.22	0	-3.783	12.415	0	-0.01
	1.875	-7.246	1.22	0	-5.666	18.276	0	-0.01
	2.5	-6.569	0.963	0	-7.842	21.071	0	-0.01
	3.125	-6.123	0	-1.276	-10.067	21.847	0	-0.01
	3.75	-7.084	0	-1.551	-12.252	20.554	0	-0.01
	4.375	-8.054	0	-1.551	-14.517	17.492	0	-0.01
	5	-9.043	0	-1.594	-16.619	12.67	0	-0.01
	5.625	-10.574	0	-2.453	-18.475	6.599	0	-0.01
4	0	-12.107	14.018	-2.453	-19.987	0	-0.059	0
	0.6	-9.069	1.679	0	-1.315	7.103	0	0
	1.2	-8.061	1.679	0	-2.715	13.033	0	-0.01
	1.8	-7.053	1.679	0	-4.347	18.256	0	-0.01
	2.4	-6.046	1.679	0	-6.173	22.223	0	-0.01
	3	-5.038	1.679	0	-8.158	24.474	0	-0.01
	3.6	-4.031	1.679	0	-10.265	24.636	0	-0.01
	4.2	-3.023	1.679	0	-12.565	22.618	0	-0.01
	4.8	-2.015	1.679	0	-14.991	17.989	0	0
	5.4	-1.008	1.679	0	-17.48	10.488	0	0
6	0	1.679	-19.975	-19.975	0	0	0	

Support	Reac. Pos	Reac. Negative
1	1.484	-20
2	2.524	-20.162

3	3.49	-18.703
4	2.585	-20.003
5	1.679	-20

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	21.921	-1.473	21.921	0	0	0
	0.65	11.89	18.293	0	18.293	11.89	0	0.01
	1.3	19.268	14.822	-2.178	14.822	19.268	0	0.02
	1.95	22.634	11.607	-5.393	11.607	22.634	0	0.03
	2.6	22.652	8.712	-8.288	8.712	22.652	0	0.03
	3.25	22.292	6.859	-10.141	6.859	22.292	0	0.03
	3.9	20.292	5.203	-11.797	5.203	20.292	0	0.03
	4.55	17.749	1.846	-15.154	2.801	12.743	0	0.02
	5.2	11.771	0	-18.659	1.782	9.267	0	0.02
	5.85	5.269	0.901	-11.099	0.901	5.269	0	0.01
2	0	2.469	0.38	-2.007	22.904	0	-6.359	0
	0.625	4.41	10.494	-1.506	19.81	3.624	0	0.01
	1.25	11.12	16.555	-0.445	16.555	11.12	0	0.01
	1.875	15.764	13.317	-3.683	14.515	8.203	0	0.02
	2.5	17.52	10.241	-6.759	12.256	12.974	0	0.02
	3.125	16.684	7.426	-9.574	9.856	16.372	0	0.02
	3.75	17.626	7.115	-9.885	7.115	17.626	0	0.02
	4.375	16.238	4.083	-12.917	4.083	16.238	0	0.02
	5	11.902	0.863	-16.137	3.271	7.506	0	0.01
	5.625	6.122	1.39	-10.61	2.849	1.972	0	0.01
3	0	3.753	2.849	-0.754	22.774	0	-6.623	0
	0.625	6.498	10.511	-1.489	19.685	3.111	0	0.01
	1.25	12.1	16.002	-0.998	16.438	10.473	0	0.01
	1.875	16.317	12.807	-4.193	14.181	9.335	0	0.02
	2.5	17.639	9.816	-7.184	12.181	13.333	0	0.02
	3.125	16.73	9.435	-7.565	9.737	16.17	0	0.02
	3.75	17.439	6.611	-10.389	6.985	16.98	0	0.02
	4.375	15.554	3.534	-13.466	3.956	15.299	0	0.02
	5	10.815	0.743	-16.257	2.147	7.605	0	0.01
	5.625	4.305	1.451	-10.549	2.05	1.323	0	0.01
4	0	2.604	2.05	-0.434	23.962	0	-7.976	0
	0.6	5.123	11.051	-0.949	21.016	2.114	0	0.01
	1.2	11.374	17.464	0	17.738	10.057	0	0.01
	1.8	16.24	13.943	-3.057	14.918	8.742	0	0.02
	2.4	19.131	11.686	-5.314	13.216	13.621	0	0.02
	3	20.938	10.021	-6.979	11.172	17.483	0	0.02
	3.6	20.966	8.264	-8.736	8.781	19.726	0	0.02
	4.2	20.157	5.802	-11.198	6.447	18.995	0	0.02
	4.8	17.173	2.689	-14.311	4.583	14.901	0	0.01
	5.4	10.613	0	-17.688	2.675	8.595	0	0.01

6            0            1.677    -21.234    1.677            0            0            0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	21.921	-1.473	-1.473	0	0	0
	0.65	-0.957	0	-1.473	-2.761	9.255	0	0
	1.3	-1.915	0	-1.473	-4.7	15.99	0	-0.01
	1.95	-2.872	0	-1.473	-6.578	20.323	0	-0.01
	2.6	-3.829	0	-1.473	-8.474	22.169	0	-0.01
	3.25	-4.787	0	-1.473	-10.954	19.648	0	-0.01
	3.9	-5.744	0	-1.473	-13.06	15.364	0	-0.01
	4.55	-6.701	0	-1.473	-15.383	16.706	0	-0.01
	5.2	-7.659	0	-1.473	-18.901	10.516	0	-0.01
	5.85	-10.103	0	-13.06	-22.144	1.357	0	0
2	0	-19.012	14.515	-14.367	-25.031	0	-9.921	0
	0.625	-12.274	2.849	0	-2.007	1.215	0	-0.01
	1.25	-10.518	1.574	0	-2.244	7.751	0	-0.01
	1.875	-9.534	1.574	0	-4.038	15.535	0	-0.01
	2.5	-8.55	1.574	0	-7.056	17.143	0	-0.02
	3.125	-7.566	1.574	0	-9.792	16.271	0	-0.02
	3.75	-7.007	0	-0.358	-12.093	13.702	0	-0.01
	4.375	-7.231	0	-0.358	-14.285	9.103	0	-0.01
	5	-7.566	0	-2.007	-16.523	10.446	0	-0.01
	5.625	-9.402	0	-12.051	-19.77	3.033	0	-0.01
3	0	-17.682	13.408	-14.285	-22.851	0	-6.737	0
	0.625	-9.506	12.181	0	-2.275	1.568	0	0
	1.25	-7.645	2.05	0	-2.839	7.486	0	-0.01
	1.875	-7.196	0.58	0	-4.193	16.317	0	-0.01
	2.5	-6.833	0.58	0	-7.184	17.639	0	-0.01
	3.125	-6.523	0	-0.979	-9.866	16.401	0	-0.01
	3.75	-7.135	0	-0.979	-12.196	13.131	0	-0.01
	4.375	-7.746	0	-0.979	-14.383	8.612	0	-0.01
	5	-8.385	0	-2.275	-16.696	10.806	0	-0.01
	5.625	-9.806	0	-2.275	-19.931	3.261	0	-0.01
4	0	-18.357	14.039	-14.383	-22.991	0	-6.676	0
	0.6	-10.168	13.216	0	-0.949	5.123	0	0
	1.2	-8.052	1.677	0	-1.851	8.886	0	-0.01
	1.8	-7.045	1.677	0	-3.057	16.24	0	-0.01
	2.4	-6.039	1.677	0	-5.314	19.131	0	-0.01
	3	-5.032	1.677	0	-6.979	20.938	0	-0.01
	3.6	-4.026	1.677	0	-8.736	20.966	0	-0.01
	4.2	-3.019	1.677	0	-11.198	20.157	0	-0.01
	4.8	-2.013	1.677	0	-14.311	17.173	0	0
	5.4	-1.006	1.677	0	-17.688	10.613	0	0
	6	0	1.677	-21.234	-21.234	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.473	-21.959
2	2.387	-29.056

3	3.603	-27.747
4	2.484	-28.448
5	1.677	-21.271

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	18.087	-0.956	18.087	0	0	0
	0.65	9.819	15.106	0	15.106	9.819	0	0.01
	1.3	15.923	12.249	-1.751	12.249	15.923	0	0.02
	1.95	18.716	9.598	-4.402	9.598	18.716	0	0.02
	2.6	18.74	7.208	-6.792	7.208	18.74	0	0.02
	3.25	18.414	5.666	-8.334	5.666	18.414	0	0.03
	3.9	16.838	4.317	-9.683	4.317	16.838	0	0.02
	4.55	14.801	1.561	-12.439	2.66	12.103	0	0.02
	5.2	9.915	0	-15.324	1.664	8.654	0	0.01
	5.85	4.761	0.814	-11.186	0.814	4.761	0	0.01
2	0	1.567	0.241	-1.273	20.572	0	-13.456	0
	0.625	4.35	10.594	-1.406	18.241	0	-5.068	0
	1.25	9.124	11.897	-2.103	15.638	2.027	0	0.01
	1.875	11.998	9.44	-4.56	12.882	7.358	0	0.01
	2.5	12.894	7.644	-4.356	10.849	8.846	0	0.01
	3.125	13.888	6.356	-5.644	9.327	11.41	0	0.02
	3.75	13.52	4.991	-7.009	7.445	12.834	0	0.01
	4.375	12.575	5.217	-8.783	5.217	12.575	0	0.01
	5	10.188	2.703	-11.297	3.035	7.49	0	0.01
	5.625	5.715	1.297	-10.703	2.346	1.624	0	0
3	0	3.091	2.346	-0.621	19.866	0	-10.986	0
	0.625	6.027	10.619	-1.381	17.561	0	-3.317	0
	1.25	10.36	11.424	-2.576	15.03	3.056	0	0.01
	1.875	12.821	8.983	-5.017	12.377	7.756	0	0.01
	2.5	13.783	6.835	-5.165	10.381	10.113	0	0.01
	3.125	13.994	5.482	-6.518	8.694	12.064	0	0.02
	3.75	12.869	4.213	-7.787	6.745	12.763	0	0.01
	4.375	11.836	4.521	-9.479	4.521	11.836	0	0.01
	5	8.936	2.062	-11.938	2.126	7.604	0	0.01
	5.625	4.195	1.28	-10.72	1.28	0.826	0	0
4	0	1.626	1.28	-0.271	20.66	0	-12.13	0
	0.6	4.496	11.167	-0.833	18.395	0	-4.135	0.01
	1.2	9.6	14.333	0	15.78	2.657	0	0.01
	1.8	13.573	11.435	-2.565	12.875	7.525	0	0.01
	2.4	15.9	9.583	-4.417	11.199	10.085	0	0.02
	3	17.325	8.225	-5.775	9.753	12.74	0	0.02
	3.6	17.282	6.799	-7.201	8.017	14.359	0	0.02
	4.2	16.674	4.736	-9.264	5.957	14.477	0	0.02
	4.8	14.198	2.168	-11.832	3.831	12.202	0	0.01
	5.4	8.769	0	-14.615	2.297	7.022	0	0.01



6 0 1.1 -17.532 1.1 0 0 0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.087	-0.956	-0.956	0	0	0
	0.65	-0.622	0	-0.956	-2.38	7.553	0	0
	1.3	-1.243	0	-0.956	-3.943	13.074	0	0
	1.95	-1.865	0	-0.956	-5.573	16.432	0	0
	2.6	-2.486	0	-0.956	-7.761	16.221	0	-0.01
	3.25	-3.108	0	-0.956	-9.59	14.334	0	-0.01
	3.9	-3.73	0	-0.956	-11.092	11.34	0	-0.01
	4.55	-4.351	0	-0.956	-13.694	9.093	0	-0.01
	5.2	-4.973	0	-0.956	-16.604	3.257	0	-0.01
	5.85	-10.693	0	-10.204	-19.205	0	-4.547	0
2	0	-18.329	10.402	-16.604	-21.428	0	-13.462	0
	0.625	-11.927	9.395	0	-1.406	4.35	0	-0.01
	1.25	-8.666	1.072	0	-2.213	7.752	0	-0.01
	1.875	-7.997	1.072	0	-4.56	11.998	0	-0.01
	2.5	-7.327	1.072	0	-6.777	12.891	0	-0.01
	3.125	-6.657	1.072	0	-8.719	12.159	0	-0.01
	3.75	-5.987	1.072	0	-10.398	10.179	0	-0.01
	4.375	-5.318	1.072	0	-12.41	7.797	0	-0.01
	5	-4.8	0	-1.273	-15.071	3.085	0	-0.01
	5.625	-9.702	0	-9.075	-17.601	0	-3.305	0
3	0	-15.838	10.381	-14.018	-19.901	0	-10.986	0
	0.625	-9.735	9.052	0	-1.998	4.603	0	0
	1.25	-4.774	1.28	0	-2.684	7.476	0	-0.01
	1.875	-5.079	0	-0.574	-5.017	12.821	0	-0.01
	2.5	-5.438	0	-0.574	-7.166	13.251	0	-0.01
	3.125	-5.796	0	-0.574	-8.967	12.104	0	-0.01
	3.75	-6.157	0	-0.577	-10.414	9.912	0	-0.01
	4.375	-6.518	0	-0.577	-12.847	7.702	0	-0.01
	5	-6.905	0	-1.874	-15.539	2.589	0	-0.01
	5.625	-10.315	0	-8.967	-18.07	0	-4.182	0
4	0	-16.834	10.389	-15.539	-20.325	0	-12.133	0
	0.6	-10.673	10.014	0	-0.833	4.496	0	0
	1.2	-5.281	1.1	0	-1.703	8.176	0	0
	1.8	-4.621	1.1	0	-2.715	11.403	0	-0.01
	2.4	-3.961	1.1	0	-4.417	15.9	0	-0.01
	3	-3.3	1.1	0	-5.775	17.325	0	-0.01
	3.6	-2.64	1.1	0	-7.201	17.282	0	-0.01
	4.2	-1.98	1.1	0	-9.264	16.674	0	0
	4.8	-1.32	1.1	0	-11.832	14.198	0	0
	5.4	-0.66	1.1	0	-14.615	8.769	0	0
6	0	1.1	-17.532	-17.532	0	0	0	

Support	Reac. Pos	Reac. Negative
1	0.956	-18.118
2	1.514	-28.074

3	2.967	-25.811
4	1.551	-27.029
5	1.1	-17.563

Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	21.948	-1.438	21.948	0	0	0
	0.65	11.857	18.242	0	18.242	11.857	0	0.01
	1.3	19.128	14.714	-2.286	14.714	19.128	0	0.02
	1.95	22.354	11.464	-5.536	11.464	22.354	0	0.03
	2.6	23.071	8.873	-8.127	8.873	23.071	0	0.03
	3.25	22.757	7.002	-9.998	7.002	22.757	0	0.03
	3.9	20.452	5.244	-11.756	5.244	20.452	0	0.03
	4.55	17.566	1.806	-15.194	2.61	11.874	0	0.02
	5.2	11.25	0	-18.76	1.555	8.087	0	0.02
	5.85	3.872	0.662	-11.338	0.662	3.872	0	0.01
2	0	2.469	0.38	-2.007	22.919	0	-6.377	0
	0.625	4.068	11.059	-0.941	19.715	3.681	0	0.01
	1.25	11.117	16.371	-0.629	16.623	2.329	0	0.01
	1.875	15.601	13.065	-3.935	14.829	8.406	0	0.02
	2.5	17.143	9.944	-7.056	12.628	13.446	0	0.02
	3.125	16.767	10.064	-6.936	10.064	16.767	0	0.02
	3.75	17.795	7.182	-9.818	7.182	17.795	0	0.02
	4.375	16.071	4.03	-12.97	4.03	16.071	0	0.02
	5	11.333	0.712	-16.288	2.849	0.191	0	0.01
	5.625	4.707	1.068	-10.932	2.849	1.972	0	0.01
3	0	3.753	2.849	-0.754	22.774	0	-6.623	0
	0.625	5.251	10.798	-1.202	19.685	3.111	0	0.01
	1.25	11.658	16.12	-0.88	16.438	10.473	0	0.01
	1.875	16.27	12.822	-4.178	14.29	8.998	0	0.02
	2.5	17.905	9.709	-7.291	12.181	13.333	0	0.02
	3.125	16.864	6.884	-10.116	9.737	16.17	0	0.02
	3.75	17.087	6.898	-10.102	6.985	16.98	0	0.02
	4.375	15.415	3.764	-13.236	3.956	15.299	0	0.02
	5	10.815	0.743	-16.257	2.05	0.042	0	0.01
	5.625	3.959	0.915	-11.085	2.05	1.323	0	0.01
4	0	2.604	2.05	-0.434	23.962	0	-7.976	0
	0.6	3.596	11.334	-0.666	21.016	2.114	0	0.01
	1.2	10.792	17.585	0	17.738	10.057	0	0.01
	1.8	15.979	14.005	-2.995	15	8.402	0	0.02
	2.4	19.192	11.669	-5.331	13.279	13.397	0	0.02
	3	21.288	9.904	-7.096	11.205	17.384	0	0.02
	3.6	21.533	8.028	-8.972	8.781	19.726	0	0.02
	4.2	19.841	5.977	-11.023	6.319	19.225	0	0.02
	4.8	16.993	2.839	-14.161	4.258	15.291	0	0.01
	5.4	10.55	0	-17.584	2.142	8.915	0	0.01

6            0            1.645    -21.195            1.645            0            0            0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	21.948	-1.438	-1.438	0	0	0
	0.65	-0.935	0	-1.438	-2.182	9.632	0	0
	1.3	-1.87	0	-1.438	-4.29	16.523	0	-0.01
	1.95	-2.804	0	-1.438	-6.366	20.737	0	-0.01
	2.6	-3.739	0	-1.438	-8.474	22.169	0	-0.01
	3.25	-4.674	0	-1.438	-10.969	19.6	0	-0.01
	3.9	-5.609	0	-1.438	-13.105	15.19	0	-0.01
	4.55	-6.543	0	-1.438	-15.383	16.706	0	-0.01
	5.2	-7.478	0	-1.438	-18.901	10.516	0	-0.01
5.85	-10.366	0	-13.105	-22.144	1.357	0	0	
2	0	-19.399	14.829	-14.427	-25.031	0	-9.921	0
	0.625	-12.274	2.849	0	-2.007	1.215	0	-0.01
	1.25	-10.508	2.104	0	-2.071	7.755	0	-0.01
	1.875	-9.211	2.072	0	-4.038	15.535	0	-0.01
	2.5	-7.916	2.072	0	-7.056	17.143	0	-0.01
	3.125	-6.777	1.776	0	-9.792	16.271	0	-0.01
	3.75	-6.618	0	-0.62	-12.217	13.39	0	-0.01
	4.375	-7.006	0	-0.62	-14.306	9.037	0	-0.01
	5	-7.566	0	-2.007	-16.523	10.446	0	-0.01
5.625	-9.516	0	-12.217	-19.77	3.033	0	0	
3	0	-17.795	14.29	-13.512	-22.851	0	-6.738	0
	0.625	-9.506	12.181	0	-2.275	1.568	0	0
	1.25	-7.645	2.05	0	-2.409	9.108	0	-0.01
	1.875	-6.914	0.991	0	-4.178	16.27	0	-0.01
	2.5	-6.307	0.946	0	-7.291	17.905	0	-0.01
	3.125	-6.061	0	-0.756	-10.116	16.864	0	-0.01
	3.75	-6.583	0	-0.87	-12.607	13.637	0	-0.01
	4.375	-7.4	0	-1.552	-14.724	8.818	0	-0.01
	5	-8.385	0	-2.275	-16.542	10.809	0	-0.01
5.625	-10.052	0	-13.672	-19.873	3.298	0	0	
4	0	-18.789	14.111	-14.724	-23.046	0	-6.746	0
	0.6	-10.504	13.279	0	-0.666	3.596	0	0
	1.2	-7.895	1.645	0	-1.58	7.584	0	-0.01
	1.8	-6.908	1.645	0	-2.995	15.979	0	-0.01
	2.4	-5.921	1.645	0	-5.331	19.192	0	-0.01
	3	-4.934	1.645	0	-7.096	21.288	0	-0.01
	3.6	-3.947	1.645	0	-8.972	21.533	0	-0.01
	4.2	-2.961	1.645	0	-11.023	19.841	0	-0.01
	4.8	-1.974	1.645	0	-14.161	16.993	0	0
	5.4	-0.987	1.645	0	-17.584	10.55	0	0
6	0	1.645	-21.195	-21.195	0	0	0	

Support	Reac. Pos	Reac. Negative
1	1.438	-21.986
2	2.387	-29.337

3	3.603	-27.802
4	2.484	-28.841
5	1.645	-21.233

Id HS15  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	24.066	-1.809	24.066	0	0	0
	0.65	13.695	21.068	-2.932	21.068	13.695	0	0.01
	1.3	23.483	18.063	-5.937	18.063	23.483	0	0.02
	1.95	29.492	15.124	-8.876	15.124	29.492	0	0.03
	2.6	31.963	12.293	-11.707	12.293	31.963	0	0.04
	3.25	31.245	9.614	-14.386	9.614	31.245	0	0.04
	3.9	27.799	7.128	-16.872	7.128	27.799	0	0.04
	4.55	22.198	4.879	-19.121	4.879	22.198	0	0.03
	5.2	15.157	2.915	-21.085	2.915	15.157	0	0.02
	5.85	7.492	1.281	-22.719	1.281	7.492	0	0.01
2	0	3.133	0.482	-2.547	24.148	0	-0.271	0
	0.625	8.137	22.118	-1.882	22.307	8.023	0	0.01
	1.25	15.513	20.05	-3.95	20.05	15.513	0	0.01
	1.875	21.406	17.494	-6.506	17.494	21.406	0	0.02
	2.5	25.096	14.742	-9.258	14.742	25.096	0	0.03
	3.125	26.233	11.898	-12.102	11.898	26.233	0	0.03
	3.75	24.725	9.063	-14.937	9.063	24.725	0	0.03
	4.375	20.733	6.339	-17.661	6.339	20.733	0	0.02
	5	14.833	3.872	-20.128	3.872	14.833	0	0.01
	5.625	7.63	1.729	-22.271	3.312	2.293	0	0.01
3	0	4.363	3.312	-0.876	23.985	0	-0.075	0
	0.625	7.659	22.248	-1.752	22.248	7.659	0	0.01
	1.25	14.858	20.082	-3.918	20.082	14.858	0	0.01
	1.875	20.856	17.547	-6.453	17.602	20.687	0	0.02
	2.5	24.753	14.805	-9.195	14.91	24.491	0	0.03
	3.125	26.146	11.957	-12.043	12.108	25.866	0	0.03
	3.75	24.894	9.111	-14.889	9.298	24.664	0	0.03
	4.375	21.118	6.369	-17.631	6.58	20.991	0	0.02
	5	15.204	4.057	-19.943	4.057	15.204	0	0.01
	5.625	7.919	1.83	-22.17	2.596	1.675	0	0.01
4	0	3.298	2.596	-0.55	24.026	0	-0.303	0
	0.6	7.137	22.678	-1.322	22.705	6.992	0	0.01
	1.2	14.323	21.016	-2.984	21.027	14.273	0	0.02
	1.8	20.835	19.039	-4.961	19.051	20.785	0	0.02
	2.4	25.982	16.783	-7.217	16.821	25.843	0	0.03
	3	29.107	14.298	-9.702	14.365	28.906	0	0.03
	3.6	29.701	11.624	-12.376	11.719	29.475	0	0.03
	4.2	27.352	8.804	-15.196	8.922	27.141	0	0.03
	4.8	21.746	5.878	-18.122	6.011	21.587	0	0.02
	5.4	12.668	2.887	-21.113	3.024	12.585	0	0.01

6 0 2.06 -24.099 2.06 0 0 0

Minimums table:

Span	Location	Moment(kN-m)	Corr. Shear(kN)	Corr. Shear(kN)	Shear (kN)	Corr. Momr(kN-m)	Corr. Momr(kN-m)	Deflect(mm)
1	0	0	24.066	-1.809	-1.809	0	0	0
	0.65	-1.176	0	-1.809	-3.048	13.619	0	0
	1.3	-2.352	0	-1.809	-6.057	23.326	0	-0.01
	1.95	-3.528	0	-1.809	-8.987	29.275	0	-0.01
	2.6	-4.704	0	-1.809	-11.799	31.721	0	-0.01
	3.25	-5.88	0	-1.809	-14.455	31.022	0	-0.01
	3.9	-7.056	0	-1.809	-16.914	27.637	0	-0.01
	4.55	-8.232	0	-1.809	-19.137	22.127	0	-0.01
	5.2	-9.408	0	-1.809	-21.091	15.125	0	-0.01
	5.85	-10.584	0	-1.809	-22.741	7.366	0	-0.01
2	0	-16.339	3.312	-16.914	-24.02	0	-0.287	0
	0.625	-14.269	3.312	0	-2.547	1.542	0	-0.01
	1.25	-12.232	3.067	0	-4.143	15.509	0	-0.01
	1.875	-10.315	3.067	0	-6.684	21.291	0	-0.01
	2.5	-8.398	3.067	0	-9.406	24.907	0	-0.01
	3.125	-6.534	2.873	0	-12.211	26.027	0	-0.01
	3.75	-6.896	0	-2.128	-14.999	24.569	0	-0.01
	4.375	-8.232	0	-2.147	-17.671	20.7	0	-0.01
	5	-9.601	0	-2.547	-20.128	14.833	0	-0.01
	5.625	-11.193	0	-2.547	-22.271	7.63	0	-0.01
3	0	-12.928	2.596	-14.999	-23.985	0	-0.075	0
	0.625	-11.306	2.596	0	-2.944	2.03	0	-0.01
	1.25	-9.683	2.596	0	-3.918	14.858	0	-0.01
	1.875	-8.193	2.36	0	-6.453	20.856	0	-0.01
	2.5	-6.717	2.36	0	-9.195	24.753	0	-0.01
	3.125	-5.797	0	-2.673	-12.043	26.146	0	-0.01
	3.75	-7.467	0	-2.673	-14.889	24.894	0	-0.01
	4.375	-9.138	0	-2.673	-17.631	21.118	0	-0.01
	5	-10.849	0	-2.944	-20.163	15.2	0	-0.01
	5.625	-12.689	0	-2.944	-22.38	7.783	0	-0.01
4	0	-14.529	16.821	-2.944	-24.164	0	-0.299	0
	0.6	-11.122	2.06	0	-1.322	7.137	0	-0.01
	1.2	-9.886	2.06	0	-2.984	14.323	0	-0.01
	1.8	-8.65	2.06	0	-4.961	20.835	0	-0.01
	2.4	-7.414	2.06	0	-7.217	25.982	0	-0.01
	3	-6.179	2.06	0	-9.702	29.107	0	-0.01
	3.6	-4.943	2.06	0	-12.376	29.701	0	-0.01
	4.2	-3.707	2.06	0	-15.196	27.352	0	-0.01
	4.8	-2.471	2.06	0	-18.122	21.746	0	-0.01
	5.4	-1.236	2.06	0	-21.113	12.668	0	0
6	0	2.06	-24.099	-24.099	0	0	0	

Support	Reac. Pos	Reac. Negative
1	1.809	-24.097
2	3.029	-24.369

3	4.188	-24
4	3.146	-24.284
5	2.06	-24.129



Section I  
 Unit 2  
 Coped Stringer

Id Ohio 5C1  
 Type Truck  
 Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	23.086	0	23.086	0	0	0
	0.625	12.325	19.72	0	19.72	12.325	0	0.01
	1.25	20.4	16.32	-0.68	16.32	20.4	0	0.02
	1.875	24.225	12.92	-4.08	12.92	24.225	0	0.03
	2.5	25.5	10.2	-6.8	10.2	25.5	0	0.04
	3.125	26.563	8.5	-8.5	8.5	26.563	0	0.04
	3.75	25.5	6.8	-10.2	6.8	25.5	0	0.04
	4.375	24.225	4.08	-12.92	5.1	22.313	0	0.03
	5	20.4	0.68	-16.32	3.4	17	0	0.02
	5.625	12.325	0	-19.72	1.7	9.563	0	0.01
	6.25	0	0	-23.086	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	23.086	0	0	0	0	0
	0.625	0	0	0	-1.7	9.563	0	0
	1.25	0	0	0	-3.4	17	0	0
	1.875	0	0	0	-5.1	22.313	0	0
	2.5	0	0	0	-6.8	25.5	0	0
	3.125	0	0	0	-8.5	26.563	0	0
	3.75	0	0	0	-10.2	25.5	0	0
	4.375	0	0	0	-12.92	24.225	0	0
	5	0	0	0	-16.32	20.4	0	0
	5.625	0	0	0	-19.72	12.325	0	0
	6.25	0	0	-23.086	-23.086	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-23.12
2	0	-23.12



Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	19.012	0	19.012	0	0	0
	0.625	10.15	16.24	0	16.24	10.15	0	0.01
	1.25	16.8	13.44	-0.56	13.44	16.8	0	0.02
	1.875	19.95	10.64	-3.36	10.64	19.95	0	0.03
	2.5	21	8.4	-5.6	8.4	21	0	0.03
	3.125	21.875	7	-7	7	21.875	0	0.03
	3.75	21	5.6	-8.4	5.6	21	0	0.03
	4.375	19.95	3.36	-10.64	4.2	18.375	0	0.03
	5	16.8	0.56	-13.44	2.8	14	0	0.02
	5.625	10.15	0	-16.24	1.4	7.875	0	0.01
	6.25	0	0	-19.012	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	19.012	0	0	0	0	0
	0.625	0	0	0	-1.4	7.875	0	0
	1.25	0	0	0	-2.8	14	0	0
	1.875	0	0	0	-4.2	18.375	0	0
	2.5	0	0	0	-5.6	21	0	0
	3.125	0	0	0	-7	21.875	0	0
	3.75	0	0	0	-8.4	21	0	0
	4.375	0	0	0	-10.64	19.95	0	0
	5	0	0	0	-13.44	16.8	0	0
	5.625	0	0	0	-16.24	10.15	0	0
	6.25	0	0	-19.012	-19.012	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-19.04
2	0	-19.04

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	23.086	0	23.086	0	0	0
	0.625	12.325	19.72	0	19.72	12.325	0	0.01
	1.25	20.4	16.32	-0.68	16.32	20.4	0	0.02
	1.875	24.225	12.92	-4.08	12.92	24.225	0	0.03
	2.5	25.5	10.2	-6.8	10.2	25.5	0	0.04
	3.125	26.563	8.5	-8.5	8.5	26.563	0	0.04
	3.75	25.5	6.8	-10.2	6.8	25.5	0	0.04
	4.375	24.225	4.08	-12.92	5.1	22.313	0	0.03
	5	20.4	0.68	-16.32	3.4	17	0	0.02
	5.625	12.325	0	-19.72	1.7	9.563	0	0.01
	6.25	0	0	-23.086	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	23.086	0	0	0	0	0
	0.625	0	0	0	-1.7	9.563	0	0
	1.25	0	0	0	-3.4	17	0	0
	1.875	0	0	0	-5.1	22.313	0	0
	2.5	0	0	0	-6.8	25.5	0	0
	3.125	0	0	0	-8.5	26.563	0	0
	3.75	0	0	0	-10.2	25.5	0	0
	4.375	0	0	0	-12.92	24.225	0	0
	5	0	0	0	-16.32	20.4	0	0
	5.625	0	0	0	-19.72	12.325	0	0
	6.25	0	0	-23.086	-23.086	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-23.12
2	0	-23.12

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	19.98	0	19.98	0	0	0
	0.625	11.25	18	-2	18	11.25	0	0.01
	1.25	20	16	-4	16	20	0	0.02
	1.875	26.25	14	-6	14	26.25	0	0.03
	2.5	30	12	-8	12	30	0	0.04
	3.125	31.25	10	-10	10	31.25	0	0.04
	3.75	30	8	-12	8	30	0	0.04
	4.375	26.25	6	-14	6	26.25	0	0.03
	5	20	4	-16	4	20	0	0.02
	5.625	11.25	2	-18	2	11.25	0	0.01
	6.25	0	0	-19.98	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	19.98	0	0	0	0	0
	0.625	0	0	0	-2	11.25	0	0
	1.25	0	0	0	-4	20	0	0
	1.875	0	0	0	-6	26.25	0	0
	2.5	0	0	0	-8	30	0	0
	3.125	0	0	0	-10	31.25	0	0
	3.75	0	0	0	-12	30	0	0
	4.375	0	0	0	-14	26.25	0	0
	5	0	0	0	-16	20	0	0
	5.625	0	0	0	-18	11.25	0	0
	6.25	0	0	-19.98	-19.98	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-20
2	0	-20

Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.974	0	27.974	0	0	0
	0.625	11.25	17.8	-0.2	25.02	15.637	0	0.01
	1.25	20	15.6	-2.4	22.08	27.6	0	0.02
	1.875	26.25	13.4	-4.6	19.18	35.962	0	0.03
	2.5	30	11.2	-6.8	16.32	40.8	0	0.04
	3.125	31.25	9	-9	13.5	42.187	0	0.04
	3.75	30	6.8	-11.2	10.72	40.2	0	0.04
	4.375	26.25	4.6	-13.4	7.98	34.912	0	0.03
	5	20	2.4	-15.6	5.28	26.4	0	0.02
	5.625	11.25	0.2	-17.8	2.62	14.737	0	0.01
	6.25	0	0	-27.974	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.974	0	0	0	0	0
	0.625	0	0	0	-2.62	14.737	0	0
	1.25	0	0	0	-5.28	26.4	0	0
	1.875	0	0	0	-7.98	34.912	0	0
	2.5	0	0	0	-10.72	40.2	0	0
	3.125	0	0	0	-13.5	42.187	0	0
	3.75	0	0	0	-16.32	40.8	0	0
	4.375	0	0	0	-19.18	35.962	0	0
	5	0	0	0	-22.08	27.6	0	0
	5.625	0	0	0	-25.02	15.637	0	0
	6.25	0	0	-27.974	-27.974	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-28
2	0	-27.974

Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	31.968	0	31.968	0	0	0
	0.625	18	28.8	-3.2	28.8	18	0	0.02
	1.25	32	25.6	-6.4	25.6	32	0	0.04
	1.875	42	22.4	-9.6	22.4	42	0	0.05
	2.5	48	19.2	-12.8	19.2	48	0	0.06
	3.125	50	16	-16	16	50	0	0.07
	3.75	48	12.8	-19.2	12.8	48	0	0.06
	4.375	42	9.6	-22.4	9.6	42	0	0.05
	5	32	6.4	-25.6	6.4	32	0	0.04
	5.625	18	3.2	-28.8	3.2	18	0	0.02
	6.25	0	0	-31.968	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	31.968	0	0	0	0	0
	0.625	0	0	0	-3.2	18	0	0
	1.25	0	0	0	-6.4	32	0	0
	1.875	0	0	0	-9.6	42	0	0
	2.5	0	0	0	-12.8	48	0	0
	3.125	0	0	0	-16	50	0	0
	3.75	0	0	0	-19.2	48	0	0
	4.375	0	0	0	-22.4	42	0	0
	5	0	0	0	-25.6	32	0	0
	5.625	0	0	0	-28.8	18	0	0
	6.25	0	0	-31.968	-31.968	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-32
2	0	-32



Id Dead Loads (WS+Deck+Beam+Barriers)  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-2.481
	0.625	1.396	1.985	0	
	1.25	2.481	1.489	0	
	1.875	3.257	0.993	0.01	
	2.5	3.722	0.496	0.01	
	3.125	3.877	+0.000/	0.01	
	3.75	3.722	-0.496	0.01	
	4.375	3.257	-0.993	0.01	
	5	2.481	-1.489	0	
	5.625	1.396	-1.985	0	
	6.25	-0.000/	-2.481/	0	-2.481

Section I  
Unit 5  
Coped Slab

Id Ohio 5C1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.782	0	22.782	0	0	0
	0.608	11.805	19.416	0	19.416	11.805	0	0.01
	1.216	19.475	16.016	-0.984	16.016	19.475	0	0.02
	1.824	23.011	12.616	-4.384	12.616	23.011	0	0.03
	2.432	24.806	10.2	-6.8	10.2	24.806	0	0.03
	3.04	25.84	8.5	-8.5	8.5	25.84	0	0.03
	3.648	24.806	6.8	-10.2	6.8	24.806	0	0.03
	4.256	23.011	4.384	-12.616	5.1	21.706	0	0.03
	4.864	19.475	0.984	-16.016	3.4	16.538	0	0.02
	5.472	11.805	0	-19.416	1.7	9.302	0	0.01
	6.08	0	0	-22.782	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	-22.782	0	0	0	0	0
	0.608	0	0	0	-1.7	9.302	0	0
	1.216	0	0	0	-3.4	16.538	0	0
	1.824	0	0	0	-5.1	21.706	0	0
	2.432	0	0	0	-6.8	24.806	0	0
	3.04	0	0	0	-8.5	25.84	0	0
	3.648	0	0	0	-10.2	24.806	0	0
	4.256	0	0	0	-12.616	23.011	0	0
	4.864	0	0	0	-16.016	19.475	0	0
	5.472	0	0	0	-19.416	11.805	0	0
	6.08	0	0	-22.782	-22.782	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-22.816
2	0	-22.816



Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	18.761	0	18.761	0	0	0
	0.608	9.722	15.989	0	15.989	9.722	0	0.01
	1.216	16.038	13.189	-0.811	13.189	16.038	0	0.02
	1.824	18.95	10.389	-3.611	10.389	18.95	0	0.02
	2.432	20.429	8.4	-5.6	8.4	20.429	0	0.03
	3.04	21.28	7	-7	7	21.28	0	0.03
	3.648	20.429	5.6	-8.4	5.6	20.429	0	0.03
	4.256	18.95	3.611	-10.389	4.2	17.875	0	0.02
	4.864	16.038	0.811	-13.189	2.8	13.619	0	0.02
	5.472	9.722	0	-15.989	1.4	7.661	0	0.01
	6.08	0	0	-18.761	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.761	0	0	0	0	0
	0.608	0	0	0	-1.4	7.661	0	0
	1.216	0	0	0	-2.8	13.619	0	0
	1.824	0	0	0	-4.2	17.875	0	0
	2.432	0	0	0	-5.6	20.429	0	0
	3.04	0	0	0	-7	21.28	0	0
	3.648	0	0	0	-8.4	20.429	0	0
	4.256	0	0	0	-10.389	18.95	0	0
	4.864	0	0	0	-13.189	16.038	0	0
	5.472	0	0	0	-15.989	9.722	0	0
	6.08	0	0	-18.761	-18.761	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-18.789
2	0	-18.789

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	22.782	0	22.782	0	0	0
	0.608	11.805	19.416	0	19.416	11.805	0	0.01
	1.216	19.475	16.016	-0.984	16.016	19.475	0	0.02
	1.824	23.011	12.616	-4.384	12.616	23.011	0	0.03
	2.432	24.806	10.2	-6.8	10.2	24.806	0	0.03
	3.04	25.84	8.5	-8.5	8.5	25.84	0	0.03
	3.648	24.806	6.8	-10.2	6.8	24.806	0	0.03
	4.256	23.011	4.384	-12.616	5.1	21.706	0	0.03
	4.864	19.475	0.984	-16.016	3.4	16.538	0	0.02
	5.472	11.805	0	-19.416	1.7	9.302	0	0.01
	6.08	0	0	-22.782	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	22.782	0	0	0	0	0
	0.608	0	0	0	-1.7	9.302	0	0
	1.216	0	0	0	-3.4	16.538	0	0
	1.824	0	0	0	-5.1	21.706	0	0
	2.432	0	0	0	-6.8	24.806	0	0
	3.04	0	0	0	-8.5	25.84	0	0
	3.648	0	0	0	-10.2	24.806	0	0
	4.256	0	0	0	-12.616	23.011	0	0
	4.864	0	0	0	-16.016	19.475	0	0
	5.472	0	0	0	-19.416	11.805	0	0
	6.08	0	0	-22.782	-22.782	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-22.816
2	0	-22.816

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	19.98	0	19.98	0	0	0
	0.608	10.944	18	-2	18	10.944	0	0.01
	1.216	19.456	16	-4	16	19.456	0	0.02
	1.824	25.536	14	-6	14	25.536	0	0.03
	2.432	29.184	12	-8	12	29.184	0	0.04
	3.04	30.4	10	-10	10	30.4	0	0.04
	3.648	29.184	8	-12	8	29.184	0	0.04
	4.256	25.536	6	-14	6	25.536	0	0.03
	4.864	19.456	4	-16	4	19.456	0	0.02
	5.472	10.944	2	-18	2	10.944	0	0.01
	6.08	0	0	-19.98	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	19.98	0	0	0	0	0
	0.608	0	0	0	-2	10.944	0	0
	1.216	0	0	0	-4	19.456	0	0
	1.824	0	0	0	-6	25.536	0	0
	2.432	0	0	0	-8	29.184	0	0
	3.04	0	0	0	-10	30.4	0	0
	3.648	0	0	0	-12	29.184	0	0
	4.256	0	0	0	-14	25.536	0	0
	4.864	0	0	0	-16	19.456	0	0
	5.472	0	0	0	-18	10.944	0	0
	6.08	0	0	-19.98	-19.98	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-20
2	0	-20

Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.92	0	27.92	0	0	0
	0.608	10.914	17.756	-0.244	24.976	15.185	0	0.01
	1.216	19.403	15.567	-2.433	22.045	26.807	0	0.02
	1.824	25.466	13.378	-4.622	19.153	34.936	0	0.03
	2.432	29.105	11.189	-6.811	16.3	39.643	0	0.04
	3.04	30.317	9	-9	13.486	40.999	0	0.04
	3.648	29.105	6.811	-11.189	10.711	39.075	0	0.04
	4.256	25.466	4.622	-13.378	7.975	33.942	0	0.03
	4.864	19.403	2.433	-15.567	5.278	25.671	0	0.02
	5.472	10.914	0.244	-17.756	2.619	14.334	0	0.01
	6.08	0	0	-27.92	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.92	0	0	0	0	0
	0.608	0	0	0	-2.619	14.334	0	0
	1.216	0	0	0	-5.278	25.671	0	0
	1.824	0	0	0	-7.975	33.942	0	0
	2.432	0	0	0	-10.711	39.075	0	0
	3.04	0	0	0	-13.486	40.999	0	0
	3.648	0	0	0	-16.3	39.643	0	0
	4.256	0	0	0	-19.153	34.936	0	0
	4.864	0	0	0	-22.045	26.807	0	0
	5.472	0	0	0	-24.976	15.185	0	0
	6.08	0	0	-27.92	-27.92	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-27.946
2	0	-27.92

Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	31.968	0	31.968	0	0	0
	0.608	17.51	28.8	-3.2	28.8	17.51	0	0.02
	1.216	31.13	25.6	-6.4	25.6	31.13	0	0.04
	1.824	40.858	22.4	-9.6	22.4	40.858	0	0.05
	2.432	46.694	19.2	-12.8	19.2	46.694	0	0.06
	3.04	48.64	16	-16	16	48.64	0	0.06
	3.648	46.694	12.8	-19.2	12.8	46.694	0	0.06
	4.256	40.858	9.6	-22.4	9.6	40.858	0	0.05
	4.864	31.13	6.4	-25.6	6.4	31.13	0	0.04
	5.472	17.51	3.2	-28.8	3.2	17.51	0	0.02
	6.08	0	0	-31.968	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	31.968	0	0	0	0	0
	0.608	0	0	0	-3.2	17.51	0	0
	1.216	0	0	0	-6.4	31.13	0	0
	1.824	0	0	0	-9.6	40.858	0	0
	2.432	0	0	0	-12.8	46.694	0	0
	3.04	0	0	0	-16	48.64	0	0
	3.648	0	0	0	-19.2	46.694	0	0
	4.256	0	0	0	-22.4	40.858	0	0
	4.864	0	0	0	-25.6	31.13	0	0
	5.472	0	0	0	-28.8	17.51	0	0
	6.08	0	0	-31.968	-31.968	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-32
2	0	-32

Id Dead Loads (WS+Deck+Beam+Barriers)

Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-2.414
	0.608	1.321	1.931	0	
	1.216	2.348	1.448	0	
	1.824	3.082	0.966	0	
	2.432	3.522	0.483	0.01	
	3.04	3.669	-0.000/	0.01	
	3.648	3.522	-0.483	0.01	
	4.256	3.082	-0.966	0	
	4.864	2.348	-1.448	0	
	5.472	1.321	-1.931	0	
	6.08	-0.000/	-2.414/	0	-2.414



Id Dead Loads (WS+Deck+Beam+Barriers)  
 Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-1.528
	0.488	0.651	1.141	0	
	0.976	1.113	0.753	0	
	1.464	1.386	0.366	0	
	1.952	1.47	-0.022	0	
	2.44	1.365	-0.409	0	
	2.928	1.07	-0.797	0	
	3.416	0.587	-1.184	0	
	3.904	-0.085	-1.572	0	
	4.392	-0.947	-1.959	0	
2	0	-1.998	-2.347/	0	-4.394
	0.488	-1.093	1.659	0	
	0.976	-0.378	1.272	0	
	1.464	0.148	0.884	0	
	1.952	0.485	0.497	0	
	2.44	0.633	0.109	0	
	2.928	0.592	-0.278	0	
	3.416	0.362	-0.665	0	
	3.904	-0.058	-1.053	0	
	4.392	-0.666	-1.44	0	
3	0	-1.464	-1.828/	0	-3.737
	0.488	-0.627	1.521	0	
	0.976	0.021	1.134	0	
	1.464	0.48	0.746	0	
	1.952	0.75	0.359	0	
	2.44	0.831	-0.028	0	
	2.928	0.722	-0.416	0	
	3.416	0.425	-0.803	0	
	3.904	-0.062	-1.191	0	
	4.392	-0.738	-1.578	0	
4	0	-1.603	-1.966/	0	-3.908
	0.488	-0.749	1.554	0	
	0.976	-0.085	1.167	0	
	1.464	0.389	0.779	0	
	1.952	0.675	0.392	0	
	2.44	0.772	0.005	0	
	2.928	0.68	-0.383	0	
	3.416	0.398	-0.77	0	
	3.904	-0.072	-1.158	0	
	4.392	-0.732	-1.545	0	
5	0	-1.581	-1.933/	0	-3.881
	0.492	-0.718	1.557	0	

SECTION I  
 UNIT 9  
 STRINGERS

	0.984	-0.048	1.166	0	
	1.476	0.429	0.776	0	
	1.968	0.715	0.385	0	
	2.46	0.808	-0.006	0	
	2.952	0.71	-0.396	0	
	3.444	0.419	-0.787	0	
	3.936	-0.065	-1.177	0	
	4.428	-0.74	-1.568	0	
6	0	-1.608	-1.959/	0	-3.914
	0.492	-0.742	1.564	0	
	0.984	-0.068	1.174	0	
	1.476	0.413	0.783	0	
	1.968	0.702	0.392	0	
	2.46	0.799	0.002	0	
	2.952	0.704	-0.389	0	
	3.444	0.417	-0.779	0	
	3.936	-0.063	-1.17	0	
	4.428	-0.735	-1.561	0	
7	0	-1.599	-1.951/	0	-3.903
	0.492	-0.735	1.561	0	
	0.984	-0.063	1.17	0	
	1.476	0.417	0.779	0	
	1.968	0.704	0.389	0	
	2.46	0.799	-0.002	0	
	2.952	0.702	-0.392	0	
	3.444	0.413	-0.783	0	
	3.936	-0.068	-1.174	0	
	4.428	-0.742	-1.564	0	
8	0	-1.608	-1.955/	0	-3.914
	0.492	-0.74	1.568	0	
	0.984	-0.065	1.177	0	
	1.476	0.419	0.787	0	
	1.968	0.71	0.396	0	
	2.46	0.808	0.006	0	
	2.952	0.715	-0.385	0	
	3.444	0.429	-0.776	0	
	3.936	-0.048	-1.166	0	
	4.428	-0.718	-1.557	0	
9	0	-1.581	-1.948/	0	-3.881
	0.488	-0.732	1.545	0	
	0.976	-0.072	1.158	0	
	1.464	0.398	0.77	0	
	1.952	0.68	0.383	0	
	2.44	0.772	-0.005	0	
	2.928	0.675	-0.392	0	
	3.416	0.389	-0.779	0	
	3.904	-0.085	-1.167	0	
	4.392	-0.749	-1.554	0	
10	0	-1.603	-1.942/	0	-3.908



	0.488	-0.738	1.578	0	
	0.976	-0.062	1.191	0	
	1.464	0.425	0.803	0	
	1.952	0.722	0.416	0	
	2.44	0.831	0.028	0	
	2.928	0.75	-0.359	0	
	3.416	0.48	-0.746	0	
	3.904	0.021	-1.134	0	
	4.392	-0.627	-1.521	0	
11	0	-1.464	-1.909/	0	-3.737
	0.488	-0.666	1.44	0	
	0.976	-0.058	1.053	0	
	1.464	0.362	0.665	0	
	1.952	0.592	0.278	0	
	2.44	0.633	-0.109	0	
	2.928	0.485	-0.497	0	
	3.416	0.148	-0.884	0	
	3.904	-0.378	-1.272	0	
	4.392	-1.093	-1.659	0	
12	0	-1.998	-2.047/	0	-4.394
	0.488	-0.947	1.959	0	
	0.976	-0.085	1.572	0	
	1.464	0.587	1.184	0	
	1.952	1.07	0.797	0	
	2.44	1.365	0.409	0	
	2.928	1.47	0.022	0	
	3.416	1.386	-0.366	0	
	3.904	1.113	-0.753	0	
	4.392	0.651	-1.141	0	
	4.88	-0.000/	-1.528/	0	-1.528

Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	32.123	-2.521	32.123	0	0	0
	0.488	13.657	27.986	-4.014	27.986	13.657	0	0.01
	0.976	23.379	23.954	-8.046	23.954	23.379	0	0.01
	1.464	29.367	20.059	-11.941	20.059	29.367	0	0.02
	1.952	31.855	16.319	-15.681	16.319	31.855	0	0.02
	2.44	31.194	12.785	-19.215	12.785	31.194	0	0.02
	2.928	27.838	9.507	-22.493	9.507	27.838	0	0.02
	3.416	22.337	6.539	-25.461	6.539	22.337	0	0.02
	3.904	15.345	3.931	-28.069	3.931	15.345	0	0.01
	4.392	7.615	1.734	-30.266	1.734	7.615	0	0.01
2	0	3.296	0.675	-3.377	32.198	0	-0.287	0
	0.488	8.361	29.522	-2.478	29.569	8.339	0	0
	0.976	15.991	26.526	-5.563	26.526	15.991	0	0.01
	1.464	22.007	23.145	-8.855	23.145	22.007	0	0.01
	1.952	25.793	19.515	-12.485	19.515	25.793	0	0.02
	2.44	26.99	15.769	-16.231	15.769	26.99	0	0.02
	2.928	25.504	12.042	-19.958	12.042	25.504	0	0.02
	3.416	21.503	8.467	-23.533	8.467	21.503	0	0.01
	3.904	15.414	5.179	-26.821	5.179	15.414	0	0.01
	4.392	7.929	2.312	-29.688	5.066	5.284	0	0
3	0	7.811	5.051	-4.552	32.219	0	-0.324	0
	0.488	7.982	29.635	-2.365	29.696	7.949	0	0
	0.976	15.464	26.63	-5.37	26.711	15.46	0	0.01
	1.464	21.479	23.367	-8.633	23.367	21.479	0	0.01
	1.952	25.358	19.745	-12.255	19.745	25.358	0	0.02
	2.44	26.689	15.984	-16.016	15.984	26.689	0	0.02
	2.928	25.339	12.225	-19.775	12.225	25.339	0	0.02
	3.416	21.445	8.606	-23.394	8.606	21.445	0	0.01
	3.904	15.421	5.269	-26.731	5.269	15.421	0	0.01
	4.392	7.904	2.263	-29.737	4.397	4.932	0	0
4	0	7.085	4.319	-4.392	32.261	0	-0.439	0
	0.488	7.914	29.718	-2.282	29.835	7.37	0	0
	0.976	15.426	26.658	-5.342	26.959	14.761	0	0.01
	1.464	21.372	23.223	-8.777	23.665	20.791	0	0.01
	1.952	25.129	19.547	-12.453	20.069	24.772	0	0.02
	2.44	26.335	15.763	-16.237	16.308	26.267	0	0.02
	2.928	25.106	12.516	-19.484	12.516	25.106	0	0.02
	3.416	21.384	8.829	-23.171	8.829	21.384	0	0.01
	3.904	15.457	5.383	-26.617	5.383	15.457	0	0.01
	4.392	7.949	2.313	-29.687	4.352	4.914	0	0

5	0	7.039	4.284	-4.335	32.264	0	-0.42	0
	0.492	7.949	29.735	-2.265	29.788	7.589	0	0
	0.984	15.517	26.674	-5.326	26.904	15.026	0	0.01
	1.476	21.511	23.235	-8.765	23.609	21.073	0	0.01
	1.968	25.3	19.555	-12.445	20.016	25.045	0	0.02
	2.46	26.517	15.768	-16.232	16.261	26.513	0	0.02
	2.952	25.31	12.477	-19.523	12.477	25.31	0	0.02
	3.444	21.534	8.799	-23.201	8.799	21.534	0	0.01
	3.936	15.551	5.362	-26.638	5.362	15.551	0	0.01
	4.428	7.987	2.3	-29.7	4.301	4.908	0	0
6	0	7.041	4.264	-4.322	32.264	0	-0.42	0
	0.492	7.971	29.728	-2.272	29.782	7.609	0	0
	0.984	15.547	26.664	-5.336	26.893	15.058	0	0.01
	1.476	21.542	23.224	-8.776	23.595	21.106	0	0.01
	1.968	25.327	19.544	-12.456	20.001	25.075	0	0.02
	2.46	26.538	15.759	-16.241	16.245	26.535	0	0.02
	2.952	25.324	12.461	-19.539	12.461	25.324	0	0.02
	3.444	21.541	8.784	-23.216	8.784	21.541	0	0.01
	3.936	15.55	5.348	-26.652	5.348	15.55	0	0.01
	4.428	7.98	2.287	-29.713	4.34	4.933	0	0
7	0	7.08	4.337	-4.337	32.249	0	-0.407	0
	0.492	7.98	29.713	-2.287	29.782	7.599	0	0
	0.984	15.55	26.652	-5.348	26.894	15.054	0	0.01
	1.476	21.541	23.216	-8.784	23.595	21.105	0	0.01
	1.968	25.324	19.539	-12.461	19.999	25.076	0	0.02
	2.46	26.538	16.241	-15.759	16.241	26.538	0	0.02
	2.952	25.327	12.456	-19.544	12.456	25.327	0	0.02
	3.444	21.542	8.776	-23.224	8.776	21.542	0	0.01
	3.936	15.547	5.336	-26.664	5.336	15.547	0	0.01
	4.428	7.971	2.272	-29.728	4.33	4.891	0	0
8	0	7.041	4.322	-4.264	32.235	0	-0.396	0
	0.492	7.987	29.7	-2.3	29.781	7.587	0	0
	0.984	15.551	26.638	-5.362	26.894	15.041	0	0.01
	1.476	21.534	23.201	-8.799	23.591	21.092	0	0.01
	1.968	25.31	19.523	-12.477	19.992	25.06	0	0.02
	2.46	26.517	16.232	-15.768	16.232	26.517	0	0.02
	2.952	25.3	12.445	-19.555	12.445	25.3	0	0.02
	3.444	21.511	8.765	-23.235	8.765	21.511	0	0.01
	3.936	15.517	5.326	-26.674	5.326	15.517	0	0.01
	4.428	7.949	2.265	-29.735	4.335	4.906	0	0
9	0	7.039	4.335	-4.284	32.232	0	-0.389	0
	0.488	7.949	29.687	-2.313	29.776	7.544	0	0
	0.976	15.457	26.617	-5.383	26.89	14.946	0	0.01
	1.464	21.384	23.171	-8.829	23.589	20.952	0	0.01
	1.952	25.106	19.484	-12.516	19.993	24.889	0	0.02
	2.44	26.335	16.237	-15.763	16.237	26.335	0	0.02
	2.928	25.129	12.453	-19.547	12.453	25.129	0	0.02
	3.416	21.372	8.777	-23.223	8.777	21.372	0	0.01
	3.904	15.426	5.342	-26.658	5.342	15.426	0	0.01

10	4.392	7.914	2.282	-29.718	4.392	4.941	0	0
	0	7.085	4.392	-4.319	32.37	0	-0.529	0
	0.488	7.904	29.737	-2.263	29.791	7.53	0	0
	0.976	15.421	26.731	-5.269	26.904	14.923	0	0.01
	1.464	21.445	23.394	-8.606	23.609	20.93	0	0.01
	1.952	25.339	19.775	-12.225	20.018	24.876	0	0.02
	2.44	26.689	16.016	-15.984	16.265	26.337	0	0.02
	2.928	25.358	12.255	-19.745	12.484	25.147	0	0.02
	3.416	21.479	8.633	-23.367	8.807	21.403	0	0.01
	3.904	15.464	5.37	-26.63	5.37	15.464	0	0.01
11	4.392	7.982	2.365	-29.635	4.552	5.589	0	0
	0	7.811	4.552	-5.051	32.044	0	-0.329	0
	0.488	7.929	29.688	-2.312	29.804	7.534	0	0
	0.976	15.414	26.821	-5.179	26.987	14.928	0	0.01
	1.464	21.503	23.533	-8.467	23.742	20.994	0	0.01
	1.952	25.504	19.958	-12.042	20.195	25.041	0	0.02
	2.44	26.99	16.231	-15.769	16.476	26.63	0	0.02
	2.928	25.793	12.485	-19.515	12.713	25.571	0	0.02
	3.416	22.007	8.855	-23.145	9.032	21.921	0	0.01
	3.904	15.991	5.563	-26.526	5.563	15.991	0	0.01
12	4.392	8.361	2.478	-29.522	3.377	1.648	0	0
	0	3.296	3.377	-0.675	32.03	0	-0.302	0
	0.488	7.615	30.266	-1.734	30.349	7.25	0	0.01
	0.976	15.345	28.069	-3.931	28.19	14.874	0	0.01
	1.464	22.337	25.461	-6.539	25.614	21.815	0	0.02
	1.952	27.838	22.493	-9.507	22.667	27.327	0	0.02
	2.44	31.194	19.215	-12.785	19.397	30.752	0	0.02
	2.928	31.855	15.681	-16.319	15.849	31.526	0	0.02
	3.416	29.367	11.941	-20.059	12.072	29.174	0	0.02
	3.904	23.379	8.046	-23.954	8.112	23.315	0	0.01
4.392	13.657	4.014	-27.986	4.049	13.64	0	0.01	
4.88	0	2.521	-32.123	2.521	0	0	0	

Minimums table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	32.123	-2.521	-2.521	0	0	0
	0.488	-1.23	0	-2.521	-4.049	13.64	0	0
	0.976	-2.46	0	-2.521	-8.112	23.315	0	0
	1.464	-3.69	0	-2.521	-12.072	29.174	0	-0.01
	1.952	-4.92	0	-2.521	-15.849	31.526	0	-0.01
	2.44	-6.15	0	-2.521	-19.397	30.752	0	-0.01
	2.928	-7.38	0	-2.521	-22.667	27.327	0	-0.01
	3.416	-8.61	0	-2.521	-25.614	21.815	0	-0.01
	3.904	-9.84	0	-2.521	-28.19	14.874	0	-0.01
	4.392	-11.07	0	-2.521	-30.349	7.25	0	0
2	0	-16.965	5.066	-22.073	-32.03	0	-0.302	0
	0.488	-14.492	5.066	0	-3.377	1.648	0	0
	0.976	-12.02	5.066	0	-5.563	15.991	0	-0.01
	1.464	-9.956	4.175	0	-9.032	21.921	0	-0.01

	1.952	-7.918	4.175	0	-12.713	25.571	0	-0.01
	2.44	-5.881	4.175	0	-16.476	26.63	0	-0.01
	2.928	-6.592	0	-3.377	-20.195	25.041	0	-0.01
	3.416	-8.24	0	-3.377	-23.742	20.994	0	-0.01
	3.904	-9.888	0	-3.377	-26.987	14.928	0	-0.01
	4.392	-11.536	0	-3.377	-29.804	7.534	0	0
3	0	-14.38	4.397	-20.195	-32.044	0	-0.329	0
	0.488	-12.234	4.397	0	-4.552	5.589	0	0
	0.976	-10.089	4.397	0	-5.37	15.464	0	-0.01
	1.464	-8.336	3.495	0	-8.807	21.403	0	-0.01
	1.952	-6.631	3.495	0	-12.484	25.147	0	-0.01
	2.44	-4.925	3.495	0	-16.265	26.337	0	-0.01
	2.928	-6.433	0	-3.385	-20.018	24.876	0	-0.01
	3.416	-8.085	0	-3.385	-23.609	20.93	0	-0.01
	3.904	-9.972	0	-4.538	-26.904	14.923	0	-0.01
	4.392	-12.186	0	-4.538	-29.791	7.53	0	0
4	0	-14.404	20.069	-4.552	-32.37	0	-0.529	0
	0.488	-12.076	4.352	0	-4.392	4.941	0	0
	0.976	-9.952	4.352	0	-5.342	15.426	0	-0.01
	1.464	-8.222	3.443	0	-8.777	21.372	0	-0.01
	1.952	-6.541	3.443	0	-12.453	25.129	0	-0.01
	2.44	-4.861	3.443	0	-16.237	26.335	0	-0.01
	2.928	-6.509	0	-3.431	-19.993	24.889	0	-0.01
	3.416	-8.183	0	-3.431	-23.589	20.952	0	-0.01
	3.904	-10.068	0	-4.365	-26.89	14.946	0	-0.01
	4.392	-12.204	0	-4.392	-29.776	7.544	0	0
5	0	-14.347	20.016	-4.392	-32.232	0	-0.389	0
	0.492	-12.021	4.301	0	-4.335	4.906	0	0
	0.984	-9.905	4.301	0	-5.326	15.517	0	-0.01
	1.476	-8.009	3.331	0	-8.765	21.511	0	-0.01
	1.968	-6.37	3.331	0	-12.445	25.3	0	-0.01
	2.46	-4.814	0	-3.397	-16.232	26.517	0	-0.01
	2.952	-6.485	0	-3.397	-19.992	25.06	0	-0.01
	3.444	-8.156	0	-3.397	-23.591	21.092	0	-0.01
	3.936	-10.022	0	-4.335	-26.894	15.041	0	-0.01
	4.428	-12.155	0	-4.335	-29.781	7.587	0	0
6	0	-14.287	20.001	-4.335	-32.235	0	-0.396	0
	0.492	-12.15	4.34	0	-4.33	4.891	0	0
	0.984	-10.014	4.34	0	-5.336	15.547	0	-0.01
	1.476	-8.124	3.379	0	-8.776	21.542	0	-0.01
	1.968	-6.462	3.379	0	-12.456	25.327	0	-0.01
	2.46	-4.805	0	-3.384	-16.241	26.538	0	-0.01
	2.952	-6.47	0	-3.384	-19.999	25.076	0	-0.01
	3.444	-8.134	0	-3.384	-23.595	21.105	0	-0.01
	3.936	-10.021	0	-4.33	-26.894	15.054	0	-0.01
	4.428	-12.152	0	-4.33	-29.782	7.599	0	0
7	0	-14.282	19.999	-19.999	-32.249	0	-0.407	0
	0.492	-12.152	4.33	0	-4.34	4.933	0	0
	0.984	-10.021	4.33	0	-5.348	15.55	0	-0.01

	1.476	-8.134	3.384	0	-8.784	21.541	0	-0.01
	1.968	-6.47	3.384	0	-12.461	25.324	0	-0.01
	2.46	-4.805	3.384	0	-16.245	26.535	0	-0.01
	2.952	-6.462	0	-3.379	-20.001	25.075	0	-0.01
	3.444	-8.124	0	-3.379	-23.595	21.106	0	-0.01
	3.936	-10.014	0	-4.34	-26.893	15.058	0	-0.01
	4.428	-12.15	0	-4.34	-29.782	7.609	0	0
8	0	-14.287	4.335	-20.001	-32.264	0	-0.42	0
	0.492	-12.155	4.335	0	-4.301	4.908	0	0
	0.984	-10.022	4.335	0	-5.362	15.551	0	-0.01
	1.476	-8.156	3.397	0	-8.799	21.534	0	-0.01
	1.968	-6.485	3.397	0	-12.477	25.31	0	-0.01
	2.46	-4.814	3.397	0	-16.261	26.513	0	-0.01
	2.952	-6.37	0	-3.331	-20.016	25.045	0	-0.01
	3.444	-8.009	0	-3.331	-23.609	21.073	0	-0.01
	3.936	-9.905	0	-4.301	-26.904	15.026	0	-0.01
	4.428	-12.021	0	-4.301	-29.788	7.589	0	0
9	0	-14.347	4.392	-20.016	-32.264	0	-0.42	0
	0.488	-12.204	4.392	0	-4.352	4.914	0	0
	0.976	-10.068	4.365	0	-5.383	15.457	0	-0.01
	1.464	-8.183	3.431	0	-8.829	21.384	0	-0.01
	1.952	-6.509	3.431	0	-12.516	25.106	0	-0.01
	2.44	-4.861	0	-3.443	-16.308	26.267	0	-0.01
	2.928	-6.541	0	-3.443	-20.069	24.772	0	-0.01
	3.416	-8.222	0	-3.443	-23.665	20.791	0	-0.01
	3.904	-9.952	0	-4.352	-26.959	14.761	0	-0.01
	4.392	-12.076	0	-4.352	-29.835	7.37	0	0
10	0	-14.404	4.552	-20.069	-32.261	0	-0.439	0
	0.488	-12.186	4.538	0	-4.397	4.932	0	0
	0.976	-9.972	4.538	0	-5.269	15.421	0	-0.01
	1.464	-8.085	3.385	0	-8.606	21.445	0	-0.01
	1.952	-6.433	3.385	0	-12.225	25.339	0	-0.01
	2.44	-4.925	0	-3.495	-15.984	26.689	0	-0.01
	2.928	-6.631	0	-3.495	-19.745	25.358	0	-0.01
	3.416	-8.336	0	-3.495	-23.367	21.479	0	-0.01
	3.904	-10.089	0	-4.397	-26.711	15.46	0	-0.01
	4.392	-12.234	0	-4.397	-29.696	7.949	0	0
11	0	-14.38	20.195	-4.397	-32.219	0	-0.324	0
	0.488	-11.536	3.377	0	-5.066	5.284	0	0
	0.976	-9.888	3.377	0	-5.179	15.414	0	-0.01
	1.464	-8.24	3.377	0	-8.467	21.503	0	-0.01
	1.952	-6.592	3.377	0	-12.042	25.504	0	-0.01
	2.44	-5.881	0	-4.175	-15.769	26.99	0	-0.01
	2.928	-7.918	0	-4.175	-19.515	25.793	0	-0.01
	3.416	-9.956	0	-4.175	-23.145	22.007	0	-0.01
	3.904	-12.02	0	-5.066	-26.526	15.991	0	-0.01
	4.392	-14.492	0	-5.066	-29.569	8.339	0	0
12	0	-16.965	22.073	-5.066	-32.198	0	-0.287	0
	0.488	-11.07	2.521	0	-1.734	7.615	0	0

0.976	-9.84	2.521	0	-3.931	15.345	0	-0.01
1.464	-8.61	2.521	0	-6.539	22.337	0	-0.01
1.952	-7.38	2.521	0	-9.507	27.838	0	-0.01
2.44	-6.15	2.521	0	-12.785	31.194	0	-0.01
2.928	-4.92	2.521	0	-16.319	31.855	0	-0.01
3.416	-3.69	2.521	0	-20.059	29.367	0	-0.01
3.904	-2.46	2.521	0	-23.954	23.379	0	0
4.392	-1.23	2.521	0	-27.986	13.657	0	0
4.88	0	2.521	-32.123	-32.123	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.521	-32.165
2	4.053	-32.629
3	9.603	-32.32
4	8.711	-32.56
5	8.618	-32.42
6	8.586	-32.42
7	8.634	-32.404
8	8.586	-32.42
9	8.618	-32.42
10	8.711	-32.56
11	9.603	-32.32
12	4.053	-32.629
13	2.521	-32.165

Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.363	-2.213	27.363	0	0	0
	0.488	8.278	16.806	-1.194	23.814	11.621	0	0
	0.976	14.209	14.246	-3.754	20.313	19.825	0	0.01
	1.464	17.877	11.743	-6.257	16.934	24.791	0	0.01
	1.952	19.425	9.327	-8.673	13.718	26.777	0	0.01
	2.44	19.049	7.026	-10.974	10.704	26.118	0	0.01
	2.928	17.004	4.87	-13.13	7.933	23.228	0	0.01
	3.416	13.601	2.888	-15.112	5.443	18.593	0	0.01
	3.904	9.21	1.285	-16.715	3.273	12.778	0	0.01
	4.392	4.557	0.743	-17.257	1.461	6.416	0	0
2	0	2.07	0.424	-2.121	27.897	0	-1.67	0
	0.488	4.915	16.891	-1.109	25.557	5.765	-1.028	0
	0.976	9.452	15.832	-2.168	22.848	12.543	-0.45	0.01
	1.464	13.239	13.687	-4.313	19.859	17.816	-0.065	0.01
	1.952	15.618	11.334	-6.666	16.701	21.118	0	0.01
	2.44	16.389	8.914	-9.086	13.486	22.2	0	0.01
	2.928	15.499	6.505	-11.495	10.321	21.029	0	0.01
	3.416	13.041	4.182	-13.818	7.317	17.783	0	0.01
	3.904	9.273	2.336	-15.664	4.579	12.85	0	0.01
	4.392	4.895	1.114	-16.886	3.727	2.225	0	0
3	0	2.927	2.673	-0.926	28.143	0	-1.244	0
	0.488	4.94	16.883	-1.117	25.612	5.583	-0.903	0
	0.976	9.33	15.623	-2.377	22.961	12.224	-0.338	0.01
	1.464	13.076	13.758	-4.242	20	17.485	0	0.01
	1.952	15.481	11.408	-6.592	16.846	20.848	0	0.01
	2.44	16.301	8.98	-9.02	13.616	22.022	0	0.01
	2.928	15.46	6.553	-11.447	10.424	20.94	0	0.01
	3.416	13.036	4.206	-13.794	7.382	17.76	0	0.01
	3.904	9.278	2.349	-15.651	4.604	12.856	0	0.01
	4.392	4.886	1.089	-16.911	3.125	1.901	0	0
4	0	2.484	2.241	-0.813	28.11	0	-1.356	0
	0.488	4.88	16.899	-1.101	25.637	5.505	-0.958	0
	0.976	9.267	15.645	-2.355	22.992	12.146	-0.384	0.01
	1.464	13.021	13.787	-4.213	20.035	17.419	-0.005	0.01
	1.952	15.441	11.439	-6.561	16.884	20.801	0	0.01
	2.44	16.278	9.012	-8.988	13.654	21.996	0	0.01
	2.928	15.455	6.584	-11.416	10.461	20.936	0	0.01
	3.416	13.046	4.234	-13.766	7.416	17.774	0	0.01
	3.904	9.298	2.369	-15.631	4.633	12.882	0	0.01
	4.392	4.907	1.11	-16.89	3.098	1.878	0	0



5	0	2.494	0.815	-2.227	28.131	0	-1.339	0
	0.492	4.917	16.905	-1.095	25.645	5.549	-0.947	0
	0.984	9.334	15.654	-2.346	22.999	12.236	-0.368	0.01
	1.476	13.117	13.791	-4.209	20.039	17.548	0	0.01
	1.968	15.557	11.44	-6.56	16.885	20.955	0	0.01
	2.46	16.4	9.008	-8.992	13.651	22.157	0	0.01
	2.952	15.567	6.576	-11.424	10.453	21.085	0	0.01
	3.444	13.136	4.223	-13.777	7.406	17.893	0	0.01
	3.936	9.355	2.351	-15.649	4.621	12.96	0	0.01
	4.428	4.929	1.096	-16.904	3.057	1.878	0	0
6	0	2.481	0.802	-2.223	28.127	0	-1.36	0
	0.492	4.925	16.903	-1.097	25.643	5.553	-0.961	0
	0.984	9.35	15.65	-2.35	22.994	12.249	-0.38	0.01
	1.476	13.134	13.784	-4.216	20.033	17.562	0	0.01
	1.968	15.571	11.433	-6.567	16.878	20.966	0	0.01
	2.46	16.409	9.002	-8.998	13.645	22.164	0	0.01
	2.952	15.572	6.571	-11.429	10.45	21.088	0	0.01
	3.444	13.137	4.219	-13.781	7.404	17.893	0	0.01
	3.936	9.355	2.352	-15.648	4.622	12.959	0	0.01
	4.428	4.931	1.099	-16.901	3.093	1.897	0	0
7	0	2.484	2.223	-2.223	28.131	0	-1.353	0
	0.492	4.931	16.901	-1.099	25.642	5.556	-0.959	0
	0.984	9.355	15.648	-2.352	22.992	12.251	-0.38	0.01
	1.476	13.137	13.781	-4.219	20.031	17.564	0	0.01
	1.968	15.572	11.429	-6.571	16.876	20.967	0	0.01
	2.46	16.409	8.998	-9.002	13.643	22.163	0	0.01
	2.952	15.571	6.567	-11.433	10.447	21.085	0	0.01
	3.444	13.134	4.216	-13.784	7.402	17.89	0	0.01
	3.936	9.35	2.35	-15.65	4.62	12.955	0	0.01
	4.428	4.925	1.097	-16.903	3.095	1.896	0	0
8	0	2.481	2.223	-0.802	28.131	0	-1.359	0
	0.492	4.929	16.904	-1.096	25.641	5.555	-0.961	0
	0.984	9.355	15.649	-2.351	22.989	12.25	-0.381	0.01
	1.476	13.136	13.777	-4.223	20.026	17.561	0	0.01
	1.968	15.567	11.424	-6.576	16.868	20.959	0	0.01
	2.46	16.4	8.992	-9.008	13.634	22.15	0	0.01
	2.952	15.557	6.56	-11.44	10.438	21.067	0	0.01
	3.444	13.117	4.209	-13.791	7.393	17.868	0	0.01
	3.936	9.334	2.346	-15.654	4.613	12.934	0	0.01
	4.428	4.917	1.095	-16.905	3.099	1.91	0	0
9	0	2.494	2.227	-0.815	28.119	0	-1.336	0
	0.488	4.907	16.89	-1.11	25.626	5.524	-0.957	0
	0.976	9.298	15.631	-2.369	22.976	12.169	-0.385	0.01
	1.464	13.046	13.766	-4.234	20.015	17.437	-0.008	0.01
	1.952	15.455	11.416	-6.584	16.862	20.808	0	0.01
	2.44	16.278	8.988	-9.012	13.631	21.989	0	0.01
	2.928	15.441	6.561	-11.439	10.439	20.915	0	0.01
	3.416	13.021	4.213	-13.787	7.397	17.742	0	0.01
	3.904	9.267	2.355	-15.645	4.617	12.846	0	0.01

10	4.392	4.88	1.101	-16.899	3.13	1.891	0	0
	0	2.484	0.813	-2.241	28.129	0	-1.354	0
	0.488	4.886	16.911	-1.089	25.645	5.508	-0.954	0
	0.976	9.278	15.651	-2.349	23.001	12.153	-0.377	0.01
	1.464	13.036	13.794	-4.206	20.045	17.431	0	0.01
	1.952	15.46	11.447	-6.553	16.894	20.817	0	0.01
	2.44	16.301	9.02	-8.98	13.664	22.018	0	0.01
	2.928	15.481	6.592	-11.408	10.471	20.963	0	0.01
	3.416	13.076	4.242	-13.758	7.426	17.805	0	0.01
	3.904	9.33	2.377	-15.623	4.642	12.916	0	0.01
11	4.392	4.94	1.117	-16.883	3.104	1.906	0	0
	0	2.927	0.926	-2.673	28.078	0	-1.243	0
	0.488	4.895	16.886	-1.114	25.618	5.523	-0.92	0
	0.976	9.273	15.664	-2.336	23.012	12.151	-0.373	0.01
	1.464	13.041	13.818	-4.182	20.095	17.451	-0.02	0.01
	1.952	15.499	11.495	-6.505	16.978	20.893	0	0.01
	2.44	16.389	9.086	-8.914	13.772	22.169	0	0.01
	2.928	15.618	6.666	-11.334	10.589	21.186	0	0.01
	3.416	13.239	4.313	-13.687	7.535	18.065	0	0.01
	3.904	9.452	2.168	-15.832	4.719	13.138	0	0.01
12	4.392	4.915	1.109	-16.891	2.977	1.486	0	0
	0	2.07	2.121	-0.424	28.144	0	-1.677	0
	0.488	4.557	17.257	-0.743	26.222	5.195	-0.992	0
	0.976	9.21	16.715	-1.285	24.153	12.09	-0.378	0.01
	1.464	13.601	15.112	-2.888	21.772	18.178	0	0.01
	1.952	17.004	13.13	-4.87	19.126	22.872	0	0.01
	2.44	19.049	10.974	-7.026	16.259	25.673	0	0.01
	2.928	19.425	8.673	-9.327	13.217	26.172	0	0.01
	3.416	17.877	6.257	-11.743	10.043	24.047	0	0.01
	3.904	14.209	3.754	-14.246	6.781	19.062	0	0.01
4.392	8.278	1.194	-16.806	3.474	11.069	-0.014	0	
4.88	0	2.213	-27.363	2.213	0	0	0	

Minimums table:

Span	Location	Moment(kn	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.363	-2.213	-2.213	0	0	0
	0.488	-0.822	0	-1.684	-3.474	11.069	-0.014	0
	0.976	-1.644	0	-1.684	-6.781	19.062	0	0
	1.464	-2.466	0	-1.685	-10.043	24.047	0	0
	1.952	-3.288	0	-1.685	-13.217	26.172	0	0
	2.44	-4.11	0	-1.685	-16.259	25.673	0	0
	2.928	-4.933	0	-1.685	-19.126	22.872	0	0
	3.416	-5.755	0	-1.685	-21.772	18.178	0	0
	3.904	-6.58	0	-1.861	-24.153	12.09	-0.378	0
	4.392	-10.868	0	-11.585	-26.222	5.195	-0.992	0
2	0	-17.783	15.193	-16.003	-28.144	0	-1.677	0
	0.488	-11.166	10.175	0	-2.977	1.486	0	0
	0.976	-7.508	0.714	0	-4.719	13.138	0	0
	1.464	-7.267	0.494	0	-7.535	18.065	0	0

	1.952	-7.027	0.493	0	-10.589	21.186	0	-0.01
	2.44	-6.787	0.493	0	-13.772	22.169	0	0
	2.928	-6.546	0.493	0	-16.978	20.893	0	0
	3.416	-6.306	0.493	0	-20.095	17.451	-0.02	0
	3.904	-6.616	0	-2.309	-23.012	12.151	-0.373	0
	4.392	-10.1	0	-12.004	-25.618	5.523	-0.92	0
3	0	-16.669	14.905	-14.921	-28.078	0	-1.243	0
	0.488	-10.102	11.971	0	-3.104	1.906	0	0
	0.976	-6.315	3.608	0	-4.642	12.916	0	0
	1.464	-6.141	0.019	0	-7.426	17.805	0	0
	1.952	-6.133	0.018	0	-10.471	20.963	0	0
	2.44	-6.124	0.018	0	-13.664	22.018	0	0
	2.928	-6.115	0.018	0	-16.894	20.817	0	0
	3.416	-6.106	0.018	0	-20.045	17.431	0	0
	3.904	-6.627	0	-2.42	-23.001	12.153	-0.377	0
	4.392	-10.092	0	-11.982	-25.645	5.508	-0.954	0
4	0	-16.666	14.907	-14.916	-28.129	0	-1.354	0
	0.488	-10.096	11.974	0	-3.13	1.891	0	0
	0.976	-6.715	2.438	0	-4.617	12.846	0	0
	1.464	-6.118	0	-0.024	-7.397	17.742	0	0
	1.952	-6.13	0	-0.025	-10.439	20.915	0	0
	2.44	-6.143	0	-0.025	-13.631	21.989	0	0
	2.928	-6.155	0	-0.025	-16.862	20.808	0	0
	3.416	-6.168	0	-0.025	-20.015	17.437	-0.008	0
	3.904	-6.701	0	-2.435	-22.976	12.169	-0.385	0
	4.392	-10.144	0	-11.98	-25.626	5.524	-0.957	0
5	0	-16.716	14.892	-14.914	-28.119	0	-1.336	0
	0.492	-10.097	11.949	0	-3.099	1.91	0	0
	0.984	-6.593	2.379	0	-4.613	12.934	0	0
	1.476	-6.071	0	-0.03	-7.393	17.868	0	0
	1.968	-6.087	0	-0.031	-10.438	21.067	0	0
	2.46	-6.102	0	-0.031	-13.634	22.15	0	0
	2.952	-6.118	0	-0.031	-16.868	20.959	0	0
	3.444	-6.133	0	-0.031	-20.026	17.561	0	0
	3.936	-6.674	0	-2.408	-22.989	12.25	-0.381	0
	4.428	-10.164	0	-11.964	-25.641	5.555	-0.961	0
6	0	-16.788	14.911	-14.907	-28.131	0	-1.359	0
	0.492	-10.163	11.969	0	-3.095	1.896	0	0
	0.984	-6.665	2.403	0	-4.62	12.955	0	0
	1.476	-6.141	0	0	-7.402	17.89	0	0
	1.968	-6.142	0	-0.002	-10.447	21.085	0	0
	2.46	-6.143	0	-0.002	-13.643	22.163	0	0
	2.952	-6.144	0	-0.002	-16.876	20.967	0	0
	3.444	-6.144	0	-0.003	-20.031	17.564	0	0
	3.936	-6.668	0	-2.404	-22.992	12.251	-0.38	0
	4.428	-10.165	0	-11.968	-25.642	5.556	-0.959	0
7	0	-16.79	24.089	-14.91	-28.131	0	-1.353	0
	0.492	-10.165	11.968	0	-3.093	1.897	0	0
	0.984	-6.668	2.404	0	-4.622	12.959	0	0

	1.476	-6.144	0.003	0	-7.404	17.893	0	0
	1.968	-6.144	0.002	0	-10.45	21.088	0	0
	2.46	-6.143	0.002	0	-13.645	22.164	0	0
	2.952	-6.142	0.002	0	-16.878	20.966	0	0
	3.444	-6.141	0	0	-20.033	17.562	0	0
	3.936	-6.665	0	-2.403	-22.994	12.249	-0.38	0
	4.428	-10.163	0	-11.969	-25.643	5.553	-0.961	0
8	0	-16.788	14.907	-14.911	-28.127	0	-1.36	0
	0.492	-10.164	11.964	0	-3.057	1.878	0	0
	0.984	-6.674	2.408	0	-4.621	12.96	0	0
	1.476	-6.133	0.031	0	-7.406	17.893	0	0
	1.968	-6.118	0.031	0	-10.453	21.085	0	0
	2.46	-6.102	0.031	0	-13.651	22.157	0	0
	2.952	-6.087	0.031	0	-16.885	20.955	0	0
	3.444	-6.071	0.03	0	-20.039	17.548	0	0
	3.936	-6.593	0	-2.379	-22.999	12.236	-0.368	0
	4.428	-10.097	0	-11.949	-25.645	5.549	-0.947	0
9	0	-16.716	14.914	-14.892	-28.131	0	-1.339	0
	0.488	-10.144	11.98	0	-3.098	1.878	0	0
	0.976	-6.701	2.435	0	-4.633	12.882	0	0
	1.464	-6.168	0.025	0	-7.416	17.774	0	0
	1.952	-6.155	0.025	0	-10.461	20.936	0	0
	2.44	-6.143	0.025	0	-13.654	21.996	0	0
	2.928	-6.13	0.025	0	-16.884	20.801	0	0
	3.416	-6.118	0.024	0	-20.035	17.419	-0.005	0
	3.904	-6.715	0	-2.438	-22.992	12.146	-0.384	0
	4.392	-10.096	0	-11.974	-25.637	5.505	-0.958	0
10	0	-16.666	14.916	-14.907	-28.11	0	-1.356	0
	0.488	-10.092	11.982	0	-3.125	1.901	0	0
	0.976	-6.627	2.42	0	-4.604	12.856	0	0
	1.464	-6.106	0	-0.018	-7.382	17.76	0	0
	1.952	-6.115	0	-0.018	-10.424	20.94	0	0
	2.44	-6.124	0	-0.018	-13.616	22.022	0	0
	2.928	-6.133	0	-0.018	-16.846	20.848	0	0
	3.416	-6.141	0	-0.019	-20	17.485	0	0
	3.904	-6.315	0	-3.608	-22.961	12.224	-0.338	0
	4.392	-10.102	0	-11.971	-25.612	5.583	-0.903	0
11	0	-16.669	14.921	-14.905	-28.143	0	-1.244	0
	0.488	-10.1	12.004	0	-3.727	2.225	0	0
	0.976	-6.616	2.309	0	-4.579	12.85	0	0
	1.464	-6.306	0	-0.493	-7.317	17.783	0	0
	1.952	-6.546	0	-0.493	-10.321	21.029	0	0
	2.44	-6.787	0	-0.493	-13.486	22.2	0	0
	2.928	-7.027	0	-0.493	-16.701	21.118	0	-0.01
	3.416	-7.267	0	-0.494	-19.859	17.816	-0.065	0
	3.904	-7.508	0	-3.123	-22.848	12.543	-0.45	0
	4.392	-11.166	0	-10.175	-25.557	5.765	-1.028	0
12	0	-17.783	16.003	-15.193	-27.897	0	-1.67	0
	0.488	-10.868	11.585	0	-1.461	6.416	0	0

0.976	-6.58	1.861	0	-3.273	12.778	0	0
1.464	-5.755	1.685	0	-5.443	18.593	0	0
1.952	-4.933	1.685	0	-7.933	23.228	0	0
2.44	-4.11	1.685	0	-10.704	26.118	0	0
2.928	-3.288	1.685	0	-13.718	26.777	0	0
3.416	-2.466	1.685	0	-16.934	24.791	0	0
3.904	-1.644	1.684	0	-20.313	19.825	0	0
4.392	-0.822	1.684	0	-23.814	11.621	0	0
4.88	0	2.213	-27.363	-27.363	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.213	-27.396
2	3.558	-29.908
3	4.922	-29.633
4	4.162	-29.711
5	4.137	-29.706
6	4.117	-29.723
7	4.119	-29.721
8	4.117	-29.723
9	4.137	-29.706
10	4.162	-29.711
11	4.922	-29.633
12	3.558	-29.908
13	2.213	-27.363

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximum table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	20.032	-1.631	20.032	0	0	0
	0.488	8.594	17.61	-2.39	17.61	8.594	0	0
	0.976	14.797	15.161	-4.839	15.161	14.797	0	0.01
	1.464	18.662	12.747	-7.253	12.747	18.662	0	0.01
	1.952	20.312	10.406	-9.594	10.406	20.312	0	0.01
	2.44	19.946	8.175	-11.825	8.175	19.946	0	0.01
	2.928	17.834	6.091	-13.909	6.091	17.834	0	0.01
	3.416	14.321	4.192	-15.808	4.192	14.321	0	0.01
	3.904	9.826	2.517	-17.483	2.517	9.826	0	0.01
	4.392	4.84	1.102	-18.898	1.102	4.84	0	0
2	0	2.133	0.437	-2.186	20.063	0	-0.12	0
	0.488	5.226	18.451	-1.549	18.64	5.134	0	0
	0.976	9.994	16.833	-3.422	16.833	9.994	0	0.01
	1.464	13.892	14.748	-5.252	14.748	13.892	0	0.01
	1.952	16.391	12.474	-7.526	12.474	16.391	0	0.01
	2.44	17.23	10.103	-9.897	10.103	17.23	0	0.01
	2.928	16.33	7.726	-12.274	7.726	16.33	0	0.01
	3.416	13.785	5.434	-14.566	5.434	13.785	0	0.01
	3.904	9.871	3.318	-16.682	3.318	9.871	0	0.01
	4.392	5.04	1.47	-18.53	2.609	1.417	0	0
3	0	2.691	2.609	-0.699	20.066	0	-0.129	0
	0.488	5.144	18.476	-1.524	18.715	4.885	0	0
	0.976	10.048	16.56	-3.44	16.956	9.649	0	0.01
	1.464	13.935	14.391	-5.609	14.895	13.551	0	0.01
	1.952	16.38	12.061	-7.939	12.627	16.113	0	0.01
	2.44	17.142	9.663	-10.337	10.246	17.043	0	0.01
	2.928	16.232	7.849	-12.151	7.849	16.232	0	0.01
	3.416	13.76	5.528	-14.472	5.528	13.76	0	0.01
	3.904	9.89	3.381	-16.619	3.381	9.89	0	0.01
	4.392	5.07	1.501	-18.499	2.185	1.186	0	0
4	0	2.329	0.604	-2.259	20.054	0	-0.117	0
	0.488	5.06	18.502	-1.498	18.714	4.87	0	0
	0.976	9.886	16.62	-3.38	16.964	9.625	0	0.01
	1.464	13.759	14.47	-5.53	14.909	13.528	0	0.01
	1.952	16.231	12.149	-7.851	12.645	16.1	0	0.01
	2.44	17.044	10.267	-9.733	10.267	17.044	0	0.01
	2.928	16.248	7.87	-12.13	7.87	16.248	0	0.01
	3.416	13.788	5.548	-14.452	5.548	13.788	0	0.01
	3.904	9.923	3.397	-16.603	3.397	9.923	0	0.01
	4.392	5.099	1.511	-18.489	2.245	1.213	0	0

5	0	2.33	0.605	-2.234	20.041	0	-0.105	0
	0.492	5.082	18.506	-1.494	18.708	4.9	0	0
	0.984	9.935	16.627	-3.373	16.962	9.681	0	0.01
	1.476	13.835	14.479	-5.521	14.909	13.612	0	0.01
	1.968	16.328	12.157	-7.843	12.645	16.204	0	0.01
	2.46	17.157	10.266	-9.734	10.266	17.157	0	0.01
	2.952	16.356	7.868	-12.132	7.868	16.356	0	0.01
	3.444	13.877	5.545	-14.455	5.545	13.877	0	0.01
	3.936	9.984	3.393	-16.607	3.393	9.984	0	0.01
	4.428	5.127	1.508	-18.492	2.202	1.206	0	0
6	0	2.319	0.598	-2.23	20.041	0	-0.105	0
	0.492	5.11	18.498	-1.502	18.704	4.914	0	0
	0.984	9.967	16.616	-3.384	16.955	9.701	0	0.01
	1.476	13.865	14.467	-5.533	14.901	13.632	0	0.01
	1.968	16.351	12.145	-7.855	12.637	16.22	0	0.01
	2.46	17.167	10.258	-9.742	10.258	17.167	0	0.01
	2.952	16.361	7.861	-12.139	7.861	16.361	0	0.01
	3.444	13.879	5.539	-14.461	5.539	13.879	0	0.01
	3.936	9.983	3.39	-16.61	3.39	9.983	0	0.01
	4.428	5.126	1.507	-18.493	2.225	1.219	0	0
7	0	2.314	2.225	-2.225	20.041	0	-0.105	0
	0.492	5.126	18.493	-1.507	18.702	4.915	0	0
	0.984	9.983	16.61	-3.39	16.952	9.702	0	0.01
	1.476	13.879	14.461	-5.539	14.897	13.632	0	0.01
	1.968	16.361	12.139	-7.861	12.632	16.217	0	0.01
	2.46	17.167	9.742	-10.258	10.253	17.161	0	0.01
	2.952	16.351	7.855	-12.145	7.855	16.351	0	0.01
	3.444	13.865	5.533	-14.467	5.533	13.865	0	0.01
	3.936	9.967	3.384	-16.616	3.384	9.967	0	0.01
	4.428	5.11	1.502	-18.498	2.23	1.222	0	0
8	0	2.319	2.23	-0.598	20.053	0	-0.117	0
	0.492	5.127	18.492	-1.508	18.709	4.912	0	0
	0.984	9.984	16.607	-3.393	16.953	9.702	0	0.01
	1.476	13.877	14.455	-5.545	14.893	13.63	0	0.01
	1.968	16.356	12.132	-7.868	12.624	16.211	0	0.01
	2.46	17.157	9.734	-10.266	10.242	17.146	0	0.01
	2.952	16.328	7.843	-12.157	7.843	16.328	0	0.01
	3.444	13.835	5.521	-14.479	5.521	13.835	0	0.01
	3.936	9.935	3.373	-16.627	3.373	9.935	0	0.01
	4.428	5.082	1.494	-18.506	2.234	1.23	0	0
9	0	2.33	2.234	-0.605	20.066	0	-0.129	0
	0.488	5.099	18.489	-1.511	18.716	4.881	0	0
	0.976	9.923	16.603	-3.397	16.958	9.644	0	0.01
	1.464	13.788	14.452	-5.548	14.898	13.546	0	0.01
	1.952	16.248	12.13	-7.87	12.63	16.109	0	0.01
	2.44	17.044	9.733	-10.267	10.249	17.04	0	0.01
	2.928	16.231	7.851	-12.149	7.851	16.231	0	0.01
	3.416	13.759	5.53	-14.47	5.53	13.759	0	0.01
	3.904	9.886	3.38	-16.62	3.38	9.886	0	0.01

10	4.392	5.06	1.498	-18.502	2.259	1.227	0	0
	0	2.329	2.259	-0.604	20.072	0	-0.136	0
	0.488	5.07	18.499	-1.501	18.743	4.855	0	0
	0.976	9.89	16.619	-3.381	17.005	9.622	0	0.01
	1.464	13.76	14.472	-5.528	14.963	13.551	0	0.01
	1.952	16.232	12.151	-7.849	12.709	16.158	0	0.01
	2.44	17.142	10.337	-9.663	10.337	17.142	0	0.01
	2.928	16.38	7.939	-12.061	7.939	16.38	0	0.01
	3.416	13.935	5.609	-14.391	5.609	13.935	0	0.01
	3.904	10.048	3.44	-16.56	3.44	10.048	0	0.01
11	4.392	5.144	1.524	-18.476	2.229	1.202	0	0
	0	2.691	0.699	-2.609	20.007	0	-0.126	0
	0.488	5.04	18.53	-1.47	18.555	4.956	0	0
	0.976	9.871	16.682	-3.318	16.763	9.634	0	0.01
	1.464	13.785	14.566	-5.434	14.708	13.439	0	0.01
	1.952	16.33	12.274	-7.726	12.474	15.94	0	0.01
	2.44	17.23	9.897	-10.103	10.144	16.869	0	0.01
	2.928	16.391	7.526	-12.474	7.803	16.12	0	0.01
	3.416	13.892	5.252	-14.748	5.534	13.755	0	0.01
	3.904	9.994	3.422	-16.833	3.422	9.994	0	0.01
12	4.392	5.226	1.549	-18.451	2.186	1.067	0	0
	0	2.133	2.186	-0.437	20.005	0	-0.124	0
	0.488	4.84	18.898	-1.102	18.916	4.759	0	0
	0.976	9.826	17.483	-2.517	17.543	9.591	0	0.01
	1.464	14.321	15.808	-4.192	15.913	13.961	0	0.01
	1.952	17.834	13.909	-6.091	14.058	17.399	0	0.01
	2.44	19.946	11.825	-8.175	12.01	19.496	0	0.01
	2.928	20.312	9.594	-10.406	9.801	19.909	0	0.01
	3.416	18.662	7.253	-12.747	7.463	18.354	0	0.01
	3.904	14.797	4.839	-15.161	5.029	14.612	0	0.01
4.392	8.594	2.39	-17.61	2.531	8.525	0	0	
4.88	0	1.631	-20.032	1.631	0	0	0	

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	20.032	-1.631	-1.631	0	0	0
	0.488	-0.796	0	-1.631	-2.531	8.525	0	0
	0.976	-1.592	0	-1.631	-5.029	14.612	0	0
	1.464	-2.387	0	-1.631	-7.463	18.354	0	0
	1.952	-3.183	0	-1.631	-9.801	19.909	0	0
	2.44	-3.979	0	-1.631	-12.01	19.496	0	0
	2.928	-4.775	0	-1.631	-14.058	17.399	0	0
	3.416	-5.571	0	-1.631	-15.913	13.961	0	0
	3.904	-6.367	0	-1.631	-17.543	9.591	0	0
	4.392	-7.162	0	-1.631	-18.916	4.759	0	0
2	0	-10.042	2.609	-14.058	-20.005	0	-0.124	0
	0.488	-8.769	2.609	0	-2.186	1.067	0	0
	0.976	-7.496	2.609	0	-3.422	9.994	0	0
	1.464	-6.626	1.77	0	-5.534	13.755	0	-0.01



	1.952	-5.762	1.77	0	-7.803	16.12	0	-0.01
	2.44	-4.937	1.627	0	-10.144	16.869	0	-0.01
	2.928	-5.082	0	-1.066	-12.474	15.94	0	-0.01
	3.416	-5.602	0	-1.066	-14.708	13.439	0	-0.01
	3.904	-6.4	0	-2.186	-16.763	9.634	0	0
	4.392	-7.467	0	-2.186	-18.555	4.956	0	0
3	0	-8.534	12.627	-2.186	-20.007	0	-0.126	0
	0.488	-7.343	2.185	0	-2.229	1.202	0	0
	0.976	-6.276	2.185	0	-3.44	10.048	0	0
	1.464	-5.541	1.427	0	-5.609	13.935	0	0
	1.952	-4.851	1.288	0	-7.939	16.38	0	-0.01
	2.44	-4.222	1.288	0	-10.337	17.142	0	-0.01
	2.928	-4.805	0	-1.231	-12.709	16.158	0	-0.01
	3.416	-5.475	0	-1.373	-14.963	13.551	0	0
	3.904	-6.413	0	-2.229	-17.005	9.622	0	0
	4.392	-7.501	0	-2.229	-18.743	4.855	0	0
4	0	-8.649	2.245	-12.709	-20.072	0	-0.136	0
	0.488	-7.553	2.245	0	-2.259	1.227	0	0
	0.976	-6.458	2.245	0	-3.38	9.886	0	0
	1.464	-5.475	1.374	0	-5.53	13.759	0	0
	1.952	-4.809	1.249	0	-7.851	16.231	0	-0.01
	2.44	-4.216	0	-1.283	-10.249	17.04	0	-0.01
	2.928	-4.842	0	-1.283	-12.63	16.109	0	-0.01
	3.416	-5.529	0	-1.413	-14.898	13.546	0	0
	3.904	-6.49	0	-2.259	-16.958	9.644	0	0
	4.392	-7.592	0	-2.259	-18.716	4.881	0	0
5	0	-8.694	13.399	-2.259	-20.066	0	-0.129	0
	0.492	-7.461	2.202	0	-2.234	1.23	0	0
	0.984	-6.377	2.202	0	-3.373	9.935	0	0
	1.476	-5.452	1.34	0	-5.521	13.835	0	0
	1.968	-4.8	1.243	0	-7.843	16.328	0	-0.01
	2.46	-4.207	0	-1.28	-10.242	17.146	0	-0.01
	2.952	-4.836	0	-1.28	-12.624	16.211	0	-0.01
	3.444	-5.51	0	-1.383	-14.893	13.63	0	0
	3.936	-6.463	0	-2.234	-16.953	9.702	0	0
	4.428	-7.562	0	-2.234	-18.709	4.912	0	0
6	0	-8.662	13.39	-2.234	-20.053	0	-0.117	0
	0.492	-7.539	2.225	0	-2.23	1.222	0	0
	0.984	-6.445	2.225	0	-3.384	9.967	0	0
	1.476	-5.515	1.359	0	-5.533	13.865	0	0
	1.968	-4.855	1.272	0	-7.855	16.351	0	-0.01
	2.46	-4.23	0	-1.275	-10.253	17.161	0	-0.01
	2.952	-4.857	0	-1.275	-12.632	16.217	0	-0.01
	3.444	-5.518	0	-1.362	-14.897	13.632	0	0
	3.936	-6.457	0	-2.23	-16.952	9.702	0	0
	4.428	-7.554	0	-2.23	-18.702	4.915	0	0
7	0	-8.651	13.46	-2.23	-20.041	0	-0.105	0
	0.492	-7.554	2.23	0	-2.225	1.219	0	0
	0.984	-6.457	2.23	0	-3.39	9.983	0	0

	1.476	-5.518	1.362	0	-5.539	13.879	0	0
	1.968	-4.857	1.275	0	-7.861	16.361	0	-0.01
	2.46	-4.23	1.275	0	-10.258	17.167	0	-0.01
	2.952	-4.855	0	-1.272	-12.637	16.22	0	-0.01
	3.444	-5.515	0	-1.359	-14.901	13.632	0	0
	3.936	-6.445	0	-2.225	-16.955	9.701	0	0
	4.428	-7.539	0	-2.225	-18.704	4.914	0	0
8	0	-8.662	2.234	-13.39	-20.041	0	-0.105	0
	0.492	-7.562	2.234	0	-2.202	1.206	0	0
	0.984	-6.463	2.234	0	-3.393	9.984	0	0
	1.476	-5.51	1.383	0	-5.545	13.877	0	0
	1.968	-4.836	1.28	0	-7.868	16.356	0	-0.01
	2.46	-4.207	1.28	0	-10.266	17.157	0	-0.01
	2.952	-4.8	0	-1.243	-12.645	16.204	0	-0.01
	3.444	-5.452	0	-1.34	-14.909	13.612	0	0
	3.936	-6.377	0	-2.202	-16.962	9.681	0	0
	4.428	-7.461	0	-2.202	-18.708	4.9	0	0
9	0	-8.694	2.259	-13.399	-20.041	0	-0.105	0
	0.488	-7.592	2.259	0	-2.245	1.213	0	0
	0.976	-6.49	2.259	0	-3.397	9.923	0	0
	1.464	-5.529	1.413	0	-5.548	13.788	0	0
	1.952	-4.842	1.283	0	-7.87	16.248	0	-0.01
	2.44	-4.216	1.283	0	-10.267	17.044	0	-0.01
	2.928	-4.809	0	-1.249	-12.645	16.1	0	-0.01
	3.416	-5.475	0	-1.374	-14.909	13.528	0	0
	3.904	-6.458	0	-2.245	-16.964	9.625	0	0
	4.392	-7.553	0	-2.245	-18.714	4.87	0	0
10	0	-8.649	12.709	-2.245	-20.054	0	-0.117	0
	0.488	-7.501	2.229	0	-2.185	1.186	0	0
	0.976	-6.413	2.229	0	-3.381	9.89	0	0
	1.464	-5.475	1.373	0	-5.528	13.76	0	0
	1.952	-4.805	1.231	0	-7.849	16.232	0	-0.01
	2.44	-4.222	0	-1.288	-10.246	17.043	0	-0.01
	2.928	-4.851	0	-1.288	-12.627	16.113	0	-0.01
	3.416	-5.541	0	-1.427	-14.895	13.551	0	0
	3.904	-6.276	0	-2.185	-16.956	9.649	0	0
	4.392	-7.343	0	-2.185	-18.715	4.885	0	0
11	0	-8.534	2.186	-12.627	-20.066	0	-0.129	0
	0.488	-7.467	2.186	0	-2.609	1.417	0	0
	0.976	-6.4	2.186	0	-3.318	9.871	0	0
	1.464	-5.602	1.066	0	-5.434	13.785	0	-0.01
	1.952	-5.082	1.066	0	-7.726	16.33	0	-0.01
	2.44	-4.937	0	-1.627	-10.103	17.23	0	-0.01
	2.928	-5.762	0	-1.77	-12.474	16.391	0	-0.01
	3.416	-6.626	0	-1.77	-14.748	13.892	0	-0.01
	3.904	-7.496	0	-2.609	-16.833	9.994	0	0
	4.392	-8.769	0	-2.609	-18.64	5.134	0	0
12	0	-10.042	14.058	-2.609	-20.063	0	-0.12	0
	0.488	-7.162	1.631	0	-1.102	4.84	0	0

0.976	-6.367	1.631	0	-2.517	9.826	0	0
1.464	-5.571	1.631	0	-4.192	14.321	0	0
1.952	-4.775	1.631	0	-6.091	17.834	0	0
2.44	-3.979	1.631	0	-8.175	19.946	0	0
2.928	-3.183	1.631	0	-10.406	20.312	0	0
3.416	-2.387	1.631	0	-12.747	18.662	0	0
3.904	-1.592	1.631	0	-15.161	14.797	0	0
4.392	-0.796	1.631	0	-17.61	8.594	0	0
4.88	0	1.631	-20.032	-20.032	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.631	-20.056
2	2.623	-20.126
3	3.308	-20.099
4	2.863	-20.107
5	2.84	-20.099
6	2.828	-20.083
7	2.821	-20.068
8	2.828	-20.083
9	2.84	-20.099
10	2.863	-20.107
11	3.308	-20.099
12	2.623	-20.126
13	1.631	-20.056

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	18.868	-1.09	18.868	0	0	0
	0.488	7.604	15.582	-1.418	15.582	7.604	0	0
	0.976	12.643	12.954	-4.046	12.954	12.643	0	0.01
	1.464	15.971	10.909	-6.091	10.909	15.971	0	0.01
	1.952	17.407	8.917	-8.083	8.917	17.407	0	0.01
	2.44	17.111	7.013	-9.987	7.013	17.111	0	0.01
	2.928	15.311	5.229	-11.771	5.229	15.311	0	0.01
	3.416	12.299	3.6	-13.4	3.6	12.299	0	0.01
	3.904	8.434	2.16	-14.84	2.16	8.434	0	0.01
	4.392	3.212	0	-17.786	0.65	2.856	0	0
2	0	1.408	0.289	-1.443	19.487	0	-2.381	0
	0.488	3.982	16.645	-0.355	17.401	0	-0.682	0
	0.976	8.495	13.891	-3.142	16.277	3.098	0	0
	1.464	11.196	11.28	-5.72	14.769	6.767	0	0.01
	1.952	12.218	8.847	-8.153	12.923	9.81	0	0.01
	2.44	11.799	10.784	-6.216	10.784	11.799	0	0.01
	2.928	12.393	8.399	-8.601	8.399	12.393	0	0.01
	3.416	11.343	5.812	-11.188	5.812	11.343	0	0.01
	3.904	8.485	3.069	-13.931	3.069	8.485	0	0
	4.392	3.761	0.224	-16.776	2.218	1.205	0	0
3	0	2.287	2.218	-0.594	19.537	0	-2.558	0
	0.488	3.908	16.667	-0.333	17.037	0.546	0	0
	0.976	8.686	13.824	-3.176	15.927	4.109	0	0
	1.464	11.571	11.122	-5.878	14.462	7.508	0	0.01
	1.952	12.677	8.605	-8.395	12.68	10.284	0	0.01
	2.44	12.197	6.305	-10.695	10.617	12.051	0	0.01
	2.928	12.494	8.31	-8.69	8.31	12.494	0	0.01
	3.416	11.369	5.795	-11.205	5.795	11.369	0	0.01
	3.904	8.506	3.11	-13.89	3.11	8.506	0	0
	4.392	3.819	0.302	-16.698	1.483	0.805	0	0
4	0	1.551	0.403	-1.504	19.552	0	-2.582	0
	0.488	3.808	16.7	-0.3	17.002	0.64	0	0
	0.976	8.501	13.891	-3.109	15.898	4.182	0	0
	1.464	11.368	11.206	-5.794	14.441	7.562	0	0.01
	1.952	12.496	8.691	-8.309	12.668	10.323	0	0.01
	2.44	12.081	10.613	-6.387	10.613	12.081	0	0.01
	2.928	12.521	8.313	-8.687	8.313	12.521	0	0.01
	3.416	11.398	5.805	-11.195	5.805	11.398	0	0.01
	3.904	8.539	3.124	-13.876	3.124	8.539	0	0
	4.392	3.854	0.317	-16.683	1.486	0.803	0	0

5	0	1.551	0.403	-1.488	19.663	0	-2.716	0
	0.492	3.771	16.793	-0.207	16.983	0.676	0	0
	0.984	8.536	13.967	-3.033	15.882	4.237	0	0
	1.476	11.452	11.265	-5.735	14.425	7.642	0	0.01
	1.968	12.602	8.736	-8.264	12.647	10.427	0	0.01
	2.46	12.2	10.585	-6.415	10.585	12.2	0	0.01
	2.952	12.64	8.275	-8.725	8.275	12.64	0	0.01
	3.444	11.496	5.752	-11.248	5.752	11.496	0	0.01
	3.936	8.588	3.053	-13.947	3.053	8.588	0	0
	4.428	3.825	0.227	-16.773	1.451	0.795	0	0
6	0	1.545	0.398	-1.486	19.66	0	-2.706	0
	0.492	3.804	16.784	-0.216	17.012	0.577	0	0
	0.984	8.568	13.956	-3.044	15.907	4.164	0	0
	1.476	11.479	11.254	-5.746	14.445	7.592	0	0.01
	1.968	12.622	8.726	-8.274	12.662	10.397	0	0.01
	2.46	12.185	10.595	-6.405	10.595	12.185	0	0.01
	2.952	12.634	8.28	-8.72	8.28	12.634	0	0.01
	3.444	11.495	5.753	-11.247	5.753	11.495	0	0.01
	3.936	8.587	3.051	-13.949	3.051	8.587	0	0
	4.428	3.823	0.222	-16.778	1.485	0.813	0	0
7	0	1.544	0.398	-1.485	19.654	0	-2.698	0
	0.492	3.823	16.778	-0.222	17.012	0.573	0	0
	0.984	8.587	13.949	-3.051	15.906	4.16	0	0
	1.476	11.495	11.247	-5.753	14.442	7.588	0	0.01
	1.968	12.634	8.72	-8.28	12.658	10.391	0	0.01
	2.46	12.185	6.405	-10.595	10.59	12.176	0	0.01
	2.952	12.622	8.274	-8.726	8.274	12.622	0	0.01
	3.444	11.479	5.746	-11.254	5.746	11.479	0	0.01
	3.936	8.568	3.044	-13.956	3.044	8.568	0	0
	4.428	3.804	0.216	-16.784	1.486	0.814	0	0
8	0	1.545	1.486	-0.398	19.643	0	-2.687	0
	0.492	3.825	16.773	-0.227	17.022	0.567	0	0
	0.984	8.588	13.947	-3.053	15.91	4.16	0	0
	1.476	11.496	11.248	-5.752	14.442	7.587	0	0.01
	1.968	12.64	8.725	-8.275	12.654	10.386	0	0.01
	2.46	12.2	6.415	-10.585	10.582	12.164	0	0.01
	2.952	12.602	8.264	-8.736	8.264	12.602	0	0.01
	3.444	11.452	5.735	-11.265	5.735	11.452	0	0.01
	3.936	8.536	3.033	-13.967	3.033	8.536	0	0
	4.428	3.771	0.207	-16.793	1.488	0.819	0	0
9	0	1.551	1.488	-0.403	19.536	0	-2.559	0
	0.488	3.854	16.683	-0.317	17.041	0.536	0	0
	0.976	8.539	13.876	-3.124	15.928	4.109	0	0
	1.464	11.398	11.195	-5.805	14.462	7.512	0	0.01
	1.952	12.521	8.687	-8.313	12.679	10.289	0	0.01
	2.44	12.081	6.387	-10.613	10.616	12.055	0	0.01
	2.928	12.496	8.309	-8.691	8.309	12.496	0	0.01
	3.416	11.368	5.794	-11.206	5.794	11.368	0	0.01
	3.904	8.501	3.109	-13.891	3.109	8.501	0	0

10	4.392	3.808	0.3	-16.7	1.504	0.817	0	0
	0	1.551	1.504	-0.403	19.597	0	-2.629	0
	0.488	3.819	16.698	-0.302	17.035	0.623	0	0
	0.976	8.506	13.89	-3.11	15.946	4.18	0	0
	1.464	11.369	11.205	-5.795	14.504	7.59	0	0.01
	1.952	12.494	8.69	-8.31	12.742	10.393	0	0.01
	2.44	12.197	10.695	-6.305	10.695	12.197	0	0.01
	2.928	12.677	8.395	-8.605	8.395	12.677	0	0.01
	3.416	11.571	5.878	-11.122	5.878	11.571	0	0.01
	3.904	8.686	3.176	-13.824	3.176	8.686	0	0
11	4.392	3.908	0.333	-16.667	1.47	0.793	0	0
	0	2.287	0.594	-2.218	19.573	0	-2.674	0
	0.488	3.761	16.776	-0.224	16.824	0.617	0	0
	0.976	8.485	13.931	-3.069	15.672	4.021	0	0
	1.464	11.343	11.188	-5.812	14.215	7.243	0	0.01
	1.952	12.393	8.601	-8.399	12.475	9.894	0	0.01
	2.44	11.799	6.216	-10.784	10.476	11.626	0	0.01
	2.928	12.218	8.153	-8.847	8.239	12.135	0	0.01
	3.416	11.196	5.72	-11.28	5.787	11.163	0	0.01
	3.904	8.495	3.142	-13.891	3.142	8.495	0	0
12	4.392	3.982	0.355	-16.645	1.443	0.704	0	0
	0	1.408	1.443	-0.289	20.849	0	-3.989	0
	0.488	3.212	17.786	0	17.808	3.115	0	0
	0.976	8.434	14.84	-2.16	15.973	4.009	0	0.01
	1.464	12.299	13.4	-3.6	14.804	7.503	0	0.01
	1.952	15.311	11.771	-5.229	13.346	10.699	0	0.01
	2.44	17.111	9.987	-7.013	11.591	13.199	0	0.01
	2.928	17.407	8.083	-8.917	9.529	14.584	0	0.01
	3.416	15.971	6.091	-10.909	7.151	14.419	0	0.01
	3.904	12.643	4.046	-12.954	4.449	12.25	0	0.01
4.392	7.604	1.418	-15.582	2.151	7.246	0	0	
4.88	0	1.09	-18.868	1.09	0	0	0	

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.868	-1.09	-1.09	0	0	0
	0.488	-0.532	0	-1.09	-2.151	7.246	0	0
	0.976	-1.064	0	-1.09	-4.449	12.25	0	0
	1.464	-1.595	0	-1.09	-7.151	14.419	0	0
	1.952	-2.127	0	-1.09	-9.529	14.584	0	0
	2.44	-2.659	0	-1.09	-11.591	13.199	0	0
	2.928	-3.191	0	-1.09	-13.346	10.699	0	0
	3.416	-3.723	0	-1.09	-14.804	7.503	0	0
	3.904	-4.254	0	-1.09	-15.973	4.009	0	0
	4.392	-9.426	0	-11.591	-17.808	3.115	0	0
2	0	-15.415	12.923	-13.024	-20.849	0	-3.989	0
	0.488	-9.345	11.87	0	-1.443	0.704	0	0
	0.976	-6.371	2.218	0	-3.142	8.495	0	0
	1.464	-5.775	1.212	0	-5.787	11.163	0	-0.01

	1.952	-5.186	1.061	0	-8.239	12.135	0	-0.01
	2.44	-4.668	1.061	0	-10.476	11.626	0	-0.01
	2.928	-4.219	0.892	0	-12.475	9.894	0	-0.01
	3.416	-3.994	0	-0.327	-14.215	7.243	0	0
	3.904	-4.225	0	-1.443	-15.672	4.021	0	0
	4.392	-8.823	0	-10.476	-16.824	0.617	0	0
3	0	-14.467	12.68	-12.102	-19.573	0	-2.674	0
	0.488	-8.673	10.617	0	-1.47	0.793	0	0
	0.976	-4.261	1.483	0	-3.176	8.686	0	0
	1.464	-3.814	0.835	0	-5.878	11.571	0	0
	1.952	-3.477	0.554	0	-8.395	12.677	0	0
	2.44	-3.357	0	-0.143	-10.695	12.197	0	0
	2.928	-3.542	0	-0.544	-12.742	10.393	0	0
	3.416	-3.847	0	-0.662	-14.504	7.59	0	0
	3.904	-4.238	0	-0.818	-15.946	4.18	0	0
	4.392	-8.781	0	-10.396	-17.035	0.623	0	0
4	0	-14.48	12.056	-12.742	-19.597	0	-2.629	0
	0.488	-8.845	11.068	0	-1.504	0.817	0	0
	0.976	-4.275	1.486	0	-3.109	8.501	0	0
	1.464	-3.85	0.681	0	-5.794	11.368	0	0
	1.952	-3.541	0.551	0	-8.309	12.496	0	0
	2.44	-3.365	0	-0.337	-10.616	12.055	0	0
	2.928	-3.579	0	-0.57	-12.679	10.289	0	0
	3.416	-3.912	0	-0.718	-14.462	7.512	0	0
	3.904	-4.333	0	-0.903	-15.928	4.109	0	0
	4.392	-8.814	0	-10.401	-17.041	0.536	0	0
5	0	-14.463	12.647	-12.112	-19.536	0	-2.559	0
	0.492	-8.78	11.105	0	-1.488	0.819	0	0
	0.984	-4.219	0.785	0	-3.033	8.536	0	0
	1.476	-3.846	0.679	0	-5.735	11.452	0	0
	1.968	-3.545	0.526	0	-8.264	12.602	0	0
	2.46	-3.367	0	-0.35	-10.582	12.164	0	0
	2.952	-3.579	0	-0.545	-12.654	10.386	0	0
	3.444	-3.906	0	-0.717	-14.442	7.587	0	0
	3.936	-4.313	0	-0.872	-15.91	4.16	0	0
	4.428	-8.809	0	-10.374	-17.022	0.567	0	0
6	0	-14.522	12.662	-12.158	-19.643	0	-2.687	0
	0.492	-8.807	10.377	0	-1.486	0.814	0	0
	0.984	-4.312	0.848	0	-3.044	8.568	0	0
	1.476	-3.921	0.711	0	-5.746	11.479	0	0
	1.968	-3.605	0.527	0	-8.274	12.622	0	0
	2.46	-3.403	0.139	0	-10.59	12.176	0	0
	2.952	-3.601	0	-0.521	-12.658	10.391	0	0
	3.444	-3.919	0	-0.712	-14.442	7.588	0	0
	3.936	-4.311	0	-0.847	-15.906	4.16	0	0
	4.428	-8.808	0	-10.377	-17.012	0.573	0	0
7	0	-14.521	12.658	-12.658	-19.654	0	-2.698	0
	0.492	-8.808	10.377	0	-1.485	0.813	0	0
	0.984	-4.311	0.847	0	-3.051	8.587	0	0

	1.476	-3.919	0.712	0	-5.753	11.495	0	0
	1.968	-3.601	0.521	0	-8.28	12.634	0	0
	2.46	-3.403	0	-0.139	-10.595	12.185	0	0
	2.952	-3.605	0	-0.527	-12.662	10.397	0	0
	3.444	-3.921	0	-0.711	-14.445	7.592	0	0
	3.936	-4.312	0	-0.848	-15.907	4.164	0	0
	4.428	-8.807	0	-10.377	-17.012	0.577	0	0
8	0	-14.522	12.158	-12.662	-19.66	0	-2.706	0
	0.492	-8.809	10.374	0	-1.451	0.795	0	0
	0.984	-4.313	0.872	0	-3.053	8.588	0	0
	1.476	-3.906	0.717	0	-5.752	11.496	0	0
	1.968	-3.579	0.545	0	-8.275	12.64	0	0
	2.46	-3.367	0.35	0	-10.585	12.2	0	0
	2.952	-3.545	0	-0.526	-12.647	10.427	0	0
	3.444	-3.846	0	-0.679	-14.425	7.642	0	0
	3.936	-4.219	0	-0.785	-15.882	4.237	0	0
	4.428	-8.78	0	-11.105	-16.983	0.676	0	0
9	0	-14.463	12.112	-12.647	-19.663	0	-2.716	0
	0.488	-8.814	10.401	0	-1.486	0.803	0	0
	0.976	-4.333	0.903	0	-3.124	8.539	0	0
	1.464	-3.912	0.718	0	-5.805	11.398	0	0
	1.952	-3.579	0.57	0	-8.313	12.521	0	0
	2.44	-3.365	0.337	0	-10.613	12.081	0	0
	2.928	-3.541	0	-0.551	-12.668	10.323	0	0
	3.416	-3.85	0	-0.681	-14.441	7.562	0	0
	3.904	-4.275	0	-1.486	-15.898	4.182	0	0
	4.392	-8.845	0	-11.068	-17.002	0.64	0	0
10	0	-14.48	12.742	-12.056	-19.552	0	-2.582	0
	0.488	-8.781	10.396	0	-1.483	0.805	0	0
	0.976	-4.238	0.818	0	-3.11	8.506	0	0
	1.464	-3.847	0.662	0	-5.795	11.369	0	0
	1.952	-3.542	0.544	0	-8.31	12.494	0	0
	2.44	-3.357	0.143	0	-10.617	12.051	0	0
	2.928	-3.477	0	-0.554	-12.68	10.284	0	0
	3.416	-3.814	0	-0.835	-14.462	7.508	0	0
	3.904	-4.261	0	-1.483	-15.927	4.109	0	0
	4.392	-8.673	0	-10.617	-17.037	0.546	0	0
11	0	-14.467	12.102	-12.68	-19.537	0	-2.558	0
	0.488	-8.823	10.476	0	-2.218	1.205	0	0
	0.976	-4.225	1.443	0	-3.069	8.485	0	0
	1.464	-3.994	0.327	0	-5.812	11.343	0	0
	1.952	-4.219	0	-0.892	-8.399	12.393	0	-0.01
	2.44	-4.668	0	-1.061	-10.784	11.799	0	-0.01
	2.928	-5.186	0	-1.061	-12.923	9.81	0	-0.01
	3.416	-5.775	0	-1.212	-14.769	6.767	0	-0.01
	3.904	-6.371	0	-2.218	-16.277	3.098	0	0
	4.392	-9.345	0	-11.87	-17.401	0	-0.682	0
12	0	-15.415	13.024	-12.923	-19.487	0	-2.381	0
	0.488	-9.426	11.591	0	-0.65	2.856	0	0



0.976	-4.254	1.09	0	-2.16	8.434	0	0
1.464	-3.723	1.09	0	-3.6	12.299	0	0
1.952	-3.191	1.09	0	-5.229	15.311	0	0
2.44	-2.659	1.09	0	-7.013	17.111	0	0
2.928	-2.127	1.09	0	-8.917	17.407	0	0
3.416	-1.595	1.09	0	-10.909	15.971	0	0
3.904	-1.064	1.09	0	-12.954	12.643	0	0
4.392	-0.532	1.09	0	-15.582	7.604	0	0
4.88	0	1.09	-18.868	-18.868	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.09	-18.902
2	1.731	-26.039
3	2.812	-24.782
4	1.907	-24.798
5	1.891	-24.761
6	1.884	-24.82
7	1.883	-24.819
8	1.884	-24.82
9	1.891	-24.761
10	1.907	-24.798
11	2.812	-24.782
12	1.731	-26.039
13	1.09	-18.902

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(n	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	15.549	-1.005	15.549	0	0	0
	0.488	6.263	12.834	-1.166	12.834	6.263	0	0
	0.976	10.451	10.708	-3.292	10.708	10.451	0	0.01
	1.464	13.217	9.028	-4.972	9.028	13.217	0	0.01
	1.952	14.42	7.387	-6.613	7.387	14.42	0	0.01
	2.44	14.187	5.814	-8.186	5.814	14.187	0	0.01
	2.928	12.701	4.338	-9.662	4.338	12.701	0	0.01
	3.416	10.205	2.987	-11.013	2.987	10.205	0	0.01
	3.904	6.996	1.792	-12.208	1.792	6.996	0	0.01
	4.392	2.886	0.657	-11.343	0.657	2.886	0	0
2	0	1.316	0.27	-1.349	16.896	0	-5.185	0
	0.488	3.674	12.898	-1.102	14.953	0	-0.859	0
	0.976	6.996	10.987	-3.033	13.458	2.551	0	0
	1.464	9.144	9.134	-4.866	12.222	5.602	0	0.01
	1.952	10.156	7.381	-6.619	10.701	8.136	0	0.01
	2.44	10.502	6.173	-5.827	8.934	9.793	0	0.01
	2.928	10.289	6.959	-7.041	6.959	10.289	0	0.01
	3.416	9.29	5.104	-8.896	5.104	9.29	0	0.01
	3.904	7.079	3.289	-10.711	3.289	7.079	0	0
	4.392	3.743	1.345	-12.655	1.826	0.992	0	0
3	0	1.884	1.826	-0.489	16.655	0	-4.24	0
	0.488	3.675	12.931	-1.069	14.669	0.113	0	0
	0.976	7.259	10.894	-3.106	12.689	3.406	0	0
	1.464	9.568	8.956	-5.044	11.497	7.341	0	0.01
	1.952	10.633	7.114	-6.886	10.094	9.3	0	0.01
	2.44	10.653	5.536	-6.464	8.513	10.402	0	0.01
	2.928	10.46	6.793	-7.207	6.793	10.46	0	0.01
	3.416	9.366	4.971	-9.029	4.971	9.366	0	0.01
	3.904	7.085	3.062	-10.938	3.062	7.085	0	0
	4.392	3.606	1.066	-12.934	1.311	0.712	0	0
4	0	1.438	0.373	-1.395	16.647	0	-4.181	0
	0.488	3.597	12.934	-1.066	14.691	0	-0.021	0
	0.976	7.08	10.932	-3.068	12.754	3.219	0	0
	1.464	9.359	9.015	-4.985	11.549	7.222	0	0.01
	1.952	10.439	7.184	-6.816	10.133	9.242	0	0.01
	2.44	10.394	6.28	-5.72	8.537	10.391	0	0.01
	2.928	10.478	6.804	-7.196	6.804	10.478	0	0.01
	3.416	9.396	4.972	-9.028	4.972	9.396	0	0.01
	3.904	7.112	3.055	-10.945	3.055	7.112	0	0
	4.392	3.623	1.054	-12.946	1.422	0.768	0	0

5	0	1.462	1.422	-0.377	16.732	0	-4.279	0
	0.492	3.58	12.996	-1.004	14.738	0.029	0	0
	0.984	7.11	10.98	-3.02	12.78	3.328	0	0
	1.476	9.419	9.05	-4.95	11.544	7.271	0	0.01
	1.968	10.515	7.211	-6.789	10.125	9.313	0	0.01
	2.46	10.476	8.524	-5.476	8.524	10.476	0	0.01
	2.952	10.566	6.784	-7.216	6.784	10.566	0	0.01
	3.444	9.471	4.942	-9.058	4.942	9.471	0	0.01
	3.936	7.156	3.011	-10.989	3.011	7.156	0	0
	4.428	3.612	0.992	-13.008	1.353	0.741	0	0
6	0	1.431	0.369	-1.376	16.757	0	-4.374	0
	0.492	3.607	12.988	-1.012	14.761	0	-0.051	0
	0.984	7.138	10.971	-3.029	12.801	3.267	0	0
	1.476	9.443	9.04	-4.96	11.562	7.225	0	0.01
	1.968	10.533	7.201	-6.799	10.143	9.277	0	0.01
	2.46	10.471	6.275	-5.725	8.544	10.448	0	0.01
	2.952	10.545	6.805	-7.195	6.805	10.545	0	0.01
	3.444	9.459	4.966	-9.034	4.966	9.459	0	0.01
	3.936	7.156	3.035	-10.965	3.035	7.156	0	0
	4.428	3.625	1.016	-12.984	1.373	0.752	0	0
7	0	1.427	1.373	-1.373	16.751	0	-4.371	0
	0.492	3.625	12.984	-1.016	14.764	0	-0.06	0
	0.984	7.156	10.965	-3.035	12.804	3.26	0	0
	1.476	9.459	9.034	-4.966	11.556	7.231	0	0.01
	1.968	10.545	7.195	-6.805	10.137	9.276	0	0.01
	2.46	10.471	5.725	-6.275	8.537	10.441	0	0.01
	2.952	10.533	6.799	-7.201	6.799	10.533	0	0.01
	3.444	9.443	4.96	-9.04	4.96	9.443	0	0.01
	3.936	7.138	3.03	-10.97	3.03	7.138	0	0
	4.428	3.607	1.012	-12.988	1.376	0.754	0	0
8	0	1.431	1.376	-0.369	16.742	0	-4.362	0
	0.492	3.612	13.008	-0.992	14.763	0	-0.065	0
	0.984	7.156	10.989	-3.011	12.805	3.255	0	0
	1.476	9.471	9.058	-4.942	11.555	7.231	0	0.01
	1.968	10.566	7.216	-6.784	10.132	9.272	0	0.01
	2.46	10.476	5.476	-8.524	8.53	10.43	0	0.01
	2.952	10.515	6.789	-7.211	6.789	10.515	0	0.01
	3.444	9.419	4.95	-9.05	4.95	9.419	0	0.01
	3.936	7.11	3.02	-10.98	3.02	7.11	0	0
	4.428	3.58	1.004	-12.996	1.38	0.76	0	0
9	0	1.462	0.377	-1.422	16.66	0	-4.264	0
	0.488	3.623	12.946	-1.054	14.696	0	-0.043	0
	0.976	7.112	10.945	-3.055	12.768	4.544	0	0
	1.464	9.396	9.028	-4.972	11.568	7.175	0	0.01
	1.952	10.478	7.196	-6.804	10.148	9.201	0	0.01
	2.44	10.394	5.72	-6.28	8.55	10.352	0	0.01
	2.928	10.439	6.816	-7.184	6.816	10.439	0	0.01
	3.416	9.359	4.985	-9.015	4.985	9.359	0	0.01
	3.904	7.08	3.068	-10.932	3.068	7.08	0	0

10	4.392	3.597	1.066	-12.934	1.395	0.757	0	0
	0	1.438	1.395	-0.373	16.692	0	-4.227	0
	0.488	3.606	12.934	-1.066	14.673	0.041	0	0
	0.976	7.085	10.938	-3.062	12.793	4.597	0	0
	1.464	9.366	9.029	-4.971	11.612	7.248	0	0.01
	1.952	10.46	7.207	-6.793	10.208	9.31	0	0.01
	2.44	10.653	6.464	-5.536	8.619	10.506	0	0.01
	2.928	10.633	6.886	-7.114	6.886	10.633	0	0.01
	3.416	9.568	5.044	-8.956	5.044	9.568	0	0.01
	3.904	7.259	3.106	-10.894	3.106	7.259	0	0
11	4.392	3.675	1.069	-12.931	1.377	0.743	0	0
	0	1.884	0.489	-1.826	16.642	0	-4.241	0
	0.488	3.743	12.655	-1.345	14.714	0.027	0	0
	0.976	7.079	10.711	-3.289	12.736	3.289	0	0
	1.464	9.29	8.896	-5.104	11.249	7.082	0	0.01
	1.952	10.289	7.041	-6.959	9.85	8.975	0	0.01
	2.44	10.502	5.827	-6.173	8.3	10.053	0	0.01
	2.928	10.156	6.619	-7.381	6.629	10.146	0	0.01
	3.416	9.144	4.866	-9.134	4.869	9.143	0	0.01
	3.904	6.996	3.033	-10.987	3.033	6.996	0	0
12	4.392	3.674	1.102	-12.898	1.349	0.658	0	0
	0	1.316	1.349	-0.27	17.558	0	-5.182	0
	0.488	2.886	11.343	-0.657	15.317	0	-0.295	0
	0.976	6.996	12.208	-1.792	13.162	3.27	0	0.01
	1.464	10.205	11.013	-2.987	12.201	6.144	0	0.01
	1.952	12.701	9.662	-4.338	11.002	8.777	0	0.01
	2.44	14.187	8.186	-5.814	9.557	10.841	0	0.01
	2.928	14.42	6.613	-7.387	7.858	11.989	0	0.01
	3.416	13.217	4.972	-9.028	5.966	11.762	0	0.01
	3.904	10.451	3.292	-10.708	3.995	9.764	0	0.01
4.392	6.263	1.166	-12.834	1.781	5.963	0	0	
4.88	0	1.005	-15.549	1.005	0	0	0	

Minimums table:

Span	Location	Moment(kn	Corr. Shear	Corr. Shear	Shear (min	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	15.549	-1.005	-1.005	0	0	0
	0.488	-0.491	0	-1.005	-1.781	5.963	0	0
	0.976	-0.981	0	-1.005	-3.995	9.764	0	0
	1.464	-1.472	0	-1.005	-5.966	11.762	0	0
	1.952	-1.962	0	-1.005	-7.858	11.989	0	0
	2.44	-2.453	0	-1.005	-9.557	10.841	0	0
	2.928	-2.943	0	-1.005	-11.002	8.777	0	0
	3.416	-3.434	0	-1.005	-12.201	6.144	0	0
	3.904	-3.924	0	-1.005	-13.162	3.27	0	0
	4.392	-7.815	0	-9.557	-15.317	0	-0.295	0
2	0	-12.752	10.701	-10.738	-17.558	0	-5.182	0
	0.488	-7.723	9.831	0	-1.349	0.658	0	0
	0.976	-5.247	1.826	0	-3.033	6.996	0	0
	1.464	-4.842	0.821	0	-4.869	9.143	0	0

	1.952	-4.461	0.679	0	-6.629	10.146	0	0
	2.44	-4.138	0.526	0	-8.3	10.053	0	-0.01
	2.928	-3.89	0.359	0	-9.85	8.975	0	0
	3.416	-3.723	0.197	0	-11.249	7.082	0	0
	3.904	-3.949	0	-1.349	-12.736	3.289	0	0
	4.392	-6.41	0	-7.57	-14.714	0.027	0	0
3	0	-10.501	9.491	-9.219	-16.642	0	-4.241	0
	0.488	-6.275	7.851	0	-1.377	0.743	0	0
	0.976	-3.766	1.311	0	-3.106	7.259	0	0
	1.464	-3.462	0.541	0	-5.044	9.568	0	0
	1.952	-3.258	0.351	0	-6.886	10.633	0	0
	2.44	-3.136	0.078	0	-8.619	10.506	0	0
	2.928	-3.131	0	-0.091	-10.208	9.31	0	0
	3.416	-3.344	0	-0.687	-11.612	7.248	0	0
	3.904	-3.961	0	-1.377	-12.793	4.597	0	0
	4.392	-6.501	0	-7.449	-14.674	0.041	0	0
4	0	-10.691	9.31	-9.629	-16.692	0	-4.227	0
	0.488	-6.563	7.684	0	-1.395	0.757	0	0
	0.976	-4.09	1.422	0	-3.068	7.08	0	0
	1.464	-3.427	0.498	0	-4.985	9.359	0	0
	1.952	-3.238	0.29	0	-6.816	10.439	0	0
	2.44	-3.146	0	-0.066	-8.55	10.352	0	0
	2.928	-3.264	0	-0.325	-10.148	9.201	0	0
	3.416	-3.463	0	-0.513	-11.568	7.175	0	0
	3.904	-4.007	0	-1.395	-12.768	4.544	0	0
	4.392	-6.546	0	-7.472	-14.696	0	-0.043	0
5	0	-10.678	9.571	-9.342	-16.66	0	-4.264	0
	0.492	-6.503	7.741	0	-1.38	0.76	0	0
	0.984	-3.918	1.353	0	-3.02	7.11	0	0
	1.476	-3.415	0.471	0	-4.95	9.419	0	0
	1.968	-3.235	0.294	0	-6.789	10.515	0	0
	2.46	-3.144	0	-0.084	-8.53	10.43	0	0
	2.952	-3.256	0	-0.337	-10.132	9.272	0	0
	3.444	-3.45	0	-0.499	-11.555	7.231	0	0
	3.936	-3.992	0	-1.38	-12.805	3.255	0	0
	4.428	-6.544	0	-7.395	-14.763	0	-0.065	0
6	0	-10.748	9.718	-9.265	-16.742	0	-4.362	0
	0.492	-6.53	7.905	0	-1.376	0.754	0	0
	0.984	-3.976	1.373	0	-3.029	7.138	0	0
	1.476	-3.455	0.48	0	-4.96	9.443	0	0
	1.968	-3.27	0.308	0	-6.799	10.533	0	0
	2.46	-3.177	0	-0.074	-8.537	10.441	0	0
	2.952	-3.277	0	-0.279	-10.137	9.276	0	0
	3.444	-3.46	0	-0.476	-11.556	7.231	0	0
	3.936	-3.986	0	-1.376	-12.804	3.26	0	0
	4.428	-6.532	0	-7.338	-14.764	0	-0.06	0
7	0	-10.735	9.737	-9.227	-16.751	0	-4.371	0
	0.492	-6.532	7.338	0	-1.373	0.752	0	0
	0.984	-3.986	1.376	0	-3.035	7.156	0	0

	1.476	-3.46	0.476	0	-4.966	9.459	0	0
	1.968	-3.277	0.279	0	-6.805	10.545	0	0
	2.46	-3.177	0.074	0	-8.544	10.448	0	0
	2.952	-3.27	0	-0.308	-10.143	9.277	0	0
	3.444	-3.455	0	-0.48	-11.562	7.225	0	0
	3.936	-3.976	0	-1.373	-12.801	3.267	0	0
	4.428	-6.53	0	-7.905	-14.761	0	-0.051	0
8	0	-10.748	9.265	-9.718	-16.757	0	-4.374	0
	0.492	-6.544	7.395	0	-1.353	0.741	0	0
	0.984	-3.992	1.38	0	-3.011	7.156	0	0
	1.476	-3.45	0.499	0	-4.942	9.471	0	0
	1.968	-3.256	0.337	0	-6.784	10.566	0	0
	2.46	-3.144	0.084	0	-8.524	10.476	0	0
	2.952	-3.235	0	-0.294	-10.125	9.313	0	0
	3.444	-3.415	0	-0.471	-11.544	7.271	0	0
	3.936	-3.918	0	-1.353	-12.78	3.328	0	0
	4.428	-6.503	0	-7.741	-14.738	0.029	0	0
9	0	-10.678	9.342	-9.571	-16.732	0	-4.279	0
	0.488	-6.546	7.472	0	-1.422	0.768	0	0
	0.976	-4.007	1.395	0	-3.055	7.112	0	0
	1.464	-3.463	0.513	0	-4.972	9.396	0	0
	1.952	-3.264	0.325	0	-6.804	10.478	0	0
	2.44	-3.146	0.066	0	-8.537	10.391	0	0
	2.928	-3.238	0	-0.29	-10.133	9.242	0	0
	3.416	-3.427	0	-0.498	-11.549	7.222	0	0
	3.904	-4.09	0	-1.422	-12.754	3.219	0	0
	4.392	-6.563	0	-7.684	-14.691	0	-0.021	0
10	0	-10.691	9.629	-9.31	-16.647	0	-4.181	0
	0.488	-6.501	7.449	0	-1.311	0.712	0	0
	0.976	-3.961	1.377	0	-3.062	7.085	0	0
	1.464	-3.344	0.687	0	-4.971	9.366	0	0
	1.952	-3.131	0.091	0	-6.793	10.46	0	0
	2.44	-3.136	0	-0.078	-8.513	10.402	0	0
	2.928	-3.258	0	-0.351	-10.094	9.3	0	0
	3.416	-3.462	0	-0.541	-11.497	7.341	0	0
	3.904	-3.766	0	-1.311	-12.689	3.406	0	0
	4.392	-6.275	0	-7.851	-14.669	0.113	0	0
11	0	-10.501	9.219	-9.491	-16.655	0	-4.24	0
	0.488	-6.41	7.57	0	-1.826	0.992	0	0
	0.976	-3.949	1.349	0	-3.289	7.079	0	0
	1.464	-3.723	0	-0.197	-5.104	9.29	0	0
	1.952	-3.89	0	-0.359	-6.959	10.289	0	0
	2.44	-4.138	0	-0.526	-8.934	9.793	0	-0.01
	2.928	-4.461	0	-0.679	-10.701	8.136	0	0
	3.416	-4.842	0	-0.821	-12.222	5.602	0	0
	3.904	-5.247	0	-1.826	-13.458	2.551	0	0
	4.392	-7.723	0	-9.831	-14.953	0	-0.858	0
12	0	-12.752	10.738	-10.701	-16.896	0	-5.185	0
	0.488	-7.815	9.557	0	-0.657	2.886	0	0

0.976	-3.924	1.005	0	-1.792	6.996	0	0
1.464	-3.434	1.005	0	-2.987	10.205	0	0
1.952	-2.943	1.005	0	-4.338	12.701	0	0
2.44	-2.453	1.005	0	-5.814	14.187	0	0
2.928	-1.962	1.005	0	-7.387	14.42	0	0
3.416	-1.472	1.005	0	-9.028	13.217	0	0
3.904	-0.981	1.005	0	-10.708	10.451	0	0
4.392	-0.491	1.005	0	-12.834	6.263	0	0
4.88	0	1.005	-15.549	-15.549	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.005	-15.577
2	1.618	-21.516
3	2.316	-19.345
4	1.768	-19.366
5	1.799	-19.393
6	1.745	-19.499
7	1.741	-19.495
8	1.745	-19.499
9	1.799	-19.393
10	1.768	-19.366
11	2.316	-19.345
12	1.618	-21.516
13	1.005	-15.577

Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	18.806	-1.09	18.806	0	0	0
	0.488	7.597	15.569	-1.431	15.569	7.597	0	0
	0.976	12.589	12.899	-4.101	12.899	12.589	0	0.01
	1.464	15.779	10.778	-6.222	10.778	15.779	0	0.01
	1.952	17.054	8.737	-8.263	8.737	17.054	0	0.01
	2.44	16.615	6.809	-10.191	6.809	16.615	0	0.01
	2.928	14.789	5.051	-11.949	5.051	14.789	0	0.01
	3.416	11.867	3.474	-13.526	3.474	11.867	0	0.01
	3.904	8.152	2.088	-14.912	2.088	8.152	0	0.01
	4.392	3.115	0	-17.808	0.65	2.856	0	0
2	0	1.425	0.292	-1.46	19.404	0	-2.301	0
	0.488	4.027	16.552	-0.448	17.467	0	-0.714	0
	0.976	8.495	13.891	-3.197	16.203	3.098	0	0
	1.464	11.196	11.28	-5.72	14.593	6.681	0	0.01
	1.952	12.218	8.847	-8.153	12.68	9.574	0	0.01
	2.44	11.76	6.616	-10.384	10.512	11.399	0	0.01
	2.928	11.926	8.16	-8.84	8.16	11.926	0	0.01
	3.416	10.928	5.642	-11.358	5.642	10.928	0	0
	3.904	8.201	2.972	-14.028	2.972	8.201	0	0
	4.392	3.66	0.195	-16.805	2.348	1.755	0	0
3	0	3.057	2.203	-1.555	19.448	0	-2.466	0
	0.488	3.772	16.628	-0.372	17.108	0.508	0	0
	0.976	8.228	13.895	-3.105	15.856	4.113	0	0
	1.464	10.959	11.379	-5.621	14.286	7.431	0	0.01
	1.952	12.039	8.941	-8.059	12.435	10.058	0	0.01
	2.44	11.707	6.652	-10.348	10.339	11.658	0	0.01
	2.928	12.019	8.06	-8.94	8.06	12.019	0	0.01
	3.416	10.941	5.616	-11.384	5.616	10.941	0	0.01
	3.904	8.204	3.005	-13.995	3.005	8.204	0	0
	4.392	3.7	0.267	-16.733	1.76	1.75	0	0
4	0	2.731	1.6	-1.757	19.567	0	-2.914	0
	0.488	3.752	16.638	-0.362	17.086	0.594	0	0
	0.976	8.209	13.903	-3.097	15.838	4.185	0	0
	1.464	10.941	11.384	-5.616	14.272	7.488	0	0.01
	1.952	12.021	8.941	-8.059	12.426	10.101	0	0.01
	2.44	11.69	10.336	-6.664	10.363	11.556	0	0.01
	2.928	12.036	8.058	-8.942	8.142	11.958	0	0.01
	3.416	10.955	5.62	-11.38	5.721	10.91	0	0.01
	3.904	8.224	3.124	-13.876	3.124	8.224	0	0
	4.392	3.776	0.388	-16.612	1.753	1.742	0	0



5	0	2.699	1.574	-1.73	19.652	0	-2.962	0
	0.492	3.72	16.731	-0.269	17.078	0.624	0	0
	0.984	8.255	13.976	-3.024	15.83	4.24	0	0
	1.476	11.035	11.438	-5.562	14.263	7.571	0	0.01
	1.968	12.137	8.979	-8.021	12.411	10.208	0	0.01
	2.46	11.812	10.312	-6.688	10.318	11.701	0	0.01
	2.952	12.154	8.02	-8.98	8.082	12.096	0	0.01
	3.444	11.051	5.567	-11.433	5.645	11.015	0	0.01
	3.936	8.27	3.031	-13.969	3.031	8.27	0	0
	4.428	3.736	0.278	-16.722	1.727	1.737	0	0
6	0	2.676	1.54	-1.724	19.649	0	-2.949	0
	0.492	3.734	16.728	-0.272	17.107	0.525	0	0
	0.984	8.27	13.972	-3.028	15.855	4.167	0	0
	1.476	11.049	11.432	-5.568	14.283	7.522	0	0.01
	1.968	12.147	8.974	-8.026	12.426	10.178	0	0.01
	2.46	11.797	10.322	-6.678	10.33	11.687	0	0.01
	2.952	12.149	8.026	-8.974	8.088	12.092	0	0.01
	3.444	11.05	5.568	-11.432	5.646	11.016	0	0.01
	3.936	8.271	3.029	-13.971	3.029	8.271	0	0
	4.428	3.735	0.273	-16.727	1.758	1.753	0	0
7	0	2.685	1.549	-1.725	19.649	0	-2.949	0
	0.492	3.735	16.727	-0.273	17.103	0.523	0	0
	0.984	8.271	13.971	-3.029	15.85	4.163	0	0
	1.476	11.05	11.432	-5.568	14.278	7.516	0	0.01
	1.968	12.149	8.974	-8.026	12.421	10.17	0	0.01
	2.46	11.797	6.678	-10.322	10.33	11.682	0	0.01
	2.952	12.147	8.026	-8.974	8.089	12.089	0	0.01
	3.444	11.049	5.568	-11.432	5.647	11.015	0	0.01
	3.936	8.27	3.028	-13.972	3.028	8.27	0	0
	4.428	3.734	0.272	-16.728	1.757	1.744	0	0
8	0	2.676	1.724	-1.54	19.645	0	-2.949	0
	0.492	3.736	16.722	-0.278	17.099	0.525	0	0
	0.984	8.27	13.969	-3.031	15.844	4.163	0	0
	1.476	11.051	11.433	-5.567	14.27	7.511	0	0.01
	1.968	12.154	8.98	-8.02	12.412	10.161	0	0.01
	2.46	11.812	6.688	-10.312	10.327	11.673	0	0.01
	2.952	12.137	8.021	-8.979	8.085	12.077	0	0.01
	3.444	11.035	5.562	-11.438	5.643	11.001	0	0.01
	3.936	8.255	3.024	-13.976	3.024	8.255	0	0
	4.428	3.72	0.269	-16.731	1.764	1.753	0	0
9	0	2.699	1.73	-1.574	19.541	0	-2.825	0
	0.488	3.776	16.612	-0.388	17.111	0.498	0	0
	0.976	8.224	13.876	-3.124	15.856	4.113	0	0
	1.464	10.955	11.38	-5.62	14.284	7.435	0	0.01
	1.952	12.036	8.942	-8.058	12.431	10.06	0	0.01
	2.44	11.69	6.664	-10.336	10.353	11.556	0	0.01
	2.928	12.021	8.059	-8.941	8.123	11.961	0	0.01
	3.416	10.941	5.616	-11.384	5.696	10.906	0	0.01
	3.904	8.209	3.097	-13.903	3.097	8.209	0	0

10	4.392	3.752	0.362	-16.638	1.791	1.764	0	0
	0	2.731	1.757	-1.6	19.549	0	-2.839	0
	0.488	3.7	16.733	-0.267	17.167	0.552	0	0
	0.976	8.204	13.995	-3.005	15.918	4.182	0	0
	1.464	10.941	11.384	-5.616	14.342	7.519	0	0.01
	1.952	12.019	8.94	-8.06	12.474	10.145	0	0.01
	2.44	11.707	10.348	-6.652	10.348	11.707	0	0.01
	2.928	12.039	8.059	-8.941	8.123	11.981	0	0.01
	3.416	10.959	5.621	-11.379	5.701	10.924	0	0.01
	3.904	8.228	3.105	-13.895	3.105	8.228	0	0
11	4.392	3.772	0.372	-16.628	1.796	1.905	0	0
	0	3.057	1.555	-2.203	19.639	0	-2.931	0
	0.488	3.66	16.805	-0.195	16.897	3.346	0	0
	0.976	8.201	14.028	-2.972	15.61	4.203	0	0
	1.464	10.928	11.358	-5.642	14.141	7.423	0	0
	1.952	11.926	8.84	-8.16	12.408	10.025	0	0.01
	2.44	11.76	10.384	-6.616	10.425	11.7	0	0.01
	2.928	12.218	8.153	-8.847	8.214	12.159	0	0.01
	3.416	11.196	5.72	-11.28	5.797	11.158	0	0.01
	3.904	8.495	3.197	-13.891	3.197	8.495	0	0
12	4.392	4.027	0.448	-16.552	1.46	0.712	0	0
	0	1.425	1.46	-0.292	20.897	0	-4.225	0
	0.488	3.115	17.808	0	17.876	2.817	0	0
	0.976	8.152	14.912	-2.088	15.928	4.186	0	0.01
	1.464	11.867	13.526	-3.474	14.749	7.69	0	0.01
	1.952	14.789	11.949	-5.051	13.296	10.846	0	0.01
	2.44	16.615	10.191	-6.809	11.552	13.293	0	0.01
	2.928	17.054	8.263	-8.737	9.509	14.622	0	0.01
	3.416	15.779	6.222	-10.778	7.158	14.408	0	0.01
	3.904	12.589	4.101	-12.899	4.489	12.21	0	0.01
4.392	7.597	1.431	-15.569	2.151	7.246	0	0	
4.88	0	1.09	-18.806	1.09	0	0	0	

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.806	-1.09	-1.09	0	0	0
	0.488	-0.532	0	-1.09	-2.151	7.246	0	0
	0.976	-1.064	0	-1.09	-4.489	12.21	0	0
	1.464	-1.595	0	-1.09	-7.158	14.408	0	0
	1.952	-2.127	0	-1.09	-9.509	14.622	0	0
	2.44	-2.659	0	-1.09	-11.552	13.293	0	0
	2.928	-3.191	0	-1.09	-13.296	10.846	0	0
	3.416	-3.723	0	-1.09	-14.749	7.69	0	0
	3.904	-4.254	0	-1.09	-15.928	4.186	0	0
	4.392	-9.257	0	-11.552	-17.876	2.817	0	0
2	0	-15.178	12.68	-12.976	-20.897	0	-4.225	0
	0.488	-9.199	11.82	0	-1.46	0.712	0	0
	0.976	-6.385	2.222	0	-3.197	8.495	0	0
	1.464	-5.301	2.222	0	-5.797	11.158	0	0

	1.952	-4.216	2.222	0	-8.214	12.159	0	0
	2.44	-3.226	1.823	0	-10.425	11.7	0	0
	2.928	-2.85	0	-1.46	-12.408	10.025	0	0
	3.416	-3.562	0	-1.46	-14.141	7.423	0	0
	3.904	-4.275	0	-1.46	-15.61	4.203	0	0
	4.392	-8.65	0	-10.425	-16.897	3.346	0	0
3	0	-14.215	12.435	-12.037	-19.639	0	-2.931	0
	0.488	-8.526	10.727	0	-1.796	1.905	0	0
	0.976	-4.274	1.745	0	-3.105	8.228	0	0
	1.464	-3.537	1.483	0	-5.701	10.924	0	0
	1.952	-2.813	1.483	0	-8.123	11.981	0	0
	2.44	-2.099	0	-1.486	-10.348	11.707	0	0
	2.928	-2.825	0	-1.486	-12.474	10.145	0	0
	3.416	-3.55	0	-1.486	-14.342	7.519	0	0
	3.904	-4.289	0	-1.755	-15.918	4.182	0	0
	4.392	-8.614	0	-10.346	-17.167	0.552	0	0
4	0	-14.205	11.985	-12.474	-19.549	0	-2.839	0
	0.488	-8.673	10.363	0	-1.791	1.764	0	0
	0.976	-4.288	1.72	0	-3.097	8.209	0	0
	1.464	-3.549	1.486	0	-5.696	10.906	0	0
	1.952	-2.824	1.486	0	-8.123	11.961	0	0
	2.44	-2.141	0	-1.52	-10.353	11.556	0	0
	2.928	-2.883	0	-1.52	-12.431	10.06	0	0
	3.416	-3.624	0	-1.52	-14.284	7.435	0	0
	3.904	-4.378	0	-1.773	-15.856	4.113	0	0
	4.392	-8.653	0	-10.353	-17.111	0.498	0	0
5	0	-14.217	12.411	-12.048	-19.541	0	-2.825	0
	0.492	-8.608	10.813	0	-1.764	1.753	0	0
	0.984	-4.272	1.693	0	-3.024	8.255	0	0
	1.476	-3.535	1.47	0	-5.643	11.001	0	0
	1.968	-2.812	1.47	0	-8.085	12.077	0	0
	2.46	-2.13	0	-1.503	-10.327	11.673	0	0
	2.952	-2.869	0	-1.503	-12.412	10.161	0	0
	3.444	-3.609	0	-1.503	-14.27	7.511	0	0
	3.936	-4.361	0	-1.743	-15.844	4.163	0	0
	4.428	-8.652	0	-10.327	-17.099	0.525	0	0
6	0	-14.277	12.426	-12.095	-19.645	0	-2.949	0
	0.492	-8.642	10.33	0	-1.757	1.744	0	0
	0.984	-4.361	1.736	0	-3.028	8.27	0	0
	1.476	-3.61	1.501	0	-5.647	11.015	0	0
	1.968	-2.871	1.501	0	-8.089	12.089	0	0
	2.46	-2.132	1.501	0	-10.33	11.682	0	0
	2.952	-2.871	0	-1.501	-12.421	10.17	0	0
	3.444	-3.609	0	-1.501	-14.278	7.516	0	0
	3.936	-4.361	0	-1.733	-15.85	4.163	0	0
	4.428	-8.648	0	-10.33	-17.103	0.523	0	0
7	0	-14.274	12.097	-12.421	-19.649	0	-2.949	0
	0.492	-8.648	10.33	0	-1.758	1.753	0	0
	0.984	-4.361	1.733	0	-3.029	8.271	0	0

	1.476	-3.609	1.501	0	-5.646	11.016	0	0
	1.968	-2.871	1.501	0	-8.088	12.092	0	0
	2.46	-2.132	0	-1.501	-10.33	11.687	0	0
	2.952	-2.871	0	-1.501	-12.426	10.178	0	0
	3.444	-3.61	0	-1.501	-14.283	7.522	0	0
	3.936	-4.361	0	-1.736	-15.855	4.167	0	0
	4.428	-8.642	0	-10.33	-17.107	0.525	0	0
8	0	-14.277	12.095	-12.426	-19.649	0	-2.949	0
	0.492	-8.652	10.327	0	-1.727	1.737	0	0
	0.984	-4.361	1.743	0	-3.031	8.27	0	0
	1.476	-3.609	1.503	0	-5.645	11.015	0	0
	1.968	-2.869	1.503	0	-8.082	12.096	0	0
	2.46	-2.13	1.503	0	-10.318	11.701	0	0
	2.952	-2.812	0	-1.47	-12.411	10.208	0	0
	3.444	-3.535	0	-1.47	-14.263	7.571	0	0
	3.936	-4.272	0	-1.693	-15.83	4.24	0	0
	4.428	-8.608	0	-10.813	-17.078	0.624	0	0
9	0	-14.217	12.048	-12.411	-19.652	0	-2.962	0
	0.488	-8.653	10.353	0	-1.753	1.742	0	0
	0.976	-4.378	1.773	0	-3.124	8.224	0	0
	1.464	-3.624	1.52	0	-5.721	10.91	0	0
	1.952	-2.883	1.52	0	-8.142	11.958	0	0
	2.44	-2.141	1.52	0	-10.363	11.556	0	0
	2.928	-2.824	0	-1.486	-12.426	10.101	0	0
	3.416	-3.549	0	-1.486	-14.272	7.488	0	0
	3.904	-4.288	0	-1.72	-15.838	4.185	0	0
	4.392	-8.673	0	-10.363	-17.086	0.594	0	0
10	0	-14.205	12.474	-11.985	-19.567	0	-2.914	0
	0.488	-8.614	10.346	0	-1.76	1.75	0	0
	0.976	-4.29	1.755	0	-3.005	8.204	0	0
	1.464	-3.55	1.486	0	-5.616	10.941	0	0
	1.952	-2.825	1.486	0	-8.06	12.019	0	0
	2.44	-2.099	1.486	0	-10.339	11.658	0	0
	2.928	-2.813	0	-1.483	-12.435	10.058	0	0
	3.416	-3.537	0	-1.483	-14.286	7.431	0	0
	3.904	-4.274	0	-1.745	-15.856	4.113	0	0
	4.392	-8.526	0	-10.727	-17.108	0.508	0	0
11	0	-14.215	12.037	-12.435	-19.448	0	-2.466	0
	0.488	-8.65	10.425	0	-2.348	1.755	0	0
	0.976	-4.275	1.46	0	-2.972	8.201	0	0
	1.464	-3.562	1.46	0	-5.642	10.928	0	0
	1.952	-2.85	1.46	0	-8.16	11.926	0	0
	2.44	-3.226	0	-1.823	-10.512	11.399	0	0
	2.928	-4.216	0	-2.222	-12.68	9.574	0	0
	3.416	-5.301	0	-2.222	-14.593	6.681	0	0
	3.904	-6.385	0	-2.222	-16.203	3.098	0	0
	4.392	-9.199	0	-11.82	-17.467	0	-0.714	0
12	0	-15.178	12.976	-12.68	-19.404	0	-2.301	0
	0.488	-9.257	11.552	0	-0.65	2.856	0	0

0.976	-4.254	1.09	0	-2.088	8.152	0	0
1.464	-3.723	1.09	0	-3.474	11.867	0	0
1.952	-3.191	1.09	0	-5.051	14.789	0	0
2.44	-2.659	1.09	0	-6.809	16.615	0	0
2.928	-2.127	1.09	0	-8.737	17.054	0	0
3.416	-1.595	1.09	0	-10.778	15.779	0	0
3.904	-1.064	1.09	0	-12.899	12.589	0	0
4.392	-0.532	1.09	0	-15.569	7.597	0	0
4.88	0	1.09	-18.806	-18.806	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.09	-18.84
2	1.752	-25.792
3	3.758	-24.472
4	3.357	-24.459
5	3.304	-24.459
6	3.264	-24.521
7	3.275	-24.518
8	3.264	-24.521
9	3.304	-24.459
10	3.357	-24.459
11	3.758	-24.472
12	1.752	-25.792
13	1.09	-18.84

Id HS15  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Momr	Corr. Momr	Deflect(max)
1	0	0	24	-1.895	24	0	0	0
	0.488	10.233	20.97	-3.03	20.97	10.233	0	0.01
	0.976	17.537	17.968	-6.032	17.968	17.537	0	0.01
	1.464	22.029	15.047	-8.953	15.047	22.029	0	0.01
	1.952	23.896	12.242	-11.758	12.242	23.896	0	0.02
	2.44	23.401	9.59	-14.41	9.59	23.401	0	0.02
	2.928	20.883	7.132	-16.868	7.132	20.883	0	0.02
	3.416	16.756	4.905	-19.095	4.905	16.756	0	0.01
	3.904	11.51	2.948	-21.052	2.948	11.51	0	0.01
	4.392	5.711	1.3	-22.7	1.3	5.711	0	0
2	0	2.478	0.508	-2.538	24.025	0	-0.094	0
	0.488	6.271	22.141	-1.859	22.15	6.267	0	0
	0.976	11.993	19.898	-4.122	19.898	11.993	0	0.01
	1.464	16.507	17.362	-6.638	17.362	16.507	0	0.01
	1.952	19.348	14.64	-9.36	14.64	19.348	0	0.01
	2.44	20.246	11.83	-12.17	11.83	20.246	0	0.01
	2.928	19.132	9.033	-14.967	9.033	19.132	0	0.01
	3.416	16.13	6.352	-17.648	6.352	16.13	0	0.01
	3.904	11.562	3.885	-20.115	3.885	11.562	0	0.01
	4.392	5.947	1.734	-22.266	3.295	2.26	0	0
3	0	3.869	3.279	-1.478	24.03	0	-0.104	0
	0.488	5.987	22.226	-1.774	22.238	5.981	0	0
	0.976	11.596	20.018	-3.982	20.036	11.595	0	0.01
	1.464	16.111	17.529	-6.471	17.529	16.111	0	0.01
	1.952	19.022	14.812	-9.188	14.812	19.022	0	0.01
	2.44	20.021	11.991	-12.009	11.991	20.021	0	0.01
	2.928	19.008	9.171	-14.829	9.171	19.008	0	0.01
	3.416	16.087	6.456	-17.544	6.456	16.087	0	0.01
	3.904	11.567	3.953	-20.047	3.953	11.567	0	0.01
	4.392	5.965	1.765	-22.235	2.791	1.992	0	0
4	0	3.354	2.791	-1.334	24.033	0	-0.108	0
	0.488	5.965	22.234	-1.766	22.269	5.856	0	0
	0.976	11.567	20.034	-3.966	20.093	11.442	0	0.01
	1.464	16.085	17.547	-6.453	17.598	15.963	0	0.01
	1.952	19.005	14.832	-9.168	14.888	18.899	0	0.01
	2.44	20.018	12.012	-11.988	12.067	19.939	0	0.01
	2.928	19.017	9.19	-14.81	9.24	18.971	0	0.01
	3.416	16.106	6.473	-17.527	6.511	16.09	0	0.01
	3.904	11.591	3.983	-20.017	3.983	11.591	0	0.01
	4.392	5.982	1.773	-22.227	2.753	1.968	0	0

5	0	3.343	1.329	-2.753	24.035	0	-0.112	0
	0.492	5.996	22.238	-1.762	22.262	5.921	0	0
	0.984	11.636	20.04	-3.96	20.087	11.543	0	0.01
	1.476	16.188	17.552	-6.448	17.591	16.092	0	0.01
	1.968	19.132	14.835	-9.165	14.88	19.046	0	0.01
	2.46	20.153	12.013	-11.987	12.059	20.087	0	0.01
	2.952	19.145	9.189	-14.811	9.231	19.105	0	0.01
	3.444	16.211	6.47	-17.53	6.502	16.196	0	0.01
	3.936	11.662	3.976	-20.024	3.976	11.662	0	0.01
	4.428	6.015	1.769	-22.231	2.721	1.971	0	0
6	0	3.334	1.317	-2.75	24.035	0	-0.111	0
	0.492	6.013	22.233	-1.767	22.258	5.936	0	0
	0.984	11.658	20.032	-3.968	20.079	11.566	0	0.01
	1.476	16.211	17.543	-6.457	17.582	16.116	0	0.01
	1.968	19.151	14.826	-9.174	14.871	19.066	0	0.01
	2.46	20.167	12.004	-11.996	12.05	20.102	0	0.01
	2.952	19.153	9.182	-14.818	9.223	19.115	0	0.01
	3.444	16.215	6.464	-17.536	6.496	16.201	0	0.01
	3.936	11.662	3.971	-20.029	3.971	11.662	0	0.01
	4.428	6.014	1.768	-22.232	2.75	1.988	0	0
7	0	3.34	2.75	-2.75	24.032	0	-0.108	0
	0.492	6.014	22.232	-1.768	22.255	5.937	0	0
	0.984	11.662	20.029	-3.971	20.075	11.566	0	0.01
	1.476	16.215	17.536	-6.464	17.577	16.114	0	0.01
	1.968	19.153	14.818	-9.182	14.866	19.062	0	0.01
	2.46	20.167	11.996	-12.004	12.045	20.097	0	0.01
	2.952	19.151	9.174	-14.826	9.219	19.109	0	0.01
	3.444	16.211	6.457	-17.543	6.492	16.196	0	0.01
	3.936	11.658	3.968	-20.032	3.968	11.658	0	0.01
	4.428	6.013	1.767	-22.233	2.75	1.982	0	0
8	0	3.334	2.75	-1.317	24.03	0	-0.107	0
	0.492	6.015	22.231	-1.769	22.254	5.935	0	0
	0.984	11.662	20.024	-3.976	20.072	11.564	0	0.01
	1.476	16.211	17.53	-6.47	17.572	16.11	0	0.01
	1.968	19.145	14.811	-9.189	14.859	19.054	0	0.01
	2.46	20.153	11.987	-12.013	12.036	20.083	0	0.01
	2.952	19.132	9.165	-14.835	9.209	19.09	0	0.01
	3.444	16.188	6.448	-17.552	6.482	16.173	0	0.01
	3.936	11.636	3.96	-20.04	3.96	11.636	0	0.01
	4.428	5.996	1.762	-22.238	2.754	1.978	0	0
9	0	3.343	2.753	-1.329	24.029	0	-0.105	0
	0.488	5.982	22.227	-1.773	22.251	5.902	0	0
	0.976	11.591	20.017	-3.983	20.068	11.493	0	0.01
	1.464	16.106	17.527	-6.473	17.569	16.005	0	0.01
	1.952	19.017	14.81	-9.19	14.858	18.926	0	0.01
	2.44	20.018	11.988	-12.012	12.038	19.948	0	0.01
	2.928	19.005	9.168	-14.832	9.213	18.963	0	0.01
	3.416	16.085	6.453	-17.547	6.488	16.07	0	0.01
	3.904	11.567	3.966	-20.034	3.966	11.567	0	0.01

	4.392	5.965	1.766	-22.234	2.787	1.985	0	0
10	0	3.354	1.334	-2.791	24.055	0	-0.133	0
	0.488	5.965	22.235	-1.765	22.257	5.888	0	0
	0.976	11.567	20.047	-3.953	20.08	11.473	0	0.01
	1.464	16.087	17.544	-6.456	17.586	15.987	0	0.01
	1.952	19.008	14.829	-9.171	14.877	18.917	0	0.01
	2.44	20.021	12.009	-11.991	12.059	19.951	0	0.01
	2.928	19.022	9.188	-14.812	9.234	18.979	0	0.01
	3.416	16.111	6.471	-17.529	6.507	16.095	0	0.01
	3.904	11.596	3.982	-20.018	3.982	11.596	0	0.01
	4.392	5.987	1.774	-22.226	2.794	2.09	0	0
11	0	3.869	1.478	-3.279	23.997	0	-0.106	0
	0.488	5.947	22.266	-1.734	22.288	5.873	0	0
	0.976	11.562	20.115	-3.885	20.147	11.469	0	0.01
	1.464	16.13	17.648	-6.352	17.689	16.032	0	0.01
	1.952	19.132	14.967	-9.033	15.013	19.041	0	0.01
	2.44	20.246	12.17	-11.83	12.219	20.175	0	0.01
	2.928	19.348	9.36	-14.64	9.406	19.303	0	0.01
	3.416	16.507	6.638	-17.362	6.674	16.489	0	0.01
	3.904	11.993	4.122	-19.898	4.122	11.993	0	0.01
	4.392	6.271	1.859	-22.141	2.538	1.239	0	0
12	0	2.478	2.538	-0.508	23.997	0	-0.104	0
	0.488	5.711	22.7	-1.3	22.715	5.643	0	0
	0.976	11.51	21.052	-2.948	21.075	11.42	0	0.01
	1.464	16.756	19.095	-4.905	19.124	16.655	0	0.01
	1.952	20.883	16.868	-7.132	16.902	20.782	0	0.02
	2.44	23.401	14.41	-9.59	14.446	23.313	0	0.02
	2.928	23.896	11.758	-12.242	11.792	23.829	0	0.02
	3.416	22.029	8.953	-15.047	8.98	21.989	0	0.01
	3.904	17.537	6.032	-17.968	6.047	17.522	0	0.01
	4.392	10.233	3.03	-20.97	3.037	10.23	0	0.01
	4.88	0	1.895	-24	1.895	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	24	-1.895	-1.895	0	0	0
	0.488	-0.925	0	-1.895	-3.037	10.23	0	0
	0.976	-1.849	0	-1.895	-6.047	17.522	0	0
	1.464	-2.774	0	-1.895	-8.98	21.989	0	0
	1.952	-3.699	0	-1.895	-11.792	23.829	0	-0.01
	2.44	-4.623	0	-1.895	-14.446	23.313	0	-0.01
	2.928	-5.548	0	-1.895	-16.902	20.782	0	-0.01
	3.416	-6.473	0	-1.895	-19.124	16.655	0	-0.01
	3.904	-7.398	0	-1.895	-21.075	11.42	0	0
	4.392	-8.322	0	-1.895	-22.715	5.643	0	0
2	0	-12.21	3.295	-16.902	-23.997	0	-0.104	0
	0.488	-10.603	3.295	0	-2.538	1.239	0	0
	0.976	-9.016	3.13	0	-4.122	11.993	0	0
	1.464	-7.488	3.13	0	-6.674	16.489	0	-0.01



	1.952	-5.96	3.13	0	-9.406	19.303	0	-0.01
	2.44	-4.433	3.13	0	-12.219	20.175	0	-0.01
	2.928	-4.955	0	-2.538	-15.013	19.041	0	0
	3.416	-6.194	0	-2.538	-17.689	16.032	0	0
	3.904	-7.433	0	-2.538	-20.147	11.469	0	0
	4.392	-8.671	0	-2.538	-22.288	5.873	0	0
3	0	-10.264	2.791	-15.013	-23.997	0	-0.106	0
	0.488	-8.902	2.791	0	-2.794	2.09	0	0
	0.976	-7.542	2.618	0	-3.982	11.596	0	0
	1.464	-6.264	2.618	0	-6.507	16.095	0	0
	1.952	-4.986	2.618	0	-9.234	18.979	0	0
	2.44	-3.709	2.618	0	-12.059	19.951	0	0
	2.928	-4.916	0	-2.587	-14.877	18.917	0	0
	3.416	-6.179	0	-2.587	-17.586	15.987	0	0
	3.904	-7.452	0	-2.794	-20.08	11.473	0	0
	4.392	-8.816	0	-2.794	-22.257	5.888	0	0
4	0	-10.179	15.297	-2.794	-24.055	0	-0.133	0
	0.488	-8.779	2.753	0	-2.787	1.985	0	0
	0.976	-7.44	2.58	0	-3.966	11.567	0	0
	1.464	-6.181	2.58	0	-6.488	16.07	0	0
	1.952	-4.922	2.58	0	-9.213	18.963	0	0
	2.44	-3.692	0	-2.62	-12.038	19.948	0	0
	2.928	-4.97	0	-2.62	-14.858	18.926	0	0
	3.416	-6.249	0	-2.62	-17.569	16.005	0	0
	3.904	-7.536	0	-2.787	-20.068	11.493	0	0
	4.392	-8.896	0	-2.787	-22.251	5.902	0	0
5	0	-10.257	15.376	-2.787	-24.029	0	-0.105	0
	0.492	-8.737	2.721	0	-2.754	1.978	0	0
	0.984	-7.399	2.721	0	-3.96	11.636	0	0
	1.476	-6.137	2.544	0	-6.482	16.173	0	0
	1.968	-4.885	2.544	0	-9.209	19.09	0	0
	2.46	-3.672	0	-2.591	-12.036	20.083	0	0
	2.952	-4.947	0	-2.591	-14.859	19.054	0	0
	3.444	-6.221	0	-2.591	-17.572	16.11	0	0
	3.936	-7.505	0	-2.754	-20.072	11.564	0	0
	4.428	-8.86	0	-2.754	-22.254	5.935	0	0
6	0	-10.215	15.591	-2.754	-24.03	0	-0.107	0
	0.492	-8.835	2.75	0	-2.75	1.982	0	0
	0.984	-7.482	2.75	0	-3.968	11.658	0	0
	1.476	-6.207	2.573	0	-6.492	16.196	0	0
	1.968	-4.941	2.573	0	-9.219	19.109	0	0
	2.46	-3.682	0	-2.572	-12.045	20.097	0	0
	2.952	-4.948	0	-2.572	-14.866	19.062	0	0
	3.444	-6.213	0	-2.572	-17.577	16.114	0	0
	3.936	-7.488	0	-2.75	-20.075	11.566	0	0
	4.428	-8.841	0	-2.75	-22.255	5.937	0	0
7	0	-10.194	2.75	-14.866	-24.032	0	-0.108	0
	0.492	-8.841	2.75	0	-2.75	1.988	0	0
	0.984	-7.488	2.75	0	-3.971	11.662	0	0

	1.476	-6.213	2.572	0	-6.496	16.201	0	0
	1.968	-4.948	2.572	0	-9.223	19.115	0	0
	2.46	-3.682	2.572	0	-12.05	20.102	0	0
	2.952	-4.941	0	-2.573	-14.871	19.066	0	0
	3.444	-6.207	0	-2.573	-17.582	16.116	0	0
	3.936	-7.482	0	-2.75	-20.079	11.566	0	0
	4.428	-8.835	0	-2.75	-22.258	5.936	0	0
8	0	-10.215	2.754	-15.591	-24.035	0	-0.111	0
	0.492	-8.86	2.754	0	-2.721	1.971	0	0
	0.984	-7.505	2.754	0	-3.976	11.662	0	0
	1.476	-6.221	2.591	0	-6.502	16.196	0	0
	1.968	-4.947	2.591	0	-9.231	19.105	0	0
	2.46	-3.672	2.591	0	-12.059	20.087	0	0
	2.952	-4.885	0	-2.544	-14.88	19.046	0	0
	3.444	-6.137	0	-2.544	-17.591	16.092	0	0
	3.936	-7.399	0	-2.721	-20.087	11.543	0	0
	4.428	-8.737	0	-2.721	-22.262	5.921	0	0
9	0	-10.257	2.787	-15.376	-24.035	0	-0.112	0
	0.488	-8.896	2.787	0	-2.753	1.968	0	0
	0.976	-7.536	2.787	0	-3.983	11.591	0	0
	1.464	-6.249	2.62	0	-6.511	16.09	0	0
	1.952	-4.97	2.62	0	-9.24	18.971	0	0
	2.44	-3.692	2.62	0	-12.067	19.939	0	0
	2.928	-4.922	0	-2.58	-14.888	18.899	0	0
	3.416	-6.181	0	-2.58	-17.598	15.963	0	0
	3.904	-7.44	0	-2.58	-20.093	11.442	0	0
	4.392	-8.779	0	-2.753	-22.269	5.856	0	0
10	0	-10.179	2.794	-15.297	-24.033	0	-0.108	0
	0.488	-8.816	2.794	0	-2.791	1.992	0	0
	0.976	-7.452	2.794	0	-3.953	11.567	0	0
	1.464	-6.179	2.587	0	-6.456	16.087	0	0
	1.952	-4.916	2.587	0	-9.171	19.008	0	0
	2.44	-3.709	0	-2.618	-11.991	20.021	0	0
	2.928	-4.986	0	-2.618	-14.812	19.022	0	0
	3.416	-6.264	0	-2.618	-17.529	16.111	0	0
	3.904	-7.542	0	-2.618	-20.036	11.595	0	0
	4.392	-8.902	0	-2.791	-22.238	5.981	0	0
11	0	-10.264	15.013	-2.791	-24.03	0	-0.104	0
	0.488	-8.671	2.538	0	-3.295	2.26	0	0
	0.976	-7.433	2.538	0	-3.885	11.562	0	0
	1.464	-6.194	2.538	0	-6.352	16.13	0	0
	1.952	-4.955	2.538	0	-9.033	19.132	0	0
	2.44	-4.433	0	-3.13	-11.83	20.246	0	-0.01
	2.928	-5.96	0	-3.13	-14.64	19.348	0	-0.01
	3.416	-7.488	0	-3.13	-17.362	16.507	0	-0.01
	3.904	-9.016	0	-3.13	-19.898	11.993	0	0
	4.392	-10.603	0	-3.295	-22.15	6.267	0	0
12	0	-12.21	16.902	-3.295	-24.025	0	-0.094	0
	0.488	-8.322	1.895	0	-1.3	5.711	0	0

0.976	-7.398	1.895	0	-2.948	11.51	0	0
1.464	-6.473	1.895	0	-4.905	16.756	0	-0.01
1.952	-5.548	1.895	0	-7.132	20.883	0	-0.01
2.44	-4.623	1.895	0	-9.59	23.401	0	-0.01
2.928	-3.699	1.895	0	-12.242	23.896	0	-0.01
3.416	-2.774	1.895	0	-15.047	22.029	0	0
3.904	-1.849	1.895	0	-17.968	17.537	0	0
4.392	-0.925	1.895	0	-20.97	10.233	0	0
4.88	0	1.895	-24	-24	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.895	-24.031
2	3.046	-24.233
3	4.757	-24.058
4	4.124	-24.092
5	4.081	-24.065
6	4.066	-24.065
7	4.074	-24.061
8	4.066	-24.065
9	4.081	-24.065
10	4.124	-24.092
11	4.757	-24.058
12	3.046	-24.233
13	1.895	-24.031

Section I  
 Unit 10  
 Coped Stringers

Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.945	0	22.945	0	0	0
	0.617	12.08	19.579	0	19.579	12.08	0	0.01
	1.234	19.965	16.179	-0.821	16.179	19.965	0	0.02
	1.851	23.654	12.779	-4.221	12.779	23.654	0	0.03
	2.468	25.174	10.2	-6.8	10.2	25.174	0	0.03
	3.085	26.223	8.5	-8.5	8.5	26.223	0	0.03
	3.702	25.174	6.8	-10.2	6.8	25.174	0	0.03
	4.319	23.654	4.221	-12.779	5.1	22.027	0	0.03
	4.936	19.965	0.821	-16.179	3.4	16.782	0	0.02
	5.553	12.08	0	-19.579	1.7	9.44	0	0.01
	6.17	0	0	-22.945	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	22.945	0	0	0	0	0
	0.617	0	0	0	-1.7	9.44	0	0
	1.234	0	0	0	-3.4	16.782	0	0
	1.851	0	0	0	-5.1	22.027	0	0
	2.468	0	0	0	-6.8	25.174	0	0
	3.085	0	0	0	-8.5	26.223	0	0
	3.702	0	0	0	-10.2	25.174	0	0
	4.319	0	0	0	-12.779	23.654	0	0
	4.936	0	0	0	-16.179	19.965	0	0
	5.553	0	0	0	-19.579	12.08	0	0
	6.17	0	0	-22.945	-22.945	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-22.979
2	0	-22.945

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	18.896	0	18.896	0	0	0
	0.617	9.948	16.124	0	16.124	9.948	0	0.01
	1.234	16.442	13.324	-0.676	13.324	16.442	0	0.02
	1.851	19.48	10.524	-3.476	10.524	19.48	0	0.02
	2.468	20.731	8.4	-5.6	8.4	20.731	0	0.03
	3.085	21.595	7	-7	7	21.595	0	0.03
	3.702	20.731	5.6	-8.4	5.6	20.731	0	0.03
	4.319	19.48	3.476	-10.524	4.2	18.14	0	0.02
	4.936	16.442	0.676	-13.324	2.8	13.821	0	0.02
	5.553	9.948	0	-16.124	1.4	7.774	0	0.01
	6.17	0	0	-18.896	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.896	0	0	0	0	0
	0.617	0	0	0	-1.4	7.774	0	0
	1.234	0	0	0	-2.8	13.821	0	0
	1.851	0	0	0	-4.2	18.14	0	0
	2.468	0	0	0	-5.6	20.731	0	0
	3.085	0	0	0	-7	21.595	0	0
	3.702	0	0	0	-8.4	20.731	0	0
	4.319	0	0	0	-10.524	19.48	0	0
	4.936	0	0	0	-13.324	16.442	0	0
	5.553	0	0	0	-16.124	9.948	0	0
	6.17	0	0	-18.896	-18.896	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-18.924
2	0	-18.924

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.945	0	22.945	0	0	0
	0.617	12.08	19.579	0	19.579	12.08	0	0.01
	1.234	19.965	16.179	-0.821	16.179	19.965	0	0.02
	1.851	23.654	12.779	-4.221	12.779	23.654	0	0.03
	2.468	25.174	10.2	-6.8	10.2	25.174	0	0.03
	3.085	26.223	8.5	-8.5	8.5	26.223	0	0.03
	3.702	25.174	6.8	-10.2	6.8	25.174	0	0.03
	4.319	23.654	4.221	-12.779	5.1	22.027	0	0.03
	4.936	19.965	0.821	-16.179	3.4	16.782	0	0.02
	5.553	12.08	0	-19.579	1.7	9.44	0	0.01
	6.17	0	0	-22.945	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	22.945	0	0	0	0	0
	0.617	0	0	0	-1.7	9.44	0	0
	1.234	0	0	0	-3.4	16.782	0	0
	1.851	0	0	0	-5.1	22.027	0	0
	2.468	0	0	0	-6.8	25.174	0	0
	3.085	0	0	0	-8.5	26.223	0	0
	3.702	0	0	0	-10.2	25.174	0	0
	4.319	0	0	0	-12.779	23.654	0	0
	4.936	0	0	0	-16.179	19.965	0	0
	5.553	0	0	0	-19.579	12.08	0	0
	6.17	0	0	-22.945	-22.945	0	0	0

Support    Reac. Pos    Reac. Negative  
 1            0            -22.979  
 2            0            -22.979

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	19.98	0	19.98	0	0	0
	0.617	11.106	18	-2	18	11.106	0	0.01
	1.234	19.744	16	-4	16	19.744	0	0.02
	1.851	25.914	14	-6	14	25.914	0	0.03
	2.468	29.616	12	-8	12	29.616	0	0.04
	3.085	30.85	10	-10	10	30.85	0	0.04
	3.702	29.616	8	-12	8	29.616	0	0.04
	4.319	25.914	6	-14	6	25.914	0	0.03
	4.936	19.744	4	-16	4	19.744	0	0.02
	5.553	11.106	2	-18	2	11.106	0	0.01
	6.17	0	0	-19.98	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.98	0	0	0	0	0
	0.617	0	0	0	-2	11.106	0	0
	1.234	0	0	0	-4	19.744	0	0
	1.851	0	0	0	-6	25.914	0	0
	2.468	0	0	0	-8	29.616	0	0
	3.085	0	0	0	-10	30.85	0	0
	3.702	0	0	0	-12	29.616	0	0
	4.319	0	0	0	-14	25.914	0	0
	4.936	0	0	0	-16	19.744	0	0
	5.553	0	0	0	-18	11.106	0	0
	6.17	0	0	-19.98	-19.98	0	0	0

Support    Reac. Pos    Reac. Negative  
 1            0            -20  
 2            0            -20

Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.948	0	27.948	0	0	0
	0.617	11.092	17.78	-0.22	24.999	15.425	0	0.01
	1.234	19.719	15.585	-2.415	22.064	27.227	0	0.02
	1.851	25.881	13.39	-4.61	19.167	35.479	0	0.03
	2.468	29.578	11.195	-6.805	16.311	40.255	0	0.04
	3.085	30.811	9	-9	13.494	41.628	0	0.04
	3.702	29.578	6.805	-11.195	10.716	39.67	0	0.04
	4.319	25.881	4.61	-13.39	7.978	34.456	0	0.03
	4.936	19.719	2.415	-15.585	5.279	26.057	0	0.02
	5.553	11.092	0.22	-17.78	2.62	14.547	0	0.01
	6.17	0	0	-27.948	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.948	0	0	0	0	0
	0.617	0	0	0	-2.62	14.547	0	0
	1.234	0	0	0	-5.279	26.057	0	0
	1.851	0	0	0	-7.978	34.456	0	0
	2.468	0	0	0	-10.716	39.67	0	0
	3.085	0	0	0	-13.494	41.628	0	0
	3.702	0	0	0	-16.311	40.255	0	0
	4.319	0	0	0	-19.167	35.479	0	0
	4.936	0	0	0	-22.064	27.227	0	0
	5.553	0	0	0	-24.999	15.425	0	0
	6.17	0	0	-27.948	-27.948	0	0	0

Support Reac. Pos Reac. Negative

1 0 -27.974  
 2 0 -27.948



Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	31.968	0	31.968	0	0	0
	0.617	17.77	28.8	-3.2	28.8	17.77	0	0.02
	1.234	31.59	25.6	-6.4	25.6	31.59	0	0.04
	1.851	41.462	22.4	-9.6	22.4	41.462	0	0.05
	2.468	47.386	19.2	-12.8	19.2	47.386	0	0.06
	3.085	49.36	16	-16	16	49.36	0	0.06
	3.702	47.386	12.8	-19.2	12.8	47.386	0	0.06
	4.319	41.462	9.6	-22.4	9.6	41.462	0	0.05
	4.936	31.59	6.4	-25.6	6.4	31.59	0	0.04
	5.553	17.77	3.2	-28.8	3.2	17.77	0	0.02
	6.17	0	0	-31.968	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	31.968	0	0	0	0	0
	0.617	0	0	0	-3.2	17.77	0	0
	1.234	0	0	0	-6.4	31.59	0	0
	1.851	0	0	0	-9.6	41.462	0	0
	2.468	0	0	0	-12.8	47.386	0	0
	3.085	0	0	0	-16	49.36	0	0
	3.702	0	0	0	-19.2	47.386	0	0
	4.319	0	0	0	-22.4	41.462	0	0
	4.936	0	0	0	-25.6	31.59	0	0
	5.553	0	0	0	-28.8	17.77	0	0
	6.17	0	0	-31.968	-31.968	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-32
2	0	-32

Id Dead Loads (WS+Deck+Beam+Barriers)

Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-2.449
	0.617	1.36	1.96	0	
	1.234	2.418	1.47	0	
	1.851	3.174	0.98	0	
	2.468	3.627	0.49	0.01	
	3.085	3.778	+0.000/	0.01	
	3.702	3.627	-0.49	0.01	
	4.319	3.174	-0.98	0	
	4.936	2.418	-1.47	0	
	5.553	1.36	-1.96	0	
	6.17	+0.000/	-2.449/	0	-2.449

Section 1  
 Unit 11  
 Coped Stringers

Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.981	0	22.981	0	0	0
	0.619	12.141	19.615	0	19.615	12.141	0	0.01
	1.238	20.074	16.215	-0.785	16.215	20.074	0	0.02
	1.857	23.797	12.815	-4.185	12.815	23.797	0	0.03
	2.476	25.255	10.2	-6.8	10.2	25.255	0	0.03
	3.095	26.307	8.5	-8.5	8.5	26.307	0	0.03
	3.714	25.255	6.8	-10.2	6.8	25.255	0	0.03
	4.333	23.797	4.185	-12.815	5.1	22.098	0	0.03
	4.952	20.074	0.785	-16.215	3.4	16.837	0	0.02
	5.571	12.141	0	-19.615	1.7	9.471	0	0.01
	6.19	0	0	-22.981	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	22.981	0	0	0	0	0
	0.619	0	0	0	-1.7	9.471	0	0
	1.238	0	0	0	-3.4	16.837	0	0
	1.857	0	0	0	-5.1	22.098	0	0
	2.476	0	0	0	-6.8	25.255	0	0
	3.095	0	0	0	-8.5	26.307	0	0
	3.714	0	0	0	-10.2	25.255	0	0
	4.333	0	0	0	-12.815	23.797	0	0
	4.952	0	0	0	-16.215	20.074	0	0
	5.571	0	0	0	-19.615	12.141	0	0
	6.19	0	0	-22.981	-22.981	0	0	0

Support    Reac. Pos    Reac. Negative  
 1            0            -23.015  
 2            0            -23.015

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	18.925	0	18.925	0	0	0
	0.619	9.999	16.153	0	16.153	9.999	0	0.01
	1.238	16.531	13.353	-0.647	13.353	16.531	0	0.02
	1.857	19.597	10.553	-3.447	10.553	19.597	0	0.02
	2.476	20.798	8.4	-5.6	8.4	20.798	0	0.03
	3.095	21.665	7	-7	7	21.665	0	0.03
	3.714	20.798	5.6	-8.4	5.6	20.798	0	0.03
	4.333	19.597	3.447	-10.553	4.2	18.199	0	0.02
	4.952	16.531	0.647	-13.353	2.8	13.866	0	0.02
	5.571	9.999	0	-16.153	1.4	7.799	0	0.01
	6.19	0	0	-18.925	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.925	0	0	0	0	0
	0.619	0	0	0	-1.4	7.799	0	0
	1.238	0	0	0	-2.8	13.866	0	0
	1.857	0	0	0	-4.2	18.199	0	0
	2.476	0	0	0	-5.6	20.798	0	0
	3.095	0	0	0	-7	21.665	0	0
	3.714	0	0	0	-8.4	20.798	0	0
	4.333	0	0	0	-10.553	19.597	0	0
	4.952	0	0	0	-13.353	16.531	0	0
	5.571	0	0	0	-16.153	9.999	0	0
	6.19	0	0	-18.925	-18.925	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-18.953
2	0	-18.953

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.981	0	22.981	0	0	0
	0.619	12.141	19.615	0	19.615	12.141	0	0.01
	1.238	20.074	16.215	-0.785	16.215	20.074	0	0.02
	1.857	23.797	12.815	-4.185	12.815	23.797	0	0.03
	2.476	25.255	10.2	-6.8	10.2	25.255	0	0.03
	3.095	26.307	8.5	-8.5	8.5	26.307	0	0.03
	3.714	25.255	6.8	-10.2	6.8	25.255	0	0.03
	4.333	23.797	4.185	-12.815	5.1	22.098	0	0.03
	4.952	20.074	0.785	-16.215	3.4	16.837	0	0.02
	5.571	12.141	0	-19.615	1.7	9.471	0	0.01
	6.19	0	0	-22.981	0	0	0	0

Minimums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	22.981	0	0	0	0	0
	0.619	0	0	0	-1.7	9.471	0	0
	1.238	0	0	0	-3.4	16.837	0	0
	1.857	0	0	0	-5.1	22.098	0	0
	2.476	0	0	0	-6.8	25.255	0	0
	3.095	0	0	0	-8.5	26.307	0	0
	3.714	0	0	0	-10.2	25.255	0	0
	4.333	0	0	0	-12.815	23.797	0	0
	4.952	0	0	0	-16.215	20.074	0	0
	5.571	0	0	0	-19.615	12.141	0	0
	6.19	0	0	-22.981	-22.981	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-23.015
2	0	-23.015



Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Sheε	Corr. Sheε	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	19.98	0	19.98	0	0	0
	0.619	11.142	18	-2	18	11.142	0	0.01
	1.238	19.808	16	-4	16	19.808	0	0.02
	1.857	25.998	14	-6	14	25.998	0	0.03
	2.476	29.712	12	-8	12	29.712	0	0.04
	3.095	30.95	10	-10	10	30.95	0	0.04
	3.714	29.712	8	-12	8	29.712	0	0.04
	4.333	25.998	6	-14	6	25.998	0	0.03
	4.952	19.808	4	-16	4	19.808	0	0.02
	5.571	11.142	2	-18	2	11.142	0	0.01
	6.19	0	0	-19.98	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Sheε	Corr. Sheε	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	19.98	0	0	0	0	0
	0.619	0	0	0	-2	11.142	0	0
	1.238	0	0	0	-4	19.808	0	0
	1.857	0	0	0	-6	25.998	0	0
	2.476	0	0	0	-8	29.712	0	0
	3.095	0	0	0	-10	30.95	0	0
	3.714	0	0	0	-12	29.712	0	0
	4.333	0	0	0	-14	25.998	0	0
	4.952	0	0	0	-16	19.808	0	0
	5.571	0	0	0	-18	11.142	0	0
	6.19	0	0	-19.98	-19.98	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-20
2	0	-20



Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.955	0	27.955	0	0	0
	0.619	11.131	17.785	-0.215	25.004	15.478	0	0.01
	1.238	19.789	15.588	-2.412	22.068	27.32	0	0.02
	1.857	25.973	13.392	-4.608	19.171	35.6	0	0.03
	2.476	29.683	11.196	-6.804	16.313	40.391	0	0.04
	3.095	30.92	9	-9	13.495	41.768	0	0.04
	3.714	29.683	6.804	-11.196	10.717	39.803	0	0.04
	4.333	25.973	4.608	-13.392	7.978	34.57	0	0.03
	4.952	19.789	2.412	-15.588	5.279	26.143	0	0.02
	5.571	11.131	0.215	-17.785	2.62	14.595	0	0.01
	6.19	0	0	-27.955	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.955	0	0	0	0	0
	0.619	0	0	0	-2.62	14.595	0	0
	1.238	0	0	0	-5.279	26.143	0	0
	1.857	0	0	0	-7.978	34.57	0	0
	2.476	0	0	0	-10.717	39.803	0	0
	3.095	0	0	0	-13.495	41.768	0	0
	3.714	0	0	0	-16.313	40.391	0	0
	4.333	0	0	0	-19.171	35.6	0	0
	4.952	0	0	0	-22.068	27.32	0	0
	5.571	0	0	0	-25.004	15.478	0	0
	6.19	0	0	-27.955	-27.955	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-27.981
2	0	-27.955

Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	31.968	0	31.968	0	0	0
	0.619	17.827	28.8	-3.2	28.8	17.827	0	0.02
	1.238	31.693	25.6	-6.4	25.6	31.693	0	0.04
	1.857	41.597	22.4	-9.6	22.4	41.597	0	0.05
	2.476	47.539	19.2	-12.8	19.2	47.539	0	0.06
	3.095	49.52	16	-16	16	49.52	0	0.06
	3.714	47.539	12.8	-19.2	12.8	47.539	0	0.06
	4.333	41.597	9.6	-22.4	9.6	41.597	0	0.05
	4.952	31.693	6.4	-25.6	6.4	31.693	0	0.04
	5.571	17.827	3.2	-28.8	3.2	17.827	0	0.02
	6.19	0	0	-31.968	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	31.968	0	0	0	0	0
	0.619	0	0	0	-3.2	17.827	0	0
	1.238	0	0	0	-6.4	31.693	0	0
	1.857	0	0	0	-9.6	41.597	0	0
	2.476	0	0	0	-12.8	47.539	0	0
	3.095	0	0	0	-16	49.52	0	0
	3.714	0	0	0	-19.2	47.539	0	0
	4.333	0	0	0	-22.4	41.597	0	0
	4.952	0	0	0	-25.6	31.693	0	0
	5.571	0	0	0	-28.8	17.827	0	0
	6.19	0	0	-31.968	-31.968	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-32
2	0	-32



Id        Dead Loads (WS+Deck+Beam+Barriers)  
 Type     Static  
 Factors        1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-2.457
	0.619	1.369	1.966	0	
	1.238	2.434	1.474	0	
	1.857	3.194	0.983	0.01	
	2.476	3.651	0.491	0.01	
	3.095	3.803	+0.000/	0.01	
	3.714	3.651	-0.491	0.01	
	4.333	3.194	-0.983	0.01	
	4.952	2.434	-1.474	0	
	5.571	1.369	-1.966	0	
	6.19	+0.000/	-2.457/	0	-2.457

Id Dead Loads (WS+Deck+Beam+Barriers)  
 Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-1.899
	0.619	1.026	1.417	0	
	1.238	1.754	0.935	0	
	1.857	2.184	0.454	0	
	2.476	2.316	-0.028	0	
	3.095	2.15	-0.509	0	
	3.714	1.685	-0.991	0	
	4.333	0.923	-1.473	0	
	4.952	-0.138	-1.954	0	
	5.571	-1.496	-2.436	0	
2	0	-3.153	-2.917/	0	-5.464
	0.619	-1.726	2.065	0	
	1.238	-0.596	1.584	0	
	1.857	0.235	1.102	0	
	2.476	0.768	0.62	0	
	3.095	1.003	0.139	0	
	3.714	0.94	-0.343	0	
	4.333	0.579	-0.824	0	
	4.952	-0.08	-1.306	0	
	5.571	-1.038	-1.787	0	
3	0	-2.293	-2.269/	0	-4.631
	0.619	-0.98	1.88	0	
	1.238	0.034	1.398	0	
	1.857	0.751	0.917	0	
	2.476	1.169	0.435	0	
	3.095	1.29	-0.046	0	
	3.714	1.112	-0.528	0	
	4.333	0.636	-1.009	0	
	4.952	-0.138	-1.491	0	
	5.571	-1.21	-1.973	0	
4	0	-2.58	-2.454/	0	-4.908
	0.619	-1.21	1.973	0	
	1.238	-0.138	1.491	0	
	1.857	0.636	1.009	0	
	2.476	1.112	0.528	0	
	3.095	1.29	0.046	0	
	3.714	1.169	-0.435	0	
	4.333	0.751	-0.917	0	
	4.952	0.034	-1.398	0	
	5.571	-0.98	-1.88	0	
5	0	-2.293	-2.362/	0	-4.631
	0.619	-1.038	1.787	0	

	1.238	-0.08	1.306	0	
	1.857	0.579	0.824	0	
	2.476	0.94	0.343	0	
	3.095	1.003	-0.139	0	
	3.714	0.768	-0.62	0	
	4.333	0.235	-1.102	0	
	4.952	-0.596	-1.584	0	
	5.571	-1.726	-2.065	0	
6	0	-3.153	-2.547/	0	-5.464
	0.619	-1.496	2.436	0	
	1.238	-0.138	1.954	0	
	1.857	0.923	1.473	0	
	2.476	1.685	0.991	0	
	3.095	2.15	0.509	0	
	3.714	2.316	0.028	0	
	4.333	2.184	-0.454	0	
	4.952	1.754	-0.935	0	
	5.571	1.026	-1.417	0	
	6.19	-0.000/	-1.899/	0	-1.899

Id HS15  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximumss table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	24.086	-1.914	24.086	0	0	0
	0.619	13.055	21.09	-2.91	21.09	13.055	0	0.01
	1.238	22.393	18.088	-5.912	18.088	22.393	0	0.02
	1.857	28.138	15.153	-8.847	15.153	28.138	0	0.03
	2.476	30.518	12.325	-11.675	12.325	30.518	0	0.03
	3.095	29.862	9.648	-14.352	9.648	29.862	0	0.03
	3.714	26.605	7.163	-16.837	7.163	26.605	0	0.03
	4.333	21.285	4.912	-19.088	4.912	21.285	0	0.02
	4.952	14.598	2.948	-21.052	2.948	14.598	0	0.02
	5.571	7.244	1.3	-22.7	1.3	7.244	0	0.01
2	0	3.175	0.513	-2.565	24.14	0	-0.263	0
	0.619	7.955	22.141	-1.859	22.311	7.849	0	0.01
	1.238	15.213	20.059	-4.106	20.059	15.213	0	0.01
	1.857	21.026	17.504	-6.496	17.504	21.026	0	0.02
	2.476	24.681	14.752	-9.248	14.752	24.681	0	0.02
	3.095	25.826	11.907	-12.093	11.907	25.826	0	0.03
	3.714	24.373	9.076	-14.924	9.076	24.373	0	0.02
	4.333	20.49	6.361	-17.639	6.361	20.49	0	0.02
	4.952	14.664	3.884	-20.116	3.884	14.664	0	0.01
	5.571	7.543	1.734	-22.266	3.19	2.413	0	0.01
3	0	4.388	3.19	-1.063	24.146	0	-0.284	0
	0.619	7.594	22.226	-1.774	22.401	7.474	0	0.01
	1.238	14.708	20.033	-3.967	20.203	14.697	0	0.01
	1.857	20.518	17.676	-6.324	17.676	20.518	0	0.02
	2.476	24.303	14.735	-9.265	14.93	24.266	0	0.02
	3.095	25.61	11.866	-12.134	12.073	25.543	0	0.03
	3.714	24.297	9.005	-14.995	9.216	24.219	0	0.02
	4.333	20.508	6.262	-17.738	6.467	20.438	0	0.02
	4.952	14.671	3.952	-20.048	3.952	14.671	0	0.01
	5.571	7.566	1.766	-22.234	2.622	1.806	0	0.01
4	0	3.428	2.622	-2.622	24.169	0	-0.314	0
	0.619	7.566	22.234	-1.766	22.441	7.424	0	0.01
	1.238	14.671	20.048	-3.952	20.257	14.657	0	0.01
	1.857	20.508	17.738	-6.262	17.738	20.508	0	0.02
	2.476	24.297	14.995	-9.005	14.995	24.297	0	0.02
	3.095	25.61	12.134	-11.866	12.134	25.61	0	0.03
	3.714	24.303	9.265	-14.735	9.265	24.303	0	0.02
	4.333	20.518	6.324	-17.676	6.495	20.497	0	0.02
	4.952	14.708	3.967	-20.033	3.967	14.708	0	0.01
	5.571	7.594	1.774	-22.226	2.625	1.796	0	0.01

5	0	4.388	1.063	-3.19	24.027	0	-0.284	0
	0.619	7.543	22.266	-1.734	22.298	7.403	0	0.01
	1.238	14.664	20.116	-3.884	20.131	14.609	0	0.01
	1.857	20.49	17.639	-6.361	17.65	20.456	0	0.02
	2.476	24.373	14.924	-9.076	14.969	24.263	0	0.02
	3.095	25.826	12.093	-11.907	12.173	25.677	0	0.03
	3.714	24.681	9.248	-14.752	9.364	24.538	0	0.02
	4.333	21.026	6.496	-17.504	6.641	20.936	0	0.02
	4.952	15.213	4.106	-20.059	4.106	15.213	0	0.01
	5.571	7.955	1.859	-22.141	2.565	1.588	0	0.01
6	0	3.175	2.565	-0.513	24.02	0	-0.273	0
	0.619	7.244	22.7	-1.3	22.724	7.111	0	0.01
	1.238	14.598	21.052	-2.948	21.063	14.543	0	0.02
	1.857	21.285	19.088	-4.912	19.107	21.202	0	0.02
	2.476	26.605	16.837	-7.163	16.881	26.439	0	0.03
	3.095	29.862	14.352	-9.648	14.423	29.641	0	0.03
	3.714	30.518	11.675	-12.325	11.771	30.28	0	0.03
	4.333	28.138	8.847	-15.153	8.963	27.924	0	0.03
	4.952	22.393	5.912	-18.088	6.037	22.238	0	0.02
	5.571	13.055	2.91	-21.09	3.037	12.976	0	0.01
	6.19	0	1.914	-24.086	1.914	0	0	0

Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	24.086	-1.914	-1.914	0	0	0
	0.619	-1.185	0	-1.914	-3.037	12.976	0	0
	1.238	-2.369	0	-1.914	-6.037	22.238	0	-0.01
	1.857	-3.554	0	-1.914	-8.963	27.924	0	-0.01
	2.476	-4.738	0	-1.914	-11.771	30.28	0	-0.01
	3.095	-5.923	0	-1.914	-14.423	29.641	0	-0.01
	3.714	-7.107	0	-1.914	-16.881	26.439	0	-0.01
	4.333	-8.292	0	-1.914	-19.107	21.202	0	-0.01
	4.952	-9.476	0	-1.914	-21.063	14.543	0	-0.01
	5.571	-10.661	0	-1.914	-22.724	7.111	0	-0.01
2	0	-15.359	3.19	-16.881	-24.02	0	-0.273	0
	0.619	-13.384	3.19	0	-2.565	1.588	0	-0.01
	1.238	-11.409	3.19	0	-4.106	15.213	0	-0.01
	1.857	-9.583	2.87	0	-6.641	20.936	0	-0.01
	2.476	-7.806	2.87	0	-9.364	24.538	0	-0.01
	3.095	-6.03	2.87	0	-12.173	25.677	0	-0.01
	3.714	-6.594	0	-2.256	-14.969	24.263	0	-0.01
	4.333	-7.991	0	-2.256	-17.65	20.456	0	-0.01
	4.952	-9.525	0	-2.565	-20.131	14.609	0	-0.01
	5.571	-11.113	0	-2.565	-22.298	7.403	0	0
3	0	-12.799	2.622	-14.969	-24.027	0	-0.284	0
	0.619	-11.176	2.622	0	-2.625	1.796	0	0
	1.238	-9.554	2.622	0	-3.967	14.708	0	-0.01
	1.857	-8.024	2.454	0	-6.495	20.497	0	-0.01
	2.476	-6.505	2.454	0	-9.265	24.303	0	-0.01

	3.095	-5.005	2.295	0	-12.134	25.61	0	-0.01
	3.714	-6.429	0	-2.407	-14.995	24.297	0	-0.01
	4.333	-7.955	0	-2.625	-17.738	20.508	0	-0.01
	4.952	-9.58	0	-2.625	-20.257	14.657	0	-0.01
	5.571	-11.205	0	-2.625	-22.441	7.424	0	0
4	0	-12.83	14.995	-14.995	-24.169	0	-0.314	0
	0.619	-11.205	2.625	0	-2.622	1.806	0	0
	1.238	-9.58	2.625	0	-3.952	14.671	0	-0.01
	1.857	-7.955	2.625	0	-6.467	20.438	0	-0.01
	2.476	-6.429	2.407	0	-9.216	24.219	0	-0.01
	3.095	-5.005	0	-2.295	-12.073	25.543	0	-0.01
	3.714	-6.505	0	-2.454	-14.93	24.266	0	-0.01
	4.333	-8.024	0	-2.454	-17.676	20.518	0	-0.01
	4.952	-9.554	0	-2.622	-20.203	14.697	0	-0.01
	5.571	-11.176	0	-2.622	-22.401	7.474	0	0
5	0	-12.799	14.969	-2.622	-24.146	0	-0.284	0
	0.619	-11.113	2.565	0	-3.19	2.413	0	0
	1.238	-9.525	2.565	0	-3.884	14.664	0	-0.01
	1.857	-7.991	2.256	0	-6.361	20.49	0	-0.01
	2.476	-6.594	2.256	0	-9.076	24.373	0	-0.01
	3.095	-6.03	0	-2.87	-11.907	25.826	0	-0.01
	3.714	-7.806	0	-2.87	-14.752	24.681	0	-0.01
	4.333	-9.583	0	-2.87	-17.504	21.026	0	-0.01
	4.952	-11.409	0	-3.19	-20.059	15.213	0	-0.01
	5.571	-13.384	0	-3.19	-22.311	7.849	0	-0.01
6	0	-15.359	16.881	-3.19	-24.14	0	-0.263	0
	0.619	-10.661	1.914	0	-1.3	7.244	0	-0.01
	1.238	-9.476	1.914	0	-2.948	14.598	0	-0.01
	1.857	-8.292	1.914	0	-4.912	21.285	0	-0.01
	2.476	-7.107	1.914	0	-7.163	26.605	0	-0.01
	3.095	-5.923	1.914	0	-9.648	29.862	0	-0.01
	3.714	-4.738	1.914	0	-12.325	30.518	0	-0.01
	4.333	-3.554	1.914	0	-15.153	28.138	0	-0.01
	4.952	-2.369	1.914	0	-18.088	22.393	0	-0.01
	5.571	-1.185	1.914	0	-21.09	13.055	0	0
	6.19	0	1.914	-24.086	-24.086	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.914	-24.117
2	3.078	-24.32
3	4.253	-24.203
4	3.323	-24.233
5	4.253	-24.203
6	3.078	-24.32
7	1.914	-24.117

Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.738	-2.257	27.738	0	0	0
	0.619	10.706	17.097	-0.903	24.11	14.924	0	0.01
	1.238	18.383	14.453	-3.547	20.541	25.43	0	0.02
	1.857	23.139	11.866	-6.134	17.105	31.763	0	0.02
	2.476	25.152	9.366	-8.634	13.841	34.27	0	0.03
	3.095	24.674	6.982	-11.018	10.789	33.393	0	0.03
	3.714	22.027	4.742	-13.258	7.989	29.671	0	0.03
	4.333	17.604	2.676	-15.324	5.478	23.736	0	0.02
	4.952	11.878	1.037	-16.963	3.294	16.313	0	0.01
	5.571	5.872	0.68	-17.32	1.475	8.216	0	0.01
2	0	2.698	0.436	-2.179	28.413	0	-2.669	0
	0.619	6.306	16.967	-1.033	25.979	6.962	-1.655	0.01
	1.238	12.145	16.09	-1.91	23.198	15.756	-0.724	0.01
	1.857	17.086	13.869	-4.131	20.143	22.577	-0.104	0.02
	2.476	20.19	11.431	-6.569	16.93	26.844	0	0.02
	3.095	21.203	8.927	-9.073	13.668	28.255	0	0.02
	3.714	20.055	6.435	-11.565	10.467	26.782	0	0.02
	4.333	16.868	4.028	-13.972	7.436	22.667	0	0.02
	4.952	11.972	2.182	-15.818	4.68	16.416	0	0.01
	5.571	6.361	1.064	-16.936	3.818	2.959	0	0.01
3	0	3.889	2.761	-1.009	28.718	0	-1.966	0
	0.619	6.423	16.936	-1.064	26.018	6.778	-1.449	0.01
	1.238	12.051	15.774	-2.226	23.293	15.391	-0.543	0.01
	1.857	16.922	13.917	-4.083	20.267	22.188	0	0.02
	2.476	20.046	11.484	-6.516	17.057	26.523	0	0.02
	3.095	21.106	8.972	-9.028	13.78	28.039	0	0.02
	3.714	20.008	6.461	-11.539	10.55	26.669	0	0.02
	4.333	16.851	4.03	-13.97	7.482	22.626	0	0.02
	4.952	11.955	2.178	-15.822	4.685	16.4	0	0.01
	5.571	6.314	1.021	-16.979	3.197	2.511	0	0.01
4	0	3.279	2.309	-2.309	28.688	0	-2.202	0
	0.619	6.314	16.979	-1.021	26.067	6.647	-1.55	0.01
	1.238	11.955	15.822	-2.178	23.348	15.275	-0.619	0.01
	1.857	16.851	13.97	-4.03	20.326	22.102	-0.001	0.02
	2.476	20.008	11.539	-6.461	17.119	26.475	0	0.02
	3.095	21.106	9.028	-8.972	13.843	28.036	0	0.02
	3.714	20.046	6.516	-11.484	10.612	26.709	0	0.02
	4.333	16.922	4.083	-13.917	7.54	22.703	0	0.02
	4.952	12.051	2.226	-15.774	4.738	16.505	0	0.01
	5.571	6.423	1.064	-16.936	3.19	2.556	0	0.01

	3.095	-7.986	0.011	0	-13.843	28.036	0	-0.01
	3.714	-7.979	0.011	0	-17.119	26.475	0	-0.01
	4.333	-7.972	0.011	0	-20.326	22.102	-0.001	-0.01
	4.952	-8.744	0	-2.545	-23.348	15.275	-0.619	-0.01
	5.571	-13.16	0	-12.264	-26.067	6.647	-1.55	0
4	0	-21.754	24.605	-15.417	-28.688	0	-2.202	0
	0.619	-13.16	12.264	0	-3.197	2.511	0	0
	1.238	-8.744	2.545	0	-4.685	16.4	0	-0.01
	1.857	-7.972	0	-0.011	-7.482	22.626	0	-0.01
	2.476	-7.979	0	-0.011	-10.55	26.669	0	-0.01
	3.095	-7.986	0	-0.011	-13.78	28.039	0	-0.01
	3.714	-7.992	0	-0.011	-17.057	26.523	0	-0.01
	4.333	-7.999	0	-0.011	-20.267	22.188	0	-0.01
	4.952	-8.22	0	-3.693	-23.293	15.391	-0.543	-0.01
	5.571	-13.136	0	-12.238	-26.018	6.778	-1.449	0
5	0	-21.71	15.401	-15.391	-28.718	0	-1.966	0
	0.619	-13.137	12.264	0	-3.818	2.959	0	0
	1.238	-8.61	2.381	0	-4.68	16.416	0	-0.01
	1.857	-8.218	0	-0.506	-7.436	22.667	0	-0.01
	2.476	-8.531	0	-0.506	-10.467	26.782	0	-0.01
	3.095	-8.844	0	-0.506	-13.668	28.255	0	-0.01
	3.714	-9.157	0	-0.506	-16.93	26.844	0	-0.01
	4.333	-9.47	0	-0.506	-20.143	22.577	-0.104	-0.01
	4.952	-9.783	0	-3.194	-23.198	15.756	-0.724	-0.01
	5.571	-14.537	0	-10.46	-25.979	6.962	-1.655	-0.01
6	0	-23.18	16.522	-15.696	-28.413	0	-2.669	0
	0.619	-14.139	11.947	0	-1.475	8.216	0	0
	1.238	-8.568	1.953	0	-3.294	16.313	0	-0.01
	1.857	-7.493	1.729	0	-5.478	23.736	0	-0.01
	2.476	-6.422	1.729	0	-7.989	29.671	0	-0.01
	3.095	-5.352	1.729	0	-10.789	33.393	0	-0.01
	3.714	-4.282	1.729	0	-13.841	34.27	0	-0.01
	4.333	-3.211	1.729	0	-17.105	31.763	0	-0.01
	4.952	-2.141	1.729	0	-20.541	25.43	0	-0.01
	5.571	-1.07	1.729	0	-24.11	14.924	0	0
	6.19	0	2.257	-27.738	-27.738	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.257	-27.771
2	3.628	-30.932
3	5.093	-30.602
4	4.286	-30.723
5	5.093	-30.602
6	3.628	-30.932
7	2.257	-27.738



Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximumss table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.738	-2.257	27.738	0	0	0
	0.619	10.706	17.097	-0.903	24.11	14.924	0	0.01
	1.238	18.383	14.453	-3.547	20.541	25.43	0	0.02
	1.857	23.139	11.866	-6.134	17.105	31.763	0	0.02
	2.476	25.152	9.366	-8.634	13.841	34.27	0	0.03
	3.095	24.674	6.982	-11.018	10.789	33.393	0	0.03
	3.714	22.027	4.742	-13.258	7.989	29.671	0	0.03
	4.333	17.604	2.676	-15.324	5.478	23.736	0	0.02
	4.952	11.878	1.037	-16.963	3.294	16.313	0	0.01
	5.571	5.872	0.68	-17.32	1.475	8.216	0	0.01
2	0	2.698	0.436	-2.179	28.413	0	-2.669	0
	0.619	6.306	16.967	-1.033	25.979	6.962	-1.655	0.01
	1.238	12.145	16.09	-1.91	23.198	15.756	-0.724	0.01
	1.857	17.086	13.869	-4.131	20.143	22.577	-0.104	0.02
	2.476	20.19	11.431	-6.569	16.93	26.844	0	0.02
	3.095	21.203	8.927	-9.073	13.668	28.255	0	0.02
	3.714	20.055	6.435	-11.565	10.467	26.782	0	0.02
	4.333	16.868	4.028	-13.972	7.436	22.667	0	0.02
	4.952	11.972	2.182	-15.818	4.68	16.416	0	0.01
	5.571	6.361	1.064	-16.936	3.818	2.959	0	0.01
3	0	3.889	2.761	-1.009	28.718	0	-1.966	0
	0.619	6.423	16.936	-1.064	26.018	6.778	-1.449	0.01
	1.238	12.051	15.774	-2.226	23.293	15.391	-0.543	0.01
	1.857	16.922	13.917	-4.083	20.267	22.188	0	0.02
	2.476	20.046	11.484	-6.516	17.057	26.523	0	0.02
	3.095	21.106	8.972	-9.028	13.78	28.039	0	0.02
	3.714	20.008	6.461	-11.539	10.55	26.669	0	0.02
	4.333	16.851	4.03	-13.97	7.482	22.626	0	0.02
	4.952	11.955	2.178	-15.822	4.685	16.4	0	0.01
	5.571	6.314	1.021	-16.979	3.197	2.511	0	0.01
4	0	3.279	2.309	-2.309	28.688	0	-2.202	0
	0.619	6.314	16.979	-1.021	26.067	6.647	-1.55	0.01
	1.238	11.955	15.822	-2.178	23.348	15.275	-0.619	0.01
	1.857	16.851	13.97	-4.03	20.326	22.102	-0.001	0.02
	2.476	20.008	11.539	-6.461	17.119	26.475	0	0.02
	3.095	21.106	9.028	-8.972	13.843	28.036	0	0.02
	3.714	20.046	6.516	-11.484	10.612	26.709	0	0.02
	4.333	16.922	4.083	-13.917	7.54	22.703	0	0.02
	4.952	12.051	2.226	-15.774	4.738	16.505	0	0.01
	5.571	6.423	1.064	-16.936	3.19	2.556	0	0.01

5	0	3.889	1.009	-2.761	28.643	0	-1.967	0
	0.619	6.361	16.936	-1.064	26.018	6.697	-1.475	0.01
	1.238	11.972	15.818	-2.182	23.338	15.29	-0.596	0.01
	1.857	16.868	13.972	-4.028	20.355	22.132	-0.029	0.02
	2.476	20.055	11.565	-6.435	17.181	26.562	0	0.02
	3.095	21.203	9.073	-8.927	13.928	28.203	0	0.02
	3.714	20.19	6.569	-11.431	10.707	26.952	0	0.02
	4.333	17.086	4.131	-13.869	7.626	22.978	0	0.02
	4.952	12.145	1.91	-16.09	4.791	16.714	0	0.01
	5.571	6.306	1.033	-16.967	3.038	1.934	0	0.01
6	0	2.698	2.179	-0.436	28.723	0	-2.679	0
	0.619	5.872	17.32	-0.68	26.661	6.25	-1.598	0.01
	1.238	11.878	16.963	-1.037	24.514	15.204	-0.611	0.01
	1.857	17.604	15.324	-2.676	22.063	23.065	0	0.02
	2.476	22.027	13.258	-4.742	19.354	29.096	0	0.03
	3.095	24.674	11.018	-6.982	16.433	32.675	0	0.03
	3.714	25.152	8.634	-9.366	13.345	33.295	0	0.03
	4.333	23.139	6.134	-11.866	10.135	30.564	0	0.02
	4.952	18.383	3.547	-14.453	6.847	24.202	0	0.02
	5.571	10.706	0.903	-17.097	3.524	14.035	-0.023	0.01
	6.19	0	2.257	-27.738	2.257	0	0	0

Minimums table:

Span	Location	Moment(k	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.738	-2.257	-2.257	0	0	0
	0.619	-1.07	0	-1.729	-3.524	14.035	-0.023	0
	1.238	-2.141	0	-1.729	-6.847	24.202	0	-0.01
	1.857	-3.211	0	-1.729	-10.135	30.564	0	-0.01
	2.476	-4.282	0	-1.729	-13.345	33.295	0	-0.01
	3.095	-5.352	0	-1.729	-16.433	32.675	0	-0.01
	3.714	-6.422	0	-1.729	-19.354	29.096	0	-0.01
	4.333	-7.493	0	-1.729	-22.063	23.065	0	-0.01
	4.952	-8.568	0	-1.953	-24.514	15.204	-0.611	-0.01
	5.571	-14.139	0	-11.947	-26.661	6.25	-1.598	0
2	0	-23.18	15.696	-16.522	-28.723	0	-2.679	0
	0.619	-14.537	10.46	0	-3.038	1.934	0	-0.01
	1.238	-9.783	0.785	0	-4.791	16.714	0	-0.01
	1.857	-9.47	0.506	0	-7.626	22.978	0	-0.01
	2.476	-9.157	0.506	0	-10.707	26.952	0	-0.01
	3.095	-8.844	0.506	0	-13.928	28.203	0	-0.01
	3.714	-8.531	0.506	0	-17.181	26.562	0	-0.01
	4.333	-8.218	0.506	0	-20.355	22.132	-0.029	-0.01
	4.952	-8.61	0	-2.381	-23.338	15.29	-0.596	-0.01
	5.571	-13.137	0	-12.264	-26.018	6.697	-1.475	0
3	0	-21.71	15.391	-15.401	-28.643	0	-1.967	0
	0.619	-13.136	12.238	0	-3.19	2.556	0	0
	1.238	-8.22	3.693	0	-4.738	16.505	0	-0.01
	1.857	-7.999	0.011	0	-7.54	22.703	0	-0.01
	2.476	-7.992	0.011	0	-10.612	26.709	0	-0.01

	3.095	-7.986	0.011	0	-13.843	28.036	0	-0.01
	3.714	-7.979	0.011	0	-17.119	26.475	0	-0.01
	4.333	-7.972	0.011	0	-20.326	22.102	-0.001	-0.01
	4.952	-8.744	0	-2.545	-23.348	15.275	-0.619	-0.01
	5.571	-13.16	0	-12.264	-26.067	6.647	-1.55	0
4	0	-21.754	24.605	-15.417	-28.688	0	-2.202	0
	0.619	-13.16	12.264	0	-3.197	2.511	0	0
	1.238	-8.744	2.545	0	-4.685	16.4	0	-0.01
	1.857	-7.972	0	-0.011	-7.482	22.626	0	-0.01
	2.476	-7.979	0	-0.011	-10.55	26.669	0	-0.01
	3.095	-7.986	0	-0.011	-13.78	28.039	0	-0.01
	3.714	-7.992	0	-0.011	-17.057	26.523	0	-0.01
	4.333	-7.999	0	-0.011	-20.267	22.188	0	-0.01
	4.952	-8.22	0	-3.693	-23.293	15.391	-0.543	-0.01
	5.571	-13.136	0	-12.238	-26.018	6.778	-1.449	0
5	0	-21.71	15.401	-15.391	-28.718	0	-1.966	0
	0.619	-13.137	12.264	0	-3.818	2.959	0	0
	1.238	-8.61	2.381	0	-4.68	16.416	0	-0.01
	1.857	-8.218	0	-0.506	-7.436	22.667	0	-0.01
	2.476	-8.531	0	-0.506	-10.467	26.782	0	-0.01
	3.095	-8.844	0	-0.506	-13.668	28.255	0	-0.01
	3.714	-9.157	0	-0.506	-16.93	26.844	0	-0.01
	4.333	-9.47	0	-0.506	-20.143	22.577	-0.104	-0.01
	4.952	-9.783	0	-3.194	-23.198	15.756	-0.724	-0.01
	5.571	-14.537	0	-10.46	-25.979	6.962	-1.655	-0.01
6	0	-23.18	16.522	-15.696	-28.413	0	-2.669	0
	0.619	-14.139	11.947	0	-1.475	8.216	0	0
	1.238	-8.568	1.953	0	-3.294	16.313	0	-0.01
	1.857	-7.493	1.729	0	-5.478	23.736	0	-0.01
	2.476	-6.422	1.729	0	-7.989	29.671	0	-0.01
	3.095	-5.352	1.729	0	-10.789	33.393	0	-0.01
	3.714	-4.282	1.729	0	-13.841	34.27	0	-0.01
	4.333	-3.211	1.729	0	-17.105	31.763	0	-0.01
	4.952	-2.141	1.729	0	-20.541	25.43	0	-0.01
	5.571	-1.07	1.729	0	-24.11	14.924	0	0
	6.19	0	2.257	-27.738	-27.738	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.257	-27.771
2	3.628	-30.932
3	5.093	-30.602
4	4.286	-30.723
5	5.093	-30.602
6	3.628	-30.932
7	2.257	-27.738

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	32.593	-2.658	32.593	0	0	0
	0.619	17.726	28.636	-3.364	28.636	17.726	0	0.02
	1.238	30.474	24.615	-7.385	24.615	30.474	0	0.03
	1.857	38.329	20.64	-11.36	20.64	38.329	0	0.04
	2.476	41.547	16.78	-15.22	16.78	41.547	0	0.05
	3.095	40.557	13.104	-18.896	13.104	40.557	0	0.05
	3.714	35.961	9.683	-22.317	9.683	35.961	0	0.04
	4.333	28.521	6.582	-25.418	6.582	28.521	0	0.03
	4.952	19.464	3.931	-28.069	3.931	19.464	0	0.02
	5.571	9.659	1.734	-30.266	1.734	9.659	0	0.01
2	0	4.393	0.71	-3.548	32.832	0	-1.149	0
	0.619	10.606	29.522	-2.478	30.444	10.035	0	0.01
	1.238	20.283	27.417	-5.474	27.417	20.283	0	0.02
	1.857	28.4	23.928	-8.072	23.928	28.4	0	0.03
	2.476	33.485	20.136	-11.864	20.136	33.485	0	0.03
	3.095	35.032	16.198	-15.802	16.198	35.032	0	0.04
	3.714	32.934	12.277	-19.723	12.277	32.934	0	0.03
	4.333	27.456	8.525	-23.475	8.525	27.456	0	0.03
	4.952	19.552	5.179	-26.821	5.179	19.552	0	0.02
	5.571	10.058	2.312	-29.688	4.175	2.877	0	0.01
3	0	5.843	3.174	-2.49	32.838	0	-1.217	0
	0.619	10.125	29.635	-2.365	30.569	9.486	0	0.01
	1.238	19.611	26.711	-5.289	27.62	19.551	0	0.02
	1.857	27.775	24.144	-7.856	24.172	27.691	0	0.03
	2.476	33.305	19.511	-12.489	20.39	32.921	0	0.03
	3.095	35.227	15.443	-16.557	16.436	34.664	0	0.04
	3.714	33.311	11.415	-20.585	12.475	32.744	0	0.03
	4.333	27.817	7.591	-24.409	8.67	27.393	0	0.03
	4.952	19.484	4.156	-27.844	5.182	19.243	0	0.02
	5.571	9.33	1.252	-30.748	3.495	2.407	0	0.01
4	0	5.426	2.901	-2.358	33.025	0	-1.7	0
	0.619	9.33	30.748	-1.252	30.796	9.122	0	0.01
	1.238	19.484	27.844	-4.156	27.866	19.404	0	0.02
	1.857	27.817	24.409	-7.591	24.425	27.769	0	0.03
	2.476	33.311	20.585	-11.415	20.648	33.161	0	0.03
	3.095	35.227	16.557	-15.443	16.67	35.025	0	0.04
	3.714	33.305	12.489	-19.511	12.65	33.116	0	0.03
	4.333	27.775	7.856	-24.144	8.744	27.582	0	0.03
	4.952	19.611	5.289	-26.711	5.289	19.611	0	0.02
	5.571	10.125	2.365	-29.635	3.677	2.516	0	0.01

5	0	5.843	2.49	-3.174	32.205	0	-1.215	0
	0.619	10.057	29.688	-2.312	29.86	9.311	0	0.01
	1.238	19.552	26.821	-5.179	26.9	19.257	0	0.02
	1.857	27.456	23.475	-8.525	23.533	27.275	0	0.03
	2.476	32.934	19.723	-12.277	19.958	32.351	0	0.03
	3.095	35.032	15.802	-16.198	16.231	34.235	0	0.04
	3.714	33.485	11.864	-20.136	12.485	32.717	0	0.03
	4.333	28.4	8.072	-23.928	8.855	27.915	0	0.03
	4.952	20.283	5.474	-27.417	5.474	20.283	0	0.02
	5.571	10.606	2.478	-29.522	3.548	2.196	0	0.01
6	0	4.393	3.548	-0.71	32.155	0	-1.16	0
	0.619	9.659	30.266	-1.734	30.398	8.927	0	0.01
	1.238	19.464	28.069	-3.931	28.132	19.154	0	0.02
	1.857	28.521	25.418	-6.582	25.461	28.333	0	0.03
	2.476	35.961	22.317	-9.683	22.493	35.311	0	0.04
	3.095	40.557	18.896	-13.104	19.215	39.568	0	0.05
	3.714	41.547	15.22	-16.78	15.681	40.406	0	0.05
	4.333	38.329	11.36	-20.64	11.941	37.25	0	0.04
	4.952	30.474	7.385	-24.615	8.046	29.655	0	0.03
	5.571	17.726	3.364	-28.636	4.049	17.302	0	0.02
	6.19	0	2.658	-32.593	2.658	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	32.593	-2.658	-2.658	0	0	0
	0.619	-1.645	0	-2.658	-4.049	17.302	0	0
	1.238	-3.29	0	-2.658	-8.046	29.655	0	-0.01
	1.857	-4.936	0	-2.658	-11.941	37.25	0	-0.01
	2.476	-6.581	0	-2.658	-15.681	40.406	0	-0.01
	3.095	-8.226	0	-2.658	-19.215	39.568	0	-0.02
	3.714	-9.871	0	-2.658	-22.493	35.311	0	-0.02
	4.333	-11.516	0	-2.658	-25.461	28.333	0	-0.02
	4.952	-13.162	0	-2.658	-28.132	19.154	0	-0.01
	5.571	-14.807	0	-2.658	-30.398	8.927	0	-0.01
2	0	-20.381	4.175	-22.493	-32.155	0	-1.16	0
	0.619	-17.797	4.175	0	-3.548	2.196	0	-0.01
	1.238	-15.248	3.151	0	-5.474	20.283	0	-0.01
	1.857	-13.39	2.837	0	-8.855	27.915	0	-0.02
	2.476	-11.823	2.227	0	-12.485	32.717	0	-0.02
	3.095	-10.845	1.054	0	-16.231	34.235	0	-0.02
	3.714	-10.736	0	-0.74	-19.958	32.351	0	-0.02
	4.333	-11.435	0	-1.505	-23.533	27.275	0	-0.02
	4.952	-13.22	0	-3.295	-26.9	19.257	0	-0.01
	5.571	-15.374	0	-3.548	-29.86	9.311	0	-0.01
3	0	-17.57	22.754	-3.548	-32.205	0	-1.215	0
	0.619	-14.902	3.495	0	-3.677	2.516	0	-0.01
	1.238	-12.738	3.495	0	-5.289	19.611	0	-0.01
	1.857	-11.07	2.601	0	-8.744	27.582	0	-0.02
	2.476	-9.798	1.646	0	-12.65	33.116	0	-0.02

	3.095	-9.254	0.139	0	-16.67	35.025	0	-0.02
	3.714	-9.829	0	-1.572	-20.648	33.161	0	-0.02
	4.333	-11.283	0	-3.53	-24.425	27.769	0	-0.02
	4.952	-13.468	0	-3.53	-27.866	19.404	0	-0.01
	5.571	-15.693	0	-3.677	-30.796	9.122	0	-0.01
4	0	-17.969	23.012	-3.677	-33.025	0	-1.7	0
	0.619	-15.693	3.677	0	-3.495	2.407	0	-0.01
	1.238	-13.468	3.53	0	-5.182	19.243	0	-0.01
	1.857	-11.283	3.53	0	-8.67	27.393	0	-0.02
	2.476	-9.829	1.572	0	-12.475	32.744	0	-0.02
	3.095	-9.254	0	-0.139	-16.436	34.664	0	-0.02
	3.714	-9.798	0	-1.646	-20.39	32.921	0	-0.02
	4.333	-11.07	0	-2.601	-24.172	27.691	0	-0.02
	4.952	-12.738	0	-3.495	-27.62	19.551	0	-0.01
	5.571	-14.902	0	-3.495	-30.569	9.486	0	-0.01
5	0	-17.57	3.548	-22.754	-32.838	0	-1.217	0
	0.619	-15.374	3.548	0	-4.175	2.877	0	-0.01
	1.238	-13.22	3.295	0	-5.179	19.552	0	-0.01
	1.857	-11.435	1.505	0	-8.525	27.456	0	-0.02
	2.476	-10.736	0.74	0	-12.277	32.934	0	-0.02
	3.095	-10.845	0	-1.054	-16.198	35.032	0	-0.02
	3.714	-11.823	0	-2.227	-20.136	33.485	0	-0.02
	4.333	-13.39	0	-2.837	-23.928	28.4	0	-0.02
	4.952	-15.248	0	-3.151	-27.417	20.283	0	-0.01
	5.571	-17.797	0	-4.175	-30.444	10.035	0	-0.01
6	0	-20.381	22.493	-4.175	-32.832	0	-1.149	0
	0.619	-14.807	2.658	0	-1.734	9.659	0	-0.01
	1.238	-13.162	2.658	0	-3.931	19.464	0	-0.01
	1.857	-11.516	2.658	0	-6.582	28.521	0	-0.02
	2.476	-9.871	2.658	0	-9.683	35.961	0	-0.02
	3.095	-8.226	2.658	0	-13.104	40.557	0	-0.02
	3.714	-6.581	2.658	0	-16.78	41.547	0	-0.01
	4.333	-4.936	2.658	0	-20.64	38.329	0	-0.01
	4.952	-3.29	2.658	0	-24.615	30.474	0	-0.01
	5.571	-1.645	2.658	0	-28.636	17.726	0	0
	6.19	0	2.658	-32.593	-32.593	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.658	-32.633
2	4.258	-33.112
3	5.664	-33.084
4	5.259	-33.552
5	5.664	-33.084
6	4.258	-33.112
7	2.658	-32.633

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximumss table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	19.975	-1.58	19.975	0	0	0
	0.619	10.814	17.469	-2.531	17.469	10.814	0	0.01
	1.238	18.534	14.971	-5.029	14.971	18.534	0	0.02
	1.857	23.281	12.537	-7.463	12.537	23.281	0	0.02
	2.476	25.3	10.218	-9.782	10.218	25.3	0	0.03
	3.095	25.09	8.107	-11.893	8.107	25.09	0	0.03
	3.714	22.727	6.119	-13.881	6.119	22.727	0	0.03
	4.333	18.603	4.293	-15.707	4.293	18.603	0	0.02
	4.952	13.206	2.667	-17.333	2.667	13.206	0	0.01
	5.571	7.114	1.277	-18.723	1.277	7.114	0	0.01
2	0	2.622	0.424	-2.118	19.986	0	-0.057	0
	0.619	7.002	17.848	-2.152	18.451	6.629	0	0.01
	1.238	12.677	16.578	-3.799	16.578	12.677	0	0.01
	1.857	17.447	14.466	-5.534	14.466	17.447	0	0.02
	2.476	20.479	12.222	-7.778	12.222	20.479	0	0.02
	3.095	21.687	10.012	-9.988	10.012	21.687	0	0.02
	3.714	20.807	7.764	-12.236	7.764	20.807	0	0.02
	4.333	17.904	5.569	-14.431	5.577	16.891	0	0.02
	4.952	13.267	3.519	-16.481	3.842	12.262	0	0.01
	5.571	7.41	1.704	-18.296	2.609	1.798	0	0.01
3	0	3.413	2.609	-0.699	19.688	1.397	0	0
	0.619	7.767	18.184	-1.816	18.184	7.767	0	0.01
	1.238	13.533	16.344	-3.656	16.344	13.533	0	0.01
	1.857	18.03	14.274	-5.726	14.443	16.939	0	0.02
	2.476	20.764	12.066	-7.934	12.367	20.134	0	0.02
	3.095	21.472	9.815	-10.185	10.15	21.445	0	0.02
	3.714	20.676	7.885	-12.115	7.885	20.676	0	0.02
	4.333	17.866	5.664	-14.336	5.664	17.866	0	0.02
	4.952	13.289	3.585	-16.415	3.694	12.254	0	0.01
	5.571	7.454	1.74	-18.26	2.188	1.507	0	0.01
4	0	2.861	2.188	-2.188	19.761	1.046	0	0
	0.619	7.454	18.26	-1.74	18.26	7.454	0	0.01
	1.238	13.289	16.415	-3.585	16.415	13.289	0	0.01
	1.857	17.866	14.336	-5.664	14.45	16.908	0	0.02
	2.476	20.676	12.115	-7.885	12.387	20.121	0	0.02
	3.095	21.472	10.185	-9.815	10.185	21.472	0	0.02
	3.714	20.764	7.934	-12.066	7.934	20.764	0	0.02
	4.333	18.03	5.726	-14.274	5.726	18.03	0	0.02
	4.952	13.533	3.656	-16.344	3.691	12.282	0	0.01
	5.571	7.767	1.816	-18.184	2.159	1.477	0	0.01

5	0	3.413	0.699	-2.609	19.77	1.015	0	0
	0.619	7.41	18.296	-1.704	18.296	7.41	0	0.01
	1.238	13.267	16.481	-3.519	16.481	13.267	0	0.01
	1.857	17.904	14.431	-5.569	14.431	17.904	0	0.02
	2.476	20.807	12.236	-7.764	12.474	20.219	0	0.02
	3.095	21.687	9.988	-10.012	10.144	21.397	0	0.02
	3.714	20.479	7.778	-12.222	7.803	20.448	0	0.02
	4.333	17.447	5.534	-14.466	5.693	17.349	0	0.02
	4.952	12.677	3.799	-16.578	3.799	12.677	0	0.01
	5.571	7.002	2.152	-17.848	2.152	7.002	0	0.01
6	0	2.622	2.118	-0.424	19.991	0	-0.066	0
	0.619	7.114	18.723	-1.277	18.916	6.037	0	0.01
	1.238	13.206	17.333	-2.667	17.543	12.165	0	0.01
	1.857	18.603	15.707	-4.293	15.913	17.708	0	0.02
	2.476	22.727	13.881	-6.119	14.058	22.069	0	0.03
	3.095	25.09	11.893	-8.107	12.01	24.73	0	0.03
	3.714	25.3	9.782	-10.218	9.801	25.254	0	0.03
	4.333	23.281	7.463	-12.537	7.581	23.061	0	0.02
	4.952	18.534	5.029	-14.971	5.31	18.186	0	0.02
	5.571	10.814	2.531	-17.469	2.98	10.535	0	0.01
	6.19	0	1.58	-19.975	1.58	0	0	0

Minimums table:

Span	Location	Moment(kn	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.975	-1.58	-1.58	0	0	0
	0.619	-0.978	0	-1.58	-2.98	10.535	0	0
	1.238	-1.957	0	-1.58	-5.31	18.186	0	0
	1.857	-2.935	0	-1.58	-7.581	23.061	0	-0.01
	2.476	-3.913	0	-1.58	-9.801	25.254	0	-0.01
	3.095	-4.891	0	-1.58	-12.01	24.73	0	-0.01
	3.714	-5.87	0	-1.58	-14.058	22.069	0	-0.01
	4.333	-6.848	0	-1.58	-15.913	17.708	0	-0.01
	4.952	-7.826	0	-1.58	-17.543	12.165	0	-0.01
	5.571	-8.804	0	-1.58	-18.916	6.037	0	0
2	0	-12.738	2.609	-14.058	-19.991	0	-0.066	0
	0.619	-11.123	2.609	0	-2.152	7.002	0	-0.01
	1.238	-9.528	1.766	0	-3.799	12.677	0	-0.01
	1.857	-8.441	1.724	0	-5.693	17.349	0	-0.01
	2.476	-7.374	1.724	0	-7.803	20.448	0	-0.01
	3.095	-6.309	1.453	0	-10.144	21.397	0	-0.01
	3.714	-6.531	0	-0.853	-12.474	20.219	0	-0.01
	4.333	-7.095	0	-1.086	-14.431	17.904	0	-0.01
	4.952	-7.865	0	-2.118	-16.481	13.267	0	-0.01
	5.571	-9.175	0	-2.118	-18.296	7.41	0	0
3	0	-10.68	2.188	-12.829	-19.77	1.015	0	0
	0.619	-9.326	2.188	0	-2.159	1.477	0	0
	1.238	-7.972	2.188	0	-3.691	12.282	0	-0.01
	1.857	-7.109	1.282	0	-5.726	18.03	0	-0.01
	2.476	-6.348	1.093	0	-7.934	20.764	0	-0.01



	3.095	-5.671	1.093	0	-10.185	21.472	0	-0.01
	3.714	-6.303	0	-1.053	-12.387	20.121	0	-0.01
	4.333	-7.019	0	-1.24	-14.45	16.908	0	-0.01
	4.952	-7.877	0	-2.159	-16.415	13.289	0	-0.01
	5.571	-9.213	0	-2.159	-18.26	7.454	0	0
4	0	-10.55	12.387	-12.387	-19.761	1.046	0	0
	0.619	-9.213	2.159	0	-2.188	1.507	0	0
	1.238	-7.877	2.159	0	-3.694	12.254	0	-0.01
	1.857	-7.019	1.24	0	-5.664	17.866	0	-0.01
	2.476	-6.303	1.053	0	-7.885	20.676	0	-0.01
	3.095	-5.671	0	-1.093	-10.15	21.445	0	-0.01
	3.714	-6.348	0	-1.093	-12.367	20.134	0	-0.01
	4.333	-7.109	0	-1.282	-14.443	16.939	0	-0.01
	4.952	-7.972	0	-2.188	-16.344	13.533	0	-0.01
	5.571	-9.326	0	-2.188	-18.184	7.767	0	0
5	0	-10.68	12.829	-2.188	-19.688	1.397	0	0
	0.619	-9.175	2.118	0	-2.609	1.798	0	0
	1.238	-7.865	2.118	0	-3.842	12.262	0	-0.01
	1.857	-7.095	1.086	0	-5.577	16.891	0	-0.01
	2.476	-6.531	0.853	0	-7.764	20.807	0	-0.01
	3.095	-6.309	0	-1.453	-10.012	21.687	0	-0.01
	3.714	-7.374	0	-1.724	-12.222	20.479	0	-0.01
	4.333	-8.441	0	-1.724	-14.466	17.447	0	-0.01
	4.952	-9.528	0	-1.766	-16.578	12.677	0	-0.01
	5.571	-11.123	0	-2.609	-18.451	6.629	0	-0.01
6	0	-12.738	14.058	-2.609	-19.986	0	-0.057	0
	0.619	-8.804	1.58	0	-1.277	7.114	0	0
	1.238	-7.826	1.58	0	-2.667	13.206	0	-0.01
	1.857	-6.848	1.58	0	-4.293	18.603	0	-0.01
	2.476	-5.87	1.58	0	-6.119	22.727	0	-0.01
	3.095	-4.891	1.58	0	-8.107	25.09	0	-0.01
	3.714	-3.913	1.58	0	-10.218	25.3	0	-0.01
	4.333	-2.935	1.58	0	-12.537	23.281	0	-0.01
	4.952	-1.957	1.58	0	-14.971	18.534	0	0
	5.571	-0.978	1.58	0	-17.469	10.814	0	0
	6.19	0	1.58	-19.975	-19.975	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.58	-20
2	2.541	-20.078
3	3.308	-18.96
4	2.773	-18.931
5	3.308	-18.96
6	2.541	-20.078
7	1.58	-20

	3.095	-5.969	0.755	0	-9.919	16.21	0	-0.01
	3.714	-6.374	0	-0.698	-12.177	13.163	0	-0.01
	4.333	-6.806	0	-0.698	-14.225	9.007	0	-0.01
	4.952	-7.726	0	-2.117	-16.678	10.3	0	-0.01
	5.571	-9.45	0	-12.177	-19.905	2.861	0	0
4	0	-17.408	14.225	-14.225	-22.945	0	-6.865	0
	0.619	-9.45	12.177	0	-2.043	1.407	0	0
	1.238	-7.726	2.117	0	-2.425	8.972	0	-0.01
	1.857	-6.806	0.698	0	-4.28	15.841	0	-0.01
	2.476	-6.374	0.698	0	-7.249	17.241	0	-0.01
	3.095	-5.969	0	-0.755	-9.895	16.165	0	-0.01
	3.714	-6.436	0	-0.755	-12.177	13.138	0	-0.01
	4.333	-6.904	0	-0.755	-14.218	9.017	0	-0.01
	4.952	-7.446	0	-2.043	-16.582	10.343	0	-0.01
	5.571	-9.476	0	-12.476	-19.824	2.949	0	0
5	0	-17.463	14.266	-13.243	-22.884	0	-6.762	0
	0.619	-9.483	12.556	0	-2.531	1.744	0	0
	1.238	-7.64	2.057	0	-2.971	7.404	0	-0.01
	1.857	-6.958	0.405	0	-4.161	15.89	0	-0.01
	2.476	-6.707	0.405	0	-7.179	17.311	0	-0.01
	3.095	-6.865	0	-1.259	-9.901	16.147	0	-0.01
	3.714	-7.65	0	-1.27	-12.277	12.895	0	-0.01
	4.333	-8.436	0	-1.27	-14.458	8.29	0	-0.01
	4.952	-9.221	0	-2.531	-16.437	10.852	0	-0.01
	5.571	-10.788	0	-2.531	-19.691	3.498	0	-0.01
6	0	-18.558	14.113	-14.458	-22.788	0	-6.304	0
	0.619	-10.118	13.15	0	-0.911	5.076	0	0
	1.238	-7.597	1.534	0	-1.8	8.913	0	-0.01
	1.857	-6.647	1.534	0	-2.826	12.246	0	-0.01
	2.476	-5.698	1.534	0	-5.263	19.548	0	-0.01
	3.095	-4.748	1.534	0	-6.931	21.453	0	-0.01
	3.714	-3.799	1.534	0	-8.692	21.521	0	-0.01
	4.333	-2.849	1.534	0	-11.336	21.051	0	-0.01
	4.952	-1.899	1.534	0	-14.491	17.94	0	0
	5.571	-0.95	1.534	0	-17.91	11.087	0	0
	6.19	0	1.534	-21.496	-21.496	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.534	-21.533
2	2.468	-28.65
3	3.209	-27.531
4	2.59	-27.455
5	3.209	-27.531
6	2.468	-28.65
7	1.534	-21.533

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (max	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	21.496	-1.534	21.496	0	0	0
	0.619	11.087	17.91	0	17.91	11.087	0	0.01
	1.238	17.94	14.491	-2.509	14.491	17.94	0	0.02
	1.857	21.051	11.336	-5.664	11.336	21.051	0	0.02
	2.476	21.521	8.692	-8.308	8.692	21.521	0	0.02
	3.095	21.453	6.931	-10.069	6.931	21.453	0	0.02
	3.714	19.548	5.263	-11.737	5.263	19.548	0	0.02
	4.333	16.766	2.563	-14.437	2.826	12.246	0	0.02
	4.952	11.439	0	-17.958	1.8	8.913	0	0.01
	5.571	5.076	0.911	-11.089	0.911	5.076	0	0.01
2	0	2.547	0.411	-2.057	22.788	0	-6.304	0
	0.619	4.314	10.527	-1.473	19.691	3.498	0	0.01
	1.238	10.852	16.437	-0.893	16.437	10.852	0	0.01
	1.857	15.397	13.206	-3.794	14.458	8.29	0	0.01
	2.476	17.11	10.149	-6.851	12.277	12.895	0	0.02
	3.095	16.298	7.36	-9.64	9.901	16.147	0	0.02
	3.714	17.311	7.179	-9.821	7.179	17.311	0	0.02
	4.333	15.89	4.161	-12.839	4.161	15.89	0	0.02
	4.952	11.574	0.946	-16.054	2.971	7.404	0	0.01
	5.571	5.286	1.217	-10.783	2.531	1.744	0	0.01
3	0	3.31	2.531	-0.678	22.884	0	-6.762	0
	0.619	6.243	10.539	-1.461	19.824	2.949	0	0.01
	1.238	11.897	15.821	-1.179	16.582	10.343	0	0.01
	1.857	16.029	12.648	-4.352	14.218	9.017	0	0.02
	2.476	17.343	9.702	-7.298	12.177	13.138	0	0.02
	3.095	16.26	9.457	-7.543	9.895	16.165	0	0.02
	3.714	17.241	7.249	-9.751	7.249	17.241	0	0.02
	4.333	15.841	4.28	-12.72	4.28	15.841	0	0.02
	4.952	11.604	1.089	-15.911	2.425	8.972	0	0.01
	5.571	5.295	1.237	-10.763	2.043	1.407	0	0.01
4	0	2.672	0.547	-2.043	22.945	0	-6.865	0
	0.619	5.295	10.763	-1.237	19.905	2.861	0	0.01
	1.238	11.604	15.911	-1.089	16.678	10.3	0	0.01
	1.857	15.841	12.72	-4.28	14.225	9.007	0	0.02
	2.476	17.241	9.751	-7.249	12.177	13.163	0	0.02
	3.095	16.26	7.543	-9.457	9.919	16.21	0	0.02
	3.714	17.343	7.298	-9.702	7.298	17.343	0	0.02
	4.333	16.029	4.352	-12.648	4.352	16.029	0	0.02
	4.952	11.897	1.179	-15.821	2.579	9.524	0	0.01
	5.571	6.243	1.461	-10.539	2.117	1.449	0	0.01

5	0	3.31	0.678	-2.531	22.7	0	-6.546	0
	0.619	5.286	10.783	-1.217	19.625	3.051	0	0.01
	1.238	11.574	16.054	-0.946	16.392	10.318	0	0.01
	1.857	15.89	12.839	-4.161	14.266	9.029	0	0.02
	2.476	17.311	9.821	-7.179	12.211	13.205	0	0.02
	3.095	16.298	9.64	-7.36	9.801	15.999	0	0.02
	3.714	17.11	6.851	-10.149	7.083	16.824	0	0.02
	4.333	15.397	3.794	-13.206	4.084	15.217	0	0.01
	4.952	10.852	0.893	-16.437	2.227	7.606	0	0.01
	5.571	4.314	1.473	-10.527	2.057	1.273	0	0.01
6	0	2.547	2.057	-0.411	24.397	0	-8.766	0
	0.619	5.076	11.089	-0.911	21.475	1.776	0	0.01
	1.238	11.439	17.958	0	18.21	10.19	0	0.01
	1.857	16.766	14.437	-2.563	14.859	9.275	0	0.02
	2.476	19.548	11.737	-5.263	13.15	14.301	0	0.02
	3.095	21.453	10.069	-6.931	11.088	18.299	0	0.02
	3.714	21.521	8.308	-8.692	8.666	20.634	0	0.02
	4.333	21.051	5.664	-11.336	6.486	19.525	0	0.02
	4.952	17.94	2.509	-14.491	4.612	15.336	0	0.02
	5.571	11.087	0	-17.91	2.691	8.857	0	0.01
	6.19	0	1.534	-21.496	1.534	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.496	-1.534	-1.534	0	0	0
	0.619	-0.95	0	-1.534	-2.691	8.857	0	0
	1.238	-1.899	0	-1.534	-4.612	15.336	0	0
	1.857	-2.849	0	-1.534	-6.486	19.525	0	-0.01
	2.476	-3.799	0	-1.534	-8.666	20.634	0	-0.01
	3.095	-4.748	0	-1.534	-11.088	18.299	0	-0.01
	3.714	-5.698	0	-1.534	-13.15	14.301	0	-0.01
	4.333	-6.647	0	-1.534	-14.859	9.275	0	-0.01
	4.952	-7.597	0	-1.534	-18.21	10.19	0	-0.01
	5.571	-10.118	0	-13.15	-21.475	1.776	0	0
2	0	-18.558	14.458	-14.113	-24.397	0	-8.766	0
	0.619	-10.788	2.531	0	-2.057	1.273	0	-0.01
	1.238	-9.221	2.531	0	-2.227	7.606	0	-0.01
	1.857	-8.436	1.27	0	-4.084	15.217	0	-0.01
	2.476	-7.65	1.27	0	-7.083	16.824	0	-0.01
	3.095	-6.865	1.259	0	-9.801	15.999	0	-0.01
	3.714	-6.707	0	-0.405	-12.211	13.205	0	-0.01
	4.333	-6.958	0	-0.405	-14.266	9.029	0	-0.01
	4.952	-7.64	0	-2.057	-16.392	10.318	0	-0.01
	5.571	-9.483	0	-12.556	-19.625	3.051	0	0
3	0	-17.463	13.243	-14.266	-22.7	0	-6.546	0
	0.619	-9.476	12.476	0	-2.117	1.449	0	0
	1.238	-7.446	2.043	0	-2.579	9.524	0	-0.01
	1.857	-6.904	0.755	0	-4.352	16.029	0	-0.01
	2.476	-6.436	0.755	0	-7.298	17.343	0	-0.01

	3.095	-5.969	0.755	0	-9.919	16.21	0	-0.01
	3.714	-6.374	0	-0.698	-12.177	13.163	0	-0.01
	4.333	-6.806	0	-0.698	-14.225	9.007	0	-0.01
	4.952	-7.726	0	-2.117	-16.678	10.3	0	-0.01
	5.571	-9.45	0	-12.177	-19.905	2.861	0	0
4	0	-17.408	14.225	-14.225	-22.945	0	-6.865	0
	0.619	-9.45	12.177	0	-2.043	1.407	0	0
	1.238	-7.726	2.117	0	-2.425	8.972	0	-0.01
	1.857	-6.806	0.698	0	-4.28	15.841	0	-0.01
	2.476	-6.374	0.698	0	-7.249	17.241	0	-0.01
	3.095	-5.969	0	-0.755	-9.895	16.165	0	-0.01
	3.714	-6.436	0	-0.755	-12.177	13.138	0	-0.01
	4.333	-6.904	0	-0.755	-14.218	9.017	0	-0.01
	4.952	-7.446	0	-2.043	-16.582	10.343	0	-0.01
	5.571	-9.476	0	-12.476	-19.824	2.949	0	0
5	0	-17.463	14.266	-13.243	-22.884	0	-6.762	0
	0.619	-9.483	12.556	0	-2.531	1.744	0	0
	1.238	-7.64	2.057	0	-2.971	7.404	0	-0.01
	1.857	-6.958	0.405	0	-4.161	15.89	0	-0.01
	2.476	-6.707	0.405	0	-7.179	17.311	0	-0.01
	3.095	-6.865	0	-1.259	-9.901	16.147	0	-0.01
	3.714	-7.65	0	-1.27	-12.277	12.895	0	-0.01
	4.333	-8.436	0	-1.27	-14.458	8.29	0	-0.01
	4.952	-9.221	0	-2.531	-16.437	10.852	0	-0.01
	5.571	-10.788	0	-2.531	-19.691	3.498	0	-0.01
6	0	-18.558	14.113	-14.458	-22.788	0	-6.304	0
	0.619	-10.118	13.15	0	-0.911	5.076	0	0
	1.238	-7.597	1.534	0	-1.8	8.913	0	-0.01
	1.857	-6.647	1.534	0	-2.826	12.246	0	-0.01
	2.476	-5.698	1.534	0	-5.263	19.548	0	-0.01
	3.095	-4.748	1.534	0	-6.931	21.453	0	-0.01
	3.714	-3.799	1.534	0	-8.692	21.521	0	-0.01
	4.333	-2.849	1.534	0	-11.336	21.051	0	-0.01
	4.952	-1.899	1.534	0	-14.491	17.94	0	0
	5.571	-0.95	1.534	0	-17.91	11.087	0	0
	6.19	0	1.534	-21.496	-21.496	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.534	-21.533
2	2.468	-28.65
3	3.209	-27.531
4	2.59	-27.455
5	3.209	-27.531
6	2.468	-28.65
7	1.534	-21.533

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	17.744	-0.985	17.744	0	0	0
	0.619	9.158	14.795	0	14.795	9.158	0	0.01
	1.238	14.828	11.977	-2.023	11.977	14.828	0	0.01
	1.857	17.407	9.374	-4.626	9.374	17.407	0	0.02
	2.476	17.733	7.162	-6.838	7.162	17.733	0	0.02
	3.095	17.743	5.733	-8.267	5.733	17.743	0	0.02
	3.714	16.238	4.372	-9.628	4.372	16.238	0	0.02
	4.333	13.996	2.154	-11.846	2.698	11.692	0	0.02
	4.952	9.641	0	-14.745	1.696	8.398	0	0.01
	5.571	4.654	0.835	-11.165	0.835	4.654	0	0.01
2	0	1.631	0.264	-1.318	20.297	0	-12.462	0
	0.619	4.257	10.618	-1.382	17.99	0	-4.463	0
	1.238	8.937	11.873	-2.175	15.42	2.282	0	0.01
	1.857	11.795	9.446	-4.554	12.707	7.325	0	0.01
	2.476	12.723	7.253	-6.747	10.622	9.409	0	0.01
	3.095	13.393	6.212	-5.788	9.132	11.67	0	0.01
	3.714	12.962	4.851	-7.149	7.287	12.834	0	0.01
	4.333	12.38	5.102	-8.898	5.102	12.38	0	0.01
	4.952	9.879	2.631	-11.369	2.79	7.391	0	0.01
	5.571	5.118	0	-14.028	2.111	4.629	0	0
3	0	2.726	2.084	-0.558	20.004	0	-11.018	0
	0.619	5.811	10.641	-1.359	17.736	0	-3.362	0
	1.238	10.16	11.536	-2.464	15.218	3.041	0	0.01
	1.857	12.74	9.132	-4.868	12.565	7.78	0	0.01
	2.476	13.403	6.847	-5.153	10.344	10.078	0	0.01
	3.095	13.646	5.462	-6.538	8.819	12.234	0	0.01
	3.714	13.202	6.982	-7.018	6.982	13.202	0	0.01
	4.333	12.546	4.828	-9.172	4.828	12.546	0	0.01
	4.952	9.882	2.404	-11.596	2.404	9.882	0	0.01
	5.571	5.023	0	-14.199	1.313	0.904	0	0
4	0	1.716	1.313	-1.313	20.033	0	-10.98	0
	0.619	5.023	14.199	0	17.786	0	-3.33	0
	1.238	9.882	11.596	-2.404	15.285	3.09	0	0.01
	1.857	12.546	9.172	-4.828	12.643	7.861	0	0.01
	2.476	13.202	7.018	-6.982	10.406	9.832	0	0.01
	3.095	13.646	6.538	-5.462	8.82	12.316	0	0.01
	3.714	13.403	5.153	-6.847	7.001	13.329	0	0.01
	4.333	12.74	4.868	-9.132	4.868	12.74	0	0.01
	4.952	10.16	2.464	-11.536	2.474	9.141	0	0.01
	5.571	5.811	1.359	-10.641	1.403	0.96	0	0

5	0	2.726	0.558	-2.084	19.83	0	-11.017	0
	0.619	5.118	14.028	0	17.522	0	-3.378	0
	1.238	9.879	11.369	-2.631	14.977	3.006	0	0.01
	1.857	12.38	8.898	-5.102	12.318	7.686	0	0.01
	2.476	12.962	7.149	-4.851	10.432	9.944	0	0.01
	3.095	13.393	5.788	-6.212	8.765	11.888	0	0.01
	3.714	12.723	6.747	-7.253	6.837	12.612	0	0.01
	4.333	11.795	4.554	-9.446	4.63	11.748	0	0.01
	4.952	8.937	2.175	-11.873	2.252	7.606	0	0.01
	5.571	4.257	1.382	-10.618	1.382	4.257	0	0
6	0	1.631	1.318	-0.264	20.939	0	-12.463	0
	0.619	4.654	11.165	-0.835	18.7	0	-4.188	0.01
	1.238	9.641	14.745	0	16.1	2.929	0	0.01
	1.857	13.996	11.846	-2.154	13.192	8.165	0	0.02
	2.476	16.238	9.628	-4.372	11.108	10.74	0	0.02
	3.095	17.743	8.267	-5.733	9.648	13.471	0	0.02
	3.714	17.733	6.838	-7.162	7.886	15.139	0	0.02
	4.333	17.407	4.626	-9.374	5.787	15.252	0	0.02
	4.952	14.828	2.023	-11.977	3.858	12.556	0	0.01
	5.571	9.158	0	-14.795	2.311	7.235	0	0.01
	6.19	0	0.985	-17.744	0.985	0	0	0

Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	17.744	-0.985	-0.985	0	0	0
	0.619	-0.61	0	-0.985	-2.311	7.235	0	0
	1.238	-1.22	0	-0.985	-3.858	12.556	0	0
	1.857	-1.83	0	-0.985	-5.787	15.252	0	0
	2.476	-2.44	0	-0.985	-7.886	15.139	0	-0.01
	3.095	-3.05	0	-0.985	-9.648	13.471	0	-0.01
	3.714	-3.66	0	-0.985	-11.108	10.74	0	-0.01
	4.333	-4.269	0	-0.985	-13.192	8.165	0	-0.01
	4.952	-4.879	0	-0.985	-16.1	2.929	0	0
	5.571	-10.433	0	-9.769	-18.7	0	-4.188	0
2	0	-17.003	9.978	-16.1	-20.939	0	-12.463	0
	0.619	-10.961	9.386	0	-1.382	4.257	0	0
	1.238	-7.594	2.084	0	-2.252	7.606	0	-0.01
	1.857	-7.085	0.823	0	-4.63	11.748	0	-0.01
	2.476	-6.575	0.823	0	-6.837	12.612	0	-0.01
	3.095	-6.069	0.814	0	-8.765	11.888	0	-0.01
	3.714	-5.565	0.814	0	-10.432	9.944	0	-0.01
	4.333	-5.062	0.814	0	-12.318	7.686	0	-0.01
	4.952	-4.894	0	-1.318	-14.977	3.006	0	-0.01
	5.571	-9.84	0	-8.9	-17.522	0	-3.378	0
3	0	-15.895	14.213	-10.309	-19.83	0	-11.017	0
	0.619	-9.634	9.076	0	-1.403	0.96	0	0
	1.238	-4.783	1.313	0	-2.474	9.141	0	-0.01
	1.857	-4.671	0.037	0	-4.868	12.74	0	-0.01
	2.476	-4.652	0.029	0	-7.001	13.329	0	-0.01

	3.095	-4.634	0.029	0	-8.82	12.316	0	-0.01
	3.714	-4.616	0.029	0	-10.406	9.832	0	-0.01
	4.333	-4.598	0.029	0	-12.643	7.861	0	-0.01
	4.952	-5.121	0	-1.403	-15.285	3.09	0	-0.01
	5.571	-9.884	0	-8.858	-17.786	0	-3.33	0
4	0	-15.942	14.285	-10.282	-20.033	0	-10.98	0
	0.619	-9.884	8.858	0	-1.313	0.904	0	0
	1.238	-5.121	1.403	0	-2.404	9.882	0	-0.01
	1.857	-4.598	0	-0.029	-4.828	12.546	0	-0.01
	2.476	-4.616	0	-0.029	-6.982	13.202	0	-0.01
	3.095	-4.634	0	-0.029	-8.819	12.234	0	-0.01
	3.714	-4.652	0	-0.029	-10.344	10.078	0	-0.01
	4.333	-4.671	0	-0.037	-12.565	7.78	0	-0.01
	4.952	-4.783	0	-1.313	-15.218	3.041	0	-0.01
	5.571	-9.634	0	-9.076	-17.736	0	-3.362	0
5	0	-15.895	10.309	-14.213	-20.004	0	-11.018	0
	0.619	-9.84	8.9	0	-2.111	4.629	0	0
	1.238	-4.894	1.318	0	-2.79	7.391	0	-0.01
	1.857	-5.062	0	-0.814	-5.102	12.38	0	-0.01
	2.476	-5.565	0	-0.814	-7.287	12.834	0	-0.01
	3.095	-6.069	0	-0.814	-9.132	11.67	0	-0.01
	3.714	-6.575	0	-0.823	-10.622	9.409	0	-0.01
	4.333	-7.085	0	-0.823	-12.707	7.325	0	-0.01
	4.952	-7.594	0	-2.084	-15.42	2.282	0	-0.01
	5.571	-10.961	0	-9.386	-17.99	0	-4.463	0
6	0	-17.003	16.1	-9.978	-20.297	0	-12.461	0
	0.619	-10.433	9.769	0	-0.835	4.654	0	0
	1.238	-4.879	0.985	0	-1.696	8.398	0	0
	1.857	-4.269	0.985	0	-2.698	11.692	0	-0.01
	2.476	-3.66	0.985	0	-4.372	16.238	0	-0.01
	3.095	-3.05	0.985	0	-5.733	17.743	0	-0.01
	3.714	-2.44	0.985	0	-7.162	17.733	0	-0.01
	4.333	-1.83	0.985	0	-9.374	17.407	0	0
	4.952	-1.22	0.985	0	-11.977	14.828	0	0
	5.571	-0.61	0.985	0	-14.795	9.158	0	0
	6.19	0	0.985	-17.744	-17.744	0	0	0

Support	Reac. Pos	Reac. Negative
1	0.985	-17.774
2	1.581	-27.279
3	2.642	-25.878
4	1.664	-25.841
5	2.642	-25.878
6	1.581	-27.279
7	0.985	-17.774



Id Ohio 5C1  
 Type Truck  
 Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.47	-1.497	21.47	0	0	0
	0.619	11.029	17.818	0	17.818	11.029	0	0.01
	1.238	17.769	14.353	-2.647	14.353	17.769	0	0.02
	1.857	20.749	11.173	-5.827	11.173	20.749	0	0.02
	2.476	22.088	8.921	-8.079	8.921	22.088	0	0.02
	3.095	21.793	7.041	-9.959	7.041	21.793	0	0.03
	3.714	19.593	5.275	-11.725	5.275	19.593	0	0.02
	4.333	16.486	2.498	-14.502	2.621	11.355	0	0.02
	4.952	10.845	0	-18.078	1.565	7.75	0	0.01
	5.571	3.729	0.669	-11.331	0.669	3.729	0	0.01
2	0	2.485	0.401	-2.007	22.752	0	-6.26	0
	0.619	3.977	11.071	-0.929	19.567	3.575	0	0.01
	1.238	10.852	16.251	-0.893	16.524	2.695	0	0.01
	1.857	15.261	12.988	-4.012	14.758	8.476	0	0.01
	2.476	16.834	9.926	-7.074	12.584	13.275	0	0.02
	3.095	16.421	10.049	-6.951	10.049	16.421	0	0.02
	3.714	17.352	7.196	-9.804	7.196	17.352	0	0.02
	4.333	15.623	4.075	-12.925	4.075	15.623	0	0.01
	4.952	10.978	0.786	-16.214	2.551	0.252	0	0.01
	5.571	3.875	0.891	-11.109	2.551	1.831	0	0.01
3	0	3.412	2.55	-0.757	22.851	0	-6.719	0
	0.619	4.834	10.87	-1.13	19.699	3.035	0	0.01
	1.238	11.334	15.976	-1.024	16.393	10.355	0	0.01
	1.857	15.865	12.702	-4.298	14.568	9.062	0	0.02
	2.476	17.505	9.635	-7.365	12.494	13.509	0	0.02
	3.095	16.585	6.871	-10.129	10.049	16.441	0	0.02
	3.714	17.29	7.269	-9.731	7.269	17.29	0	0.02
	4.333	15.582	4.195	-12.805	4.195	15.582	0	0.01
	4.952	11.01	0.926	-16.074	2.082	7.723	0	0.01
	5.571	3.786	0.883	-11.117	2.043	1.407	0	0.01
4	0	2.672	2.043	-0.547	22.952	0	-6.874	0
	0.619	3.786	11.117	-0.883	19.802	2.932	0	0.01
	1.238	11.01	16.074	-0.926	16.485	10.314	0	0.01
	1.857	15.582	12.805	-4.195	14.598	9.128	0	0.01
	2.476	17.29	9.731	-7.269	12.551	13.599	0	0.02
	3.095	16.585	10.129	-6.871	10.129	16.585	0	0.02
	3.714	17.505	7.365	-9.635	7.365	17.505	0	0.02
	4.333	15.865	4.298	-12.702	4.298	15.865	0	0.02
	4.952	11.334	1.024	-15.976	2.36	8.727	0	0.01
	5.571	4.834	1.13	-10.87	2.066	1.413	0	0.01

5	0	3.412	0.757	-2.55	22.7	0	-6.546	0
	0.619	3.875	11.109	-0.891	19.625	3.051	0	0.01
	1.238	10.978	16.214	-0.786	16.392	10.318	0	0.01
	1.857	15.623	12.925	-4.075	14.376	8.691	0	0.01
	2.476	17.352	9.804	-7.196	12.281	13.03	0	0.02
	3.095	16.421	6.951	-10.049	9.84	15.927	0	0.02
	3.714	16.834	7.074	-9.926	7.083	16.824	0	0.02
	4.333	15.261	4.012	-12.988	4.084	15.217	0	0.01
	4.952	10.852	0.893	-16.251	2.053	7.606	0	0.01
	5.571	3.977	0.929	-11.071	2.007	1.242	0	0.01
6	0	2.485	2.007	-0.401	24.397	0	-8.766	0
	0.619	3.729	11.331	-0.669	21.477	1.765	0	0.01
	1.238	10.845	18.078	0	18.214	10.17	0	0.01
	1.857	16.486	14.502	-2.498	14.924	8.996	0	0.02
	2.476	19.593	11.725	-5.275	13.202	14.107	0	0.02
	3.095	21.793	9.959	-7.041	11.117	18.209	0	0.03
	3.714	22.088	8.079	-8.921	8.666	20.634	0	0.02
	4.333	20.749	5.827	-11.173	6.352	19.773	0	0.02
	4.952	17.769	2.647	-14.353	4.284	15.742	0	0.02
	5.571	11.029	0	-17.818	2.16	9.186	0	0.01
	6.19	0	1.497	-21.47	1.497	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	21.47	-1.497	-1.497	0	0	0
	0.619	-0.927	0	-1.497	-2.16	9.186	0	0
	1.238	-1.853	0	-1.497	-4.284	15.742	0	0
	1.857	-2.78	0	-1.497	-6.352	19.773	0	-0.01
	2.476	-3.707	0	-1.497	-8.666	20.634	0	-0.01
	3.095	-4.634	0	-1.497	-11.117	18.209	0	-0.01
	3.714	-5.56	0	-1.497	-13.202	14.107	0	-0.01
	4.333	-6.487	0	-1.497	-14.924	8.996	0	-0.01
	4.952	-7.414	0	-1.497	-18.214	10.17	0	-0.01
	5.571	-10.408	0	-13.202	-21.477	1.765	0	0
2	0	-18.93	14.758	-14.173	-24.397	0	-8.766	0
	0.619	-10.8	2.551	0	-2.007	1.242	0	-0.01
	1.238	-9.221	2.551	0	-2.053	7.606	0	-0.01
	1.857	-8.065	1.869	0	-4.084	15.217	0	-0.01
	2.476	-6.972	1.741	0	-7.083	16.824	0	-0.01
	3.095	-6.187	0.918	0	-9.84	15.927	0	-0.01
	3.714	-6.195	0	-0.617	-12.281	13.03	0	-0.01
	4.333	-6.691	0	-0.852	-14.376	8.691	0	-0.01
	4.952	-7.455	0	-2.007	-16.392	10.318	0	-0.01
	5.571	-9.803	0	-12.622	-19.625	3.051	0	0
3	0	-18.004	13.658	-14.376	-22.7	0	-6.546	0
	0.619	-9.692	12.494	0	-2.066	1.413	0	0
	1.238	-7.446	2.043	0	-2.36	8.727	0	-0.01
	1.857	-6.6	1.259	0	-4.298	15.865	0	-0.01
	2.476	-5.84	1.208	0	-7.365	17.505	0	-0.01

	3.095	-5.208	0.863	0	-10.129	16.585	0	-0.01
	3.714	-5.789	0	-1.149	-12.551	13.599	0	-0.01
	4.333	-6.509	0	-1.2	-14.598	9.128	0	-0.01
	4.952	-7.537	0	-2.066	-16.485	10.314	0	-0.01
	5.571	-9.801	0	-12.57	-19.802	2.932	0	0
4	0	-18.022	14.35	-14.35	-22.952	0	-6.874	0
	0.619	-9.801	12.57	0	-2.043	1.407	0	0
	1.238	-7.537	2.066	0	-2.082	7.723	0	-0.01
	1.857	-6.509	1.2	0	-4.195	15.582	0	-0.01
	2.476	-5.789	1.149	0	-7.269	17.29	0	-0.01
	3.095	-5.208	0	-0.863	-10.049	16.441	0	-0.01
	3.714	-5.84	0	-1.208	-12.494	13.509	0	-0.01
	4.333	-6.6	0	-1.259	-14.568	9.062	0	-0.01
	4.952	-7.446	0	-2.043	-16.393	10.355	0	-0.01
	5.571	-9.692	0	-12.494	-19.699	3.035	0	0
5	0	-18.004	14.376	-13.658	-22.851	0	-6.719	0
	0.619	-9.803	12.622	0	-2.551	1.831	0	0
	1.238	-7.455	2.007	0	-2.551	0.252	0	-0.01
	1.857	-6.691	0.852	0	-4.075	15.623	0	-0.01
	2.476	-6.195	0.617	0	-7.196	17.352	0	-0.01
	3.095	-6.187	0	-0.918	-10.049	16.421	0	-0.01
	3.714	-6.972	0	-1.741	-12.584	13.275	0	-0.01
	4.333	-8.065	0	-1.869	-14.758	8.476	0	-0.01
	4.952	-9.221	0	-2.551	-16.524	2.695	0	-0.01
	5.571	-10.8	0	-2.551	-19.567	3.575	0	-0.01
6	0	-18.93	14.173	-14.758	-22.752	0	-6.26	0
	0.619	-10.408	13.202	0	-0.669	3.729	0	0
	1.238	-7.414	1.497	0	-1.565	7.75	0	-0.01
	1.857	-6.487	1.497	0	-2.621	11.355	0	-0.01
	2.476	-5.56	1.497	0	-5.275	19.593	0	-0.01
	3.095	-4.634	1.497	0	-7.041	21.793	0	-0.01
	3.714	-3.707	1.497	0	-8.921	22.088	0	-0.01
	4.333	-2.78	1.497	0	-11.173	20.749	0	-0.01
	4.952	-1.853	1.497	0	-14.353	17.769	0	0
	5.571	-0.927	1.497	0	-17.818	11.029	0	0
	6.19	0	1.497	-21.47	-21.47	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.497	-21.507
2	2.409	-28.977
3	3.307	-28.034
4	2.59	-28.051
5	3.307	-28.034
6	2.409	-28.977
7	1.497	-21.507

Section I  
 Unit 13  
 Coped  
 Stringers

Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.945	0	22.945	0	0	0
	0.617	12.08	19.579	0	19.579	12.08	0	0.01
	1.234	19.965	16.179	-0.821	16.179	19.965	0	0.02
	1.851	23.654	12.779	-4.221	12.779	23.654	0	0.03
	2.468	25.174	10.2	-6.8	10.2	25.174	0	0.03
	3.085	26.223	8.5	-8.5	8.5	26.223	0	0.03
	3.702	25.174	6.8	-10.2	6.8	25.174	0	0.03
	4.319	23.654	4.221	-12.779	5.1	22.027	0	0.03
	4.936	19.965	0.821	-16.179	3.4	16.782	0	0.02
	5.553	12.08	0	-19.579	1.7	9.44	0	0.01
	6.17	0	0	-22.945	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	22.945	0	0	0	0	0
	0.617	0	0	0	-1.7	9.44	0	0
	1.234	0	0	0	-3.4	16.782	0	0
	1.851	0	0	0	-5.1	22.027	0	0
	2.468	0	0	0	-6.8	25.174	0	0
	3.085	0	0	0	-8.5	26.223	0	0
	3.702	0	0	0	-10.2	25.174	0	0
	4.319	0	0	0	-12.779	23.654	0	0
	4.936	0	0	0	-16.179	19.965	0	0
	5.553	0	0	0	-19.579	12.08	0	0
	6.17	0	0	-22.945	-22.945	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-22.979
2	0	-22.945

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	18.896	0	18.896	0	0	0
	0.617	9.948	16.124	0	16.124	9.948	0	0.01
	1.234	16.442	13.324	-0.676	13.324	16.442	0	0.02
	1.851	19.48	10.524	-3.476	10.524	19.48	0	0.02
	2.468	20.731	8.4	-5.6	8.4	20.731	0	0.03
	3.085	21.595	7	-7	7	21.595	0	0.03
	3.702	20.731	5.6	-8.4	5.6	20.731	0	0.03
	4.319	19.48	3.476	-10.524	4.2	18.14	0	0.02
	4.936	16.442	0.676	-13.324	2.8	13.821	0	0.02
	5.553	9.948	0	-16.124	1.4	7.774	0	0.01
	6.17	0	0	-18.896	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.896	0	0	0	0	0
	0.617	0	0	0	-1.4	7.774	0	0
	1.234	0	0	0	-2.8	13.821	0	0
	1.851	0	0	0	-4.2	18.14	0	0
	2.468	0	0	0	-5.6	20.731	0	0
	3.085	0	0	0	-7	21.595	0	0
	3.702	0	0	0	-8.4	20.731	0	0
	4.319	0	0	0	-10.524	19.48	0	0
	4.936	0	0	0	-13.324	16.442	0	0
	5.553	0	0	0	-16.124	9.948	0	0
	6.17	0	0	-18.896	-18.896	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-18.924
2	0	-18.924

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.945	0	22.945	0	0	0
	0.617	12.08	19.579	0	19.579	12.08	0	0.01
	1.234	19.965	16.179	-0.821	16.179	19.965	0	0.02
	1.851	23.654	12.779	-4.221	12.779	23.654	0	0.03
	2.468	25.174	10.2	-6.8	10.2	25.174	0	0.03
	3.085	26.223	8.5	-8.5	8.5	26.223	0	0.03
	3.702	25.174	6.8	-10.2	6.8	25.174	0	0.03
	4.319	23.654	4.221	-12.779	5.1	22.027	0	0.03
	4.936	19.965	0.821	-16.179	3.4	16.782	0	0.02
	5.553	12.08	0	-19.579	1.7	9.44	0	0.01
	6.17	0	0	-22.945	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	22.945	0	0	0	0	0
	0.617	0	0	0	-1.7	9.44	0	0
	1.234	0	0	0	-3.4	16.782	0	0
	1.851	0	0	0	-5.1	22.027	0	0
	2.468	0	0	0	-6.8	25.174	0	0
	3.085	0	0	0	-8.5	26.223	0	0
	3.702	0	0	0	-10.2	25.174	0	0
	4.319	0	0	0	-12.779	23.654	0	0
	4.936	0	0	0	-16.179	19.965	0	0
	5.553	0	0	0	-19.579	12.08	0	0
	6.17	0	0	-22.945	-22.945	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-22.979
2	0	-22.979

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	19.98	0	19.98	0	0	0
	0.617	11.106	18	-2	18	11.106	0	0.01
	1.234	19.744	16	-4	16	19.744	0	0.02
	1.851	25.914	14	-6	14	25.914	0	0.03
	2.468	29.616	12	-8	12	29.616	0	0.04
	3.085	30.85	10	-10	10	30.85	0	0.04
	3.702	29.616	8	-12	8	29.616	0	0.04
	4.319	25.914	6	-14	6	25.914	0	0.03
	4.936	19.744	4	-16	4	19.744	0	0.02
	5.553	11.106	2	-18	2	11.106	0	0.01
	6.17	0	0	-19.98	0	0	0	0

Minimums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	19.98	0	0	0	0	0
	0.617	0	0	0	-2	11.106	0	0
	1.234	0	0	0	-4	19.744	0	0
	1.851	0	0	0	-6	25.914	0	0
	2.468	0	0	0	-8	29.616	0	0
	3.085	0	0	0	-10	30.85	0	0
	3.702	0	0	0	-12	29.616	0	0
	4.319	0	0	0	-14	25.914	0	0
	4.936	0	0	0	-16	19.744	0	0
	5.553	0	0	0	-18	11.106	0	0
	6.17	0	0	-19.98	-19.98	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-20
2	0	-20



Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	27.948	0	27.948	0	0	0
	0.617	11.092	17.78	-0.22	24.999	15.425	0	0.01
	1.234	19.719	15.585	-2.415	22.064	27.227	0	0.02
	1.851	25.881	13.39	-4.61	19.167	35.479	0	0.03
	2.468	29.578	11.195	-6.805	16.311	40.255	0	0.04
	3.085	30.811	9	-9	13.494	41.628	0	0.04
	3.702	29.578	6.805	-11.195	10.716	39.67	0	0.04
	4.319	25.881	4.61	-13.39	7.978	34.456	0	0.03
	4.936	19.719	2.415	-15.585	5.279	26.057	0	0.02
	5.553	11.092	0.22	-17.78	2.62	14.547	0	0.01
	6.17	0	0	-27.948	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	27.948	0	0	0	0	0
	0.617	0	0	0	-2.62	14.547	0	0
	1.234	0	0	0	-5.279	26.057	0	0
	1.851	0	0	0	-7.978	34.456	0	0
	2.468	0	0	0	-10.716	39.67	0	0
	3.085	0	0	0	-13.494	41.628	0	0
	3.702	0	0	0	-16.311	40.255	0	0
	4.319	0	0	0	-19.167	35.479	0	0
	4.936	0	0	0	-22.064	27.227	0	0
	5.553	0	0	0	-24.999	15.425	0	0
	6.17	0	0	-27.948	-27.948	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-27.974
2	0	-27.948



Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	31.968	0	31.968	0	0	0
	0.617	17.77	28.8	-3.2	28.8	17.77	0	0.02
	1.234	31.59	25.6	-6.4	25.6	31.59	0	0.04
	1.851	41.462	22.4	-9.6	22.4	41.462	0	0.05
	2.468	47.386	19.2	-12.8	19.2	47.386	0	0.06
	3.085	49.36	16	-16	16	49.36	0	0.06
	3.702	47.386	12.8	-19.2	12.8	47.386	0	0.06
	4.319	41.462	9.6	-22.4	9.6	41.462	0	0.05
	4.936	31.59	6.4	-25.6	6.4	31.59	0	0.04
	5.553	17.77	3.2	-28.8	3.2	17.77	0	0.02
	6.17	0	0	-31.968	0	0	0	0

Minimums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	31.968	0	0	0	0	0
	0.617	0	0	0	-3.2	17.77	0	0
	1.234	0	0	0	-6.4	31.59	0	0
	1.851	0	0	0	-9.6	41.462	0	0
	2.468	0	0	0	-12.8	47.386	0	0
	3.085	0	0	0	-16	49.36	0	0
	3.702	0	0	0	-19.2	47.386	0	0
	4.319	0	0	0	-22.4	41.462	0	0
	4.936	0	0	0	-25.6	31.59	0	0
	5.553	0	0	0	-28.8	17.77	0	0
	6.17	0	0	-31.968	-31.968	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-32
2	0	-32

Id Dead Loads (WS+Deck+Beam+Barriers)

Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-2.449
	0.617	1.36	1.96	0	
	1.234	2.418	1.47	0	
	1.851	3.174	0.98	0	
	2.468	3.627	0.49	0.01	
	3.085	3.778	+0.000/	0.01	
	3.702	3.627	-0.49	0.01	
	4.319	3.174	-0.98	0	
	4.936	2.418	-1.47	0	
	5.553	1.36	-1.96	0	
	6.17	+0.000/	-2.449/	0	-2.449

Section I  
Unit 14  
Copied  
Stringers

Id	Ohio 5C1	
Type	Truck	
Factors:	Moment	1
	Shear	1
	Deflection	1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	23.016	0	23.016	0	0	0
	0.621	12.203	19.65	0	19.65	12.203	0	0.01
	1.242	20.182	16.25	-0.75	16.25	20.182	0	0.02
	1.863	23.939	12.85	-4.15	12.85	23.939	0	0.03
	2.484	25.337	10.2	-6.8	10.2	25.337	0	0.03
	3.105	26.393	8.5	-8.5	8.5	26.393	0	0.04
	3.726	25.337	6.8	-10.2	6.8	25.337	0	0.03
	4.347	23.939	4.15	-12.85	5.1	22.17	0	0.03
	4.968	20.182	0.75	-16.25	3.4	16.891	0	0.02
	5.589	12.203	0	-19.65	1.7	9.501	0	0.01
	6.21	0	0	-23.016	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	23.016	0	0	0	0	0
	0.621	0	0	0	-1.7	9.501	0	0
	1.242	0	0	0	-3.4	16.891	0	0
	1.863	0	0	0	-5.1	22.17	0	0
	2.484	0	0	0	-6.8	25.337	0	0
	3.105	0	0	0	-8.5	26.393	0	0
	3.726	0	0	0	-10.2	25.337	0	0
	4.347	0	0	0	-12.85	23.939	0	0
	4.968	0	0	0	-16.25	20.182	0	0
	5.589	0	0	0	-19.65	12.203	0	0
	6.21	0	0	-23.016	-23.016	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-23.05
2	0	-23.05

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	18.954	0	18.954	0	0	0
	0.621	10.049	16.182	0	16.182	10.049	0	0.01
	1.242	16.621	13.382	-0.618	13.382	16.621	0	0.02
	1.863	19.715	10.582	-3.418	10.582	19.715	0	0.02
	2.484	20.866	8.4	-5.6	8.4	20.866	0	0.03
	3.105	21.735	7	-7	7	21.735	0	0.03
	3.726	20.866	5.6	-8.4	5.6	20.866	0	0.03
	4.347	19.715	3.418	-10.582	4.2	18.257	0	0.02
	4.968	16.621	0.618	-13.382	2.8	13.91	0	0.02
	5.589	10.049	0	-16.182	1.4	7.825	0	0.01
	6.21	0	0	-18.954	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.954	0	0	0	0	0
	0.621	0	0	0	-1.4	7.825	0	0
	1.242	0	0	0	-2.8	13.91	0	0
	1.863	0	0	0	-4.2	18.257	0	0
	2.484	0	0	0	-5.6	20.866	0	0
	3.105	0	0	0	-7	21.735	0	0
	3.726	0	0	0	-8.4	20.866	0	0
	4.347	0	0	0	-10.582	19.715	0	0
	4.968	0	0	0	-13.382	16.621	0	0
	5.589	0	0	0	-16.182	10.049	0	0
	6.21	0	0	-18.954	-18.954	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-18.982
2	0	-18.982

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	23.016	0	23.016	0	0	0
	0.621	12.203	19.65	0	19.65	12.203	0	0.01
	1.242	20.182	16.25	-0.75	16.25	20.182	0	0.02
	1.863	23.939	12.85	-4.15	12.85	23.939	0	0.03
	2.484	25.337	10.2	-6.8	10.2	25.337	0	0.03
	3.105	26.393	8.5	-8.5	8.5	26.393	0	0.04
	3.726	25.337	6.8	-10.2	6.8	25.337	0	0.03
	4.347	23.939	4.15	-12.85	5.1	22.17	0	0.03
	4.968	20.182	0.75	-16.25	3.4	16.891	0	0.02
	5.589	12.203	0	-19.65	1.7	9.501	0	0.01
	6.21	0	0	-23.016	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	23.016	0	0	0	0	0
	0.621	0	0	0	-1.7	9.501	0	0
	1.242	0	0	0	-3.4	16.891	0	0
	1.863	0	0	0	-5.1	22.17	0	0
	2.484	0	0	0	-6.8	25.337	0	0
	3.105	0	0	0	-8.5	26.393	0	0
	3.726	0	0	0	-10.2	25.337	0	0
	4.347	0	0	0	-12.85	23.939	0	0
	4.968	0	0	0	-16.25	20.182	0	0
	5.589	0	0	0	-19.65	12.203	0	0
	6.21	0	0	-23.016	-23.016	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-23.05
2	0	-23.05

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	19.98	0	19.98	0	0	0
	0.621	11.178	18	-2	18	11.178	0	0.01
	1.242	19.872	16	-4	16	19.872	0	0.02
	1.863	26.082	14	-6	14	26.082	0	0.03
	2.484	29.808	12	-8	12	29.808	0	0.04
	3.105	31.05	10	-10	10	31.05	0	0.04
	3.726	29.808	8	-12	8	29.808	0	0.04
	4.347	26.082	6	-14	6	26.082	0	0.03
	4.968	19.872	4	-16	4	19.872	0	0.02
	5.589	11.178	2	-18	2	11.178	0	0.01
	6.21	0	0	-19.98	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	19.98	0	0	0	0	0
	0.621	0	0	0	-2	11.178	0	0
	1.242	0	0	0	-4	19.872	0	0
	1.863	0	0	0	-6	26.082	0	0
	2.484	0	0	0	-8	29.808	0	0
	3.105	0	0	0	-10	31.05	0	0
	3.726	0	0	0	-12	29.808	0	0
	4.347	0	0	0	-14	26.082	0	0
	4.968	0	0	0	-16	19.872	0	0
	5.589	0	0	0	-18	11.178	0	0
	6.21	0	0	-19.98	-19.98	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-20
2	0	-20



Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.961	0	27.961	0	0	0
	0.621	11.171	17.79	-0.21	25.01	15.531	0	0.01
	1.242	19.859	15.592	-2.408	22.072	27.413	0	0.02
	1.863	26.065	13.395	-4.605	19.174	35.721	0	0.03
	2.484	29.789	11.197	-6.803	16.315	40.527	0	0.04
	3.105	31.03	9	-9	13.497	41.908	0	0.04
	3.726	29.789	6.803	-11.197	10.718	39.935	0	0.04
	4.347	26.065	4.605	-13.395	7.979	34.684	0	0.03
	4.968	19.859	2.408	-15.592	5.279	26.229	0	0.02
	5.589	11.171	0.21	-17.79	2.62	14.642	0	0.01
	6.21	0	0	-27.961	0	0	0	0

Minimums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.961	0	0	0	0	0
	0.621	0	0	0	-2.62	14.642	0	0
	1.242	0	0	0	-5.279	26.229	0	0
	1.863	0	0	0	-7.979	34.684	0	0
	2.484	0	0	0	-10.718	39.935	0	0
	3.105	0	0	0	-13.497	41.908	0	0
	3.726	0	0	0	-16.315	40.527	0	0
	4.347	0	0	0	-19.174	35.721	0	0
	4.968	0	0	0	-22.072	27.413	0	0
	5.589	0	0	0	-25.01	15.531	0	0
	6.21	0	0	-27.961	-27.961	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-27.987
2	0	-27.961

Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	31.968	0	31.968	0	0	0
	0.621	17.885	28.8	-3.2	28.8	17.885	0	0.02
	1.242	31.795	25.6	-6.4	25.6	31.795	0	0.04
	1.863	41.731	22.4	-9.6	22.4	41.731	0	0.05
	2.484	47.693	19.2	-12.8	19.2	47.693	0	0.06
	3.105	49.68	16	-16	16	49.68	0	0.07
	3.726	47.693	12.8	-19.2	12.8	47.693	0	0.06
	4.347	41.731	9.6	-22.4	9.6	41.731	0	0.05
	4.968	31.795	6.4	-25.6	6.4	31.795	0	0.04
	5.589	17.885	3.2	-28.8	3.2	17.885	0	0.02
	6.21	0	0	-31.968	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	31.968	0	0	0	0	0
	0.621	0	0	0	-3.2	17.885	0	0
	1.242	0	0	0	-6.4	31.795	0	0
	1.863	0	0	0	-9.6	41.731	0	0
	2.484	0	0	0	-12.8	47.693	0	0
	3.105	0	0	0	-16	49.68	0	0
	3.726	0	0	0	-19.2	47.693	0	0
	4.347	0	0	0	-22.4	41.731	0	0
	4.968	0	0	0	-25.6	31.795	0	0
	5.589	0	0	0	-28.8	17.885	0	0
	6.21	0	0	-31.968	-31.968	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-32
2	0	-32



Id Dead Loads (WS+Deck+Beam+Barriers)

Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-2.465
	0.621	1.378	1.972	0	
	1.242	2.45	1.479	0	
	1.863	3.215	0.986	0.01	
	2.484	3.674	0.493	0.01	
	3.105	3.827	+0.000/	0.01	
	3.726	3.674	-0.493	0.01	
	4.347	3.215	-0.986	0.01	
	4.968	2.45	-1.479	0	
	5.589	1.378	-1.972	0	
	6.21	-0.000/	-2.465/	0	-2.465

Section I  
Unit 18  
Coped  
Stringers

Id Ohio 5C1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.945	0	22.945	0	0	0
	0.617	12.08	19.579	0	19.579	12.08	0	0.01
	1.234	19.965	16.179	-0.821	16.179	19.965	0	0.02
	1.851	23.654	12.779	-4.221	12.779	23.654	0	0.03
	2.468	25.174	10.2	-6.8	10.2	25.174	0	0.03
	3.085	26.223	8.5	-8.5	8.5	26.223	0	0.03
	3.702	25.174	6.8	-10.2	6.8	25.174	0	0.03
	4.319	23.654	4.221	-12.779	5.1	22.027	0	0.03
	4.936	19.965	0.821	-16.179	3.4	16.782	0	0.02
	5.553	12.08	0	-19.579	1.7	9.44	0	0.01
	6.17	0	0	-22.945	0	0	0	0

Minimums table:

Span	Location	Moment(r)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	22.945	0	0	0	0	0
	0.617	0	0	0	-1.7	9.44	0	0
	1.234	0	0	0	-3.4	16.782	0	0
	1.851	0	0	0	-5.1	22.027	0	0
	2.468	0	0	0	-6.8	25.174	0	0
	3.085	0	0	0	-8.5	26.223	0	0
	3.702	0	0	0	-10.2	25.174	0	0
	4.319	0	0	0	-12.779	23.654	0	0
	4.936	0	0	0	-16.179	19.965	0	0
	5.553	0	0	0	-19.579	12.08	0	0
	6.17	0	0	-22.945	-22.945	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-22.979
2	0	-22.945



Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	18.896	0	18.896	0	0	0
	0.617	9.948	16.124	0	16.124	9.948	0	0.01
	1.234	16.442	13.324	-0.676	13.324	16.442	0	0.02
	1.851	19.48	10.524	-3.476	10.524	19.48	0	0.02
	2.468	20.731	8.4	-5.6	8.4	20.731	0	0.03
	3.085	21.595	7	-7	7	21.595	0	0.03
	3.702	20.731	5.6	-8.4	5.6	20.731	0	0.03
	4.319	19.48	3.476	-10.524	4.2	18.14	0	0.02
	4.936	16.442	0.676	-13.324	2.8	13.821	0	0.02
	5.553	9.948	0	-16.124	1.4	7.774	0	0.01
	6.17	0	0	-18.896	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.896	0	0	0	0	0
	0.617	0	0	0	-1.4	7.774	0	0
	1.234	0	0	0	-2.8	13.821	0	0
	1.851	0	0	0	-4.2	18.14	0	0
	2.468	0	0	0	-5.6	20.731	0	0
	3.085	0	0	0	-7	21.595	0	0
	3.702	0	0	0	-8.4	20.731	0	0
	4.319	0	0	0	-10.524	19.48	0	0
	4.936	0	0	0	-13.324	16.442	0	0
	5.553	0	0	0	-16.124	9.948	0	0
	6.17	0	0	-18.896	-18.896	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-18.924
2	0	-18.924

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	22.945	0	22.945	0	0	0
	0.617	12.08	19.579	0	19.579	12.08	0	0.01
	1.234	19.965	16.179	-0.821	16.179	19.965	0	0.02
	1.851	23.654	12.779	-4.221	12.779	23.654	0	0.03
	2.468	25.174	10.2	-6.8	10.2	25.174	0	0.03
	3.085	26.223	8.5	-8.5	8.5	26.223	0	0.03
	3.702	25.174	6.8	-10.2	6.8	25.174	0	0.03
	4.319	23.654	4.221	-12.779	5.1	22.027	0	0.03
	4.936	19.965	0.821	-16.179	3.4	16.782	0	0.02
	5.553	12.08	0	-19.579	1.7	9.44	0	0.01
	6.17	0	0	-22.945	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	22.945	0	0	0	0	0
	0.617	0	0	0	-1.7	9.44	0	0
	1.234	0	0	0	-3.4	16.782	0	0
	1.851	0	0	0	-5.1	22.027	0	0
	2.468	0	0	0	-6.8	25.174	0	0
	3.085	0	0	0	-8.5	26.223	0	0
	3.702	0	0	0	-10.2	25.174	0	0
	4.319	0	0	0	-12.779	23.654	0	0
	4.936	0	0	0	-16.179	19.965	0	0
	5.553	0	0	0	-19.579	12.08	0	0
	6.17	0	0	-22.945	-22.945	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-22.979
2	0	-22.979



Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	19.98	0	19.98	0	0	0
	0.617	11.106	18	-2	18	11.106	0	0.01
	1.234	19.744	16	-4	16	19.744	0	0.02
	1.851	25.914	14	-6	14	25.914	0	0.03
	2.468	29.616	12	-8	12	29.616	0	0.04
	3.085	30.85	10	-10	10	30.85	0	0.04
	3.702	29.616	8	-12	8	29.616	0	0.04
	4.319	25.914	6	-14	6	25.914	0	0.03
	4.936	19.744	4	-16	4	19.744	0	0.02
	5.553	11.106	2	-18	2	11.106	0	0.01
	6.17	0	0	-19.98	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	19.98	0	0	0	0	0
	0.617	0	0	0	-2	11.106	0	0
	1.234	0	0	0	-4	19.744	0	0
	1.851	0	0	0	-6	25.914	0	0
	2.468	0	0	0	-8	29.616	0	0
	3.085	0	0	0	-10	30.85	0	0
	3.702	0	0	0	-12	29.616	0	0
	4.319	0	0	0	-14	25.914	0	0
	4.936	0	0	0	-16	19.744	0	0
	5.553	0	0	0	-18	11.106	0	0
	6.17	0	0	-19.98	-19.98	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-20
2	0	-20

Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	27.948	0	27.948	0	0	0
	0.617	11.092	17.78	-0.22	24.999	15.425	0	0.01
	1.234	19.719	15.585	-2.415	22.064	27.227	0	0.02
	1.851	25.881	13.39	-4.61	19.167	35.479	0	0.03
	2.468	29.578	11.195	-6.805	16.311	40.255	0	0.04
	3.085	30.811	9	-9	13.494	41.628	0	0.04
	3.702	29.578	6.805	-11.195	10.716	39.67	0	0.04
	4.319	25.881	4.61	-13.39	7.978	34.456	0	0.03
	4.936	19.719	2.415	-15.585	5.279	26.057	0	0.02
	5.553	11.092	0.22	-17.78	2.62	14.547	0	0.01
	6.17	0	0	-27.948	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	27.948	0	0	0	0	0
	0.617	0	0	0	-2.62	14.547	0	0
	1.234	0	0	0	-5.279	26.057	0	0
	1.851	0	0	0	-7.978	34.456	0	0
	2.468	0	0	0	-10.716	39.67	0	0
	3.085	0	0	0	-13.494	41.628	0	0
	3.702	0	0	0	-16.311	40.255	0	0
	4.319	0	0	0	-19.167	35.479	0	0
	4.936	0	0	0	-22.064	27.227	0	0
	5.553	0	0	0	-24.999	15.425	0	0
	6.17	0	0	-27.948	-27.948	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-27.974
2	0	-27.948



Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	31.968	0	31.968	0	0	0
	0.617	17.77	28.8	-3.2	28.8	17.77	0	0.02
	1.234	31.59	25.6	-6.4	25.6	31.59	0	0.04
	1.851	41.462	22.4	-9.6	22.4	41.462	0	0.05
	2.468	47.386	19.2	-12.8	19.2	47.386	0	0.06
	3.085	49.36	16	-16	16	49.36	0	0.06
	3.702	47.386	12.8	-19.2	12.8	47.386	0	0.06
	4.319	41.462	9.6	-22.4	9.6	41.462	0	0.05
	4.936	31.59	6.4	-25.6	6.4	31.59	0	0.04
	5.553	17.77	3.2	-28.8	3.2	17.77	0	0.02
	6.17	0	0	-31.968	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	31.968	0	0	0	0	0
	0.617	0	0	0	-3.2	17.77	0	0
	1.234	0	0	0	-6.4	31.59	0	0
	1.851	0	0	0	-9.6	41.462	0	0
	2.468	0	0	0	-12.8	47.386	0	0
	3.085	0	0	0	-16	49.36	0	0
	3.702	0	0	0	-19.2	47.386	0	0
	4.319	0	0	0	-22.4	41.462	0	0
	4.936	0	0	0	-25.6	31.59	0	0
	5.553	0	0	0	-28.8	17.77	0	0
	6.17	0	0	-31.968	-31.968	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-32
2	0	-32

Id Dead Loads (WS+Deck+Beam+Barriers)

Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear ( K)	Deflect (in)	Reaction ( K)
1	0	+0.000/	+0.000/	0	-2.449
	0.617	1.36	1.96	0	
	1.234	2.418	1.47	0	
	1.851	3.174	0.98	0	
	2.468	3.627	0.49	0.01	
	3.085	3.778	+0.000/	0.01	
	3.702	3.627	-0.49	0.01	
	4.319	3.174	-0.98	0	
	4.936	2.418	-1.47	0	
	5.553	1.36	-1.96	0	
	6.17	+0.000/	-2.449/	0	-2.449



SECTION 5  
 UNIT 19  
 Coped  
 Stringers

Id Ohio 5C1  
 Type Truck  
 Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	23.016	0	23.016	0	0	0
	0.621	12.203	19.65	0	19.65	12.203	0	0.01
	1.242	20.182	16.25	-0.75	16.25	20.182	0	0.02
	1.863	23.939	12.85	-4.15	12.85	23.939	0	0.03
	2.484	25.337	10.2	-6.8	10.2	25.337	0	0.03
	3.105	26.393	8.5	-8.5	8.5	26.393	0	0.04
	3.726	25.337	6.8	-10.2	6.8	25.337	0	0.03
	4.347	23.939	4.15	-12.85	5.1	22.17	0	0.03
	4.968	20.182	0.75	-16.25	3.4	16.891	0	0.02
	5.589	12.203	0	-19.65	1.7	9.501	0	0.01
	6.21	0	0	-23.016	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	23.016	0	0	0	0	0
	0.621	0	0	0	-1.7	9.501	0	0
	1.242	0	0	0	-3.4	16.891	0	0
	1.863	0	0	0	-5.1	22.17	0	0
	2.484	0	0	0	-6.8	25.337	0	0
	3.105	0	0	0	-8.5	26.393	0	0
	3.726	0	0	0	-10.2	25.337	0	0
	4.347	0	0	0	-12.85	23.939	0	0
	4.968	0	0	0	-16.25	20.182	0	0
	5.589	0	0	0	-19.65	12.203	0	0
	6.21	0	0	-23.016	-23.016	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-23.05
2	0	-23.05

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	18.954	0	18.954	0	0	0
	0.621	10.049	16.182	0	16.182	10.049	0	0.01
	1.242	16.621	13.382	-0.618	13.382	16.621	0	0.02
	1.863	19.715	10.582	-3.418	10.582	19.715	0	0.02
	2.484	20.866	8.4	-5.6	8.4	20.866	0	0.03
	3.105	21.735	7	-7	7	21.735	0	0.03
	3.726	20.866	5.6	-8.4	5.6	20.866	0	0.03
	4.347	19.715	3.418	-10.582	4.2	18.257	0	0.02
	4.968	16.621	0.618	-13.382	2.8	13.91	0	0.02
	5.589	10.049	0	-16.182	1.4	7.825	0	0.01
	6.21	0	0	-18.954	0	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	18.954	0	0	0	0	0
	0.621	0	0	0	-1.4	7.825	0	0
	1.242	0	0	0	-2.8	13.91	0	0
	1.863	0	0	0	-4.2	18.257	0	0
	2.484	0	0	0	-5.6	20.866	0	0
	3.105	0	0	0	-7	21.735	0	0
	3.726	0	0	0	-8.4	20.866	0	0
	4.347	0	0	0	-10.582	19.715	0	0
	4.968	0	0	0	-13.382	16.621	0	0
	5.589	0	0	0	-16.182	10.049	0	0
	6.21	0	0	-18.954	-18.954	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-18.982
2	0	-18.982

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	23.016	0	23.016	0	0	0
	0.621	12.203	19.65	0	19.65	12.203	0	0.01
	1.242	20.182	16.25	-0.75	16.25	20.182	0	0.02
	1.863	23.939	12.85	-4.15	12.85	23.939	0	0.03
	2.484	25.337	10.2	-6.8	10.2	25.337	0	0.03
	3.105	26.393	8.5	-8.5	8.5	26.393	0	0.04
	3.726	25.337	6.8	-10.2	6.8	25.337	0	0.03
	4.347	23.939	4.15	-12.85	5.1	22.17	0	0.03
	4.968	20.182	0.75	-16.25	3.4	16.891	0	0.02
	5.589	12.203	0	-19.65	1.7	9.501	0	0.01
	6.21	0	0	-23.016	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	23.016	0	0	0	0	0
	0.621	0	0	0	-1.7	9.501	0	0
	1.242	0	0	0	-3.4	16.891	0	0
	1.863	0	0	0	-5.1	22.17	0	0
	2.484	0	0	0	-6.8	25.337	0	0
	3.105	0	0	0	-8.5	26.393	0	0
	3.726	0	0	0	-10.2	25.337	0	0
	4.347	0	0	0	-12.85	23.939	0	0
	4.968	0	0	0	-16.25	20.182	0	0
	5.589	0	0	0	-19.65	12.203	0	0
	6.21	0	0	-23.016	-23.016	0	0	0

Support    Reac. Pos    Reac. Negative  
 1            0            -23.05  
 2            0            -23.05



Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	19.98	0	19.98	0	0	0
	0.621	11.178	18	-2	18	11.178	0	0.01
	1.242	19.872	16	-4	16	19.872	0	0.02
	1.863	26.082	14	-6	14	26.082	0	0.03
	2.484	29.808	12	-8	12	29.808	0	0.04
	3.105	31.05	10	-10	10	31.05	0	0.04
	3.726	29.808	8	-12	8	29.808	0	0.04
	4.347	26.082	6	-14	6	26.082	0	0.03
	4.968	19.872	4	-16	4	19.872	0	0.02
	5.589	11.178	2	-18	2	11.178	0	0.01
	6.21	0	0	-19.98	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	19.98	0	0	0	0	0
	0.621	0	0	0	-2	11.178	0	0
	1.242	0	0	0	-4	19.872	0	0
	1.863	0	0	0	-6	26.082	0	0
	2.484	0	0	0	-8	29.808	0	0
	3.105	0	0	0	-10	31.05	0	0
	3.726	0	0	0	-12	29.808	0	0
	4.347	0	0	0	-14	26.082	0	0
	4.968	0	0	0	-16	19.872	0	0
	5.589	0	0	0	-18	11.178	0	0
	6.21	0	0	-19.98	-19.98	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-20
2	0	-20

Id HS20 Lane Load  
 Type Lane Load

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	27.961	0	27.961	0	0	0
	0.621	11.171	17.79	-0.21	25.01	15.531	0	0.01
	1.242	19.859	15.592	-2.408	22.072	27.413	0	0.02
	1.863	26.065	13.395	-4.605	19.174	35.721	0	0.03
	2.484	29.789	11.197	-6.803	16.315	40.527	0	0.04
	3.105	31.03	9	-9	13.497	41.908	0	0.04
	3.726	29.789	6.803	-11.197	10.718	39.935	0	0.04
	4.347	26.065	4.605	-13.395	7.979	34.684	0	0.03
	4.968	19.859	2.408	-15.592	5.279	26.229	0	0.02
	5.589	11.171	0.21	-17.79	2.62	14.642	0	0.01
	6.21	0	0	-27.961	0	0	0	0

Minimums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Moment	Corr. Moment	Deflect(min)
1	0	0	27.961	0	0	0	0	0
	0.621	0	0	0	-2.62	14.642	0	0
	1.242	0	0	0	-5.279	26.229	0	0
	1.863	0	0	0	-7.979	34.684	0	0
	2.484	0	0	0	-10.718	39.935	0	0
	3.105	0	0	0	-13.497	41.908	0	0
	3.726	0	0	0	-16.315	40.527	0	0
	4.347	0	0	0	-19.174	35.721	0	0
	4.968	0	0	0	-22.072	27.413	0	0
	5.589	0	0	0	-25.01	15.531	0	0
	6.21	0	0	-27.961	-27.961	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-27.987
2	0	-27.961



Id HS20  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	31.968	0	31.968	0	0	0
	0.621	17.885	28.8	-3.2	28.8	17.885	0	0.02
	1.242	31.795	25.6	-6.4	25.6	31.795	0	0.04
	1.863	41.731	22.4	-9.6	22.4	41.731	0	0.05
	2.484	47.693	19.2	-12.8	19.2	47.693	0	0.06
	3.105	49.68	16	-16	16	49.68	0	0.07
	3.726	47.693	12.8	-19.2	12.8	47.693	0	0.06
	4.347	41.731	9.6	-22.4	9.6	41.731	0	0.05
	4.968	31.795	6.4	-25.6	6.4	31.795	0	0.04
	5.589	17.885	3.2	-28.8	3.2	17.885	0	0.02
	6.21	0	0	-31.968	0	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (min)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	31.968	0	0	0	0	0
	0.621	0	0	0	-3.2	17.885	0	0
	1.242	0	0	0	-6.4	31.795	0	0
	1.863	0	0	0	-9.6	41.731	0	0
	2.484	0	0	0	-12.8	47.693	0	0
	3.105	0	0	0	-16	49.68	0	0
	3.726	0	0	0	-19.2	47.693	0	0
	4.347	0	0	0	-22.4	41.731	0	0
	4.968	0	0	0	-25.6	31.795	0	0
	5.589	0	0	0	-28.8	17.885	0	0
	6.21	0	0	-31.968	-31.968	0	0	0

Support	Reac. Pos	Reac. Negative
1	0	-32
2	0	-32

Id Dead Loads (WS+Deck+Beam+Barriers)

Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-2.465
	0.621	1.378	1.972	0	
	1.242	2.45	1.479	0	
	1.863	3.215	0.986	0.01	
	2.484	3.674	0.493	0.01	
	3.105	3.827	+0.000/	0.01	
	3.726	3.674	-0.493	0.01	
	4.347	3.215	-0.986	0.01	
	4.968	2.45	-1.479	0	
	5.589	1.378	-1.972	0	
	6.21	-0.000/	-2.465/	0	-2.465

SECTION I

Continuous Stringers (1-4) On Unit 1



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/7/2012

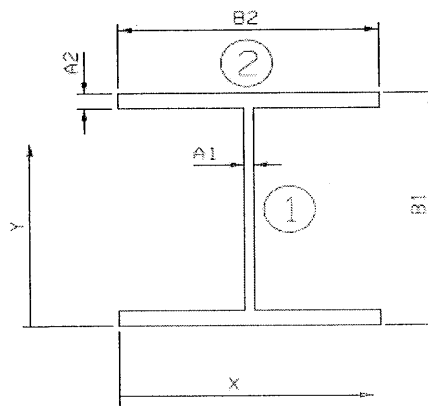
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

**Element Dimensions (without Section Losses):**

$A_1 = t_w = 0.3600$  in  
 $A_2 = t_f = 0.5600$  in  
 $B_1 = d = 8.2500$  in  
 $B_2 = b_f = 8.0700$  in



**W 8X40**  
**Continuous Stringers (1-4) On Unit 1**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		2.5668	4.1250	10.5881	10.8740	0.0000	0.0000	10.8740
2	Top Flange		4.5192	7.9700	36.0180	0.1181	3.8450	66.8120	66.9301
	Bottom Flange		4.5192	0.2800	1.2654	0.1181	3.8450	66.8120	66.9301
<b>Total</b>			<b>11.61</b>		<b>47.87</b>	<b>11.11</b>		<b>133.62</b>	<b>144.73</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	4.1250	in	S <sub>top</sub> = 35.09 in <sup>3</sup>	y-bar =	4.1250	in	S <sub>top</sub> = 35.09 in <sup>3</sup>
I <sub>x</sub> =	144.73	in <sup>4</sup>	S <sub>bottom</sub> = 35.09 in <sup>3</sup>	I <sub>x</sub> =	144.73	in <sup>4</sup>	S <sub>bottom</sub> = 35.09 in <sup>3</sup>
C <sub>top</sub> =	4.1250	in	A = 11.6052 in <sup>2</sup>	C <sub>top</sub> =	4.1250	in	A = 11.6052 in <sup>2</sup>
C <sub>bottom</sub> =	4.1250	in	r <sub>x</sub> = 3.5315 in	C <sub>bottom</sub> =	4.1250	in	r <sub>x</sub> = 3.5315 in
			Z = 39.33 in <sup>3</sup>				Z = 50.00 in <sup>3</sup>





Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For:

### Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
<b>M</b>	105.26 k-ft	105.26 k-ft
<b>V</b>	53.59 k	53.59 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	36.00 ksi
------------------------	-----------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

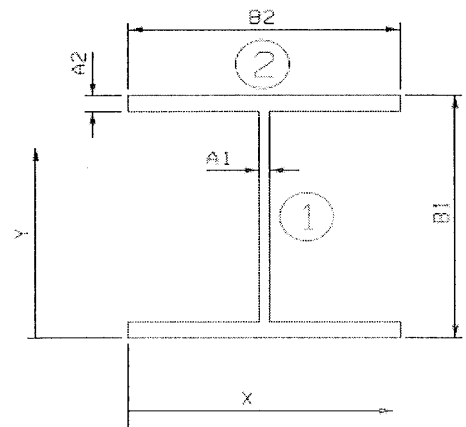
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

## Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3150$  in
- $A_2 = t_f = 0.5300$  in
- $B_1 = d = 9.9200$  in
- $B_2 = b_f = 7.9900$  in



**W 10X39**  
 Stringer Units 2 & 10 Rolled Beam

## X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		2.7909	4.9600	13.8429	18.2570	0.0000	0.0000	18.2570
2	Top Flange		4.2347	9.6550	40.8860	0.0991	4.6950	93.3456	93.4447
	Bottom Flange		4.2347	0.2650	1.1222	0.0991	4.6950	93.3456	93.4447
<b>Total</b>			<b>11.26</b>		<b>55.85</b>	<b>18.46</b>		<b>186.69</b>	<b>205.15</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties					As-Inspected Section Properties						
y-bar =	4.9600	in	$S_{top} =$	41.36	in <sup>3</sup>	y-bar =	4.9600	in	$S_{top} =$	41.36	in <sup>3</sup>
$I_x =$	205.15	in <sup>4</sup>	$S_{bott.} =$	41.36	in <sup>3</sup>	$I_x =$	205.15	in <sup>4</sup>	$S_{bott.} =$	41.36	in <sup>3</sup>
$C_{top} =$	4.9600	in	A =	11.2603	in <sup>2</sup>	$C_{top} =$	4.9600	in	A =	11.2603	in <sup>2</sup>
$C_{bottom} =$	4.9600	in	$r_x =$	4.2683	in	$C_{bottom} =$	4.9600	in	$r_x =$	4.2683	in
			Z =	45.95	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	124.08 k-ft	124.08 k-ft
V	58.27 k	58.27 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

*f<sub>y</sub> - Moment Only*

**SECTION I**

**Coped Stringers (1-4) On Unit 2 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2011  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

**Partial W-Section**

$A_1 = b_f = 7.9900$  in ✓  
 $B_1 = t_f = 0.5300$  in ✓  
 $C_1 = d = 7.7500$  in ✓  
 $D_1 = t_w = 0.3150$  in ✓

**Left Angle:**

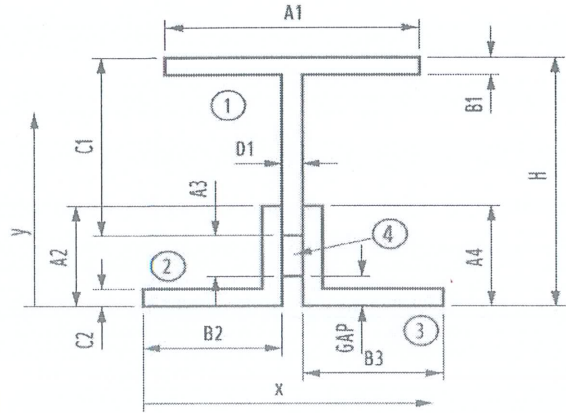
$A_2 = L_v = 6.0000$  in ✓  
 $B_2 = L_h = 4.0000$  in ✓  
 $C_2 = t = 0.5000$  in ✓

**Right Angle:**

$A_4 = L_v = 6.0000$  in ✓  
 $B_3 = L_h = 4.0000$  in ✓  
 $C_3 = t = 0.5000$  in ✓

**Miscellaneous:**

$H = 8.2500$  in ✓  
 $Gap = 0.5000$  in ✓



**Coped Stringers (1-4) On Unit 2 @ Critical Support**

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange	4.2347	7.9850	33.8141	0.0991	4.1099	71.5295	71.6287
	Web	2.2743	4.1100	9.3474	9.8796	0.2349	0.1255	10.0051
2	Horizontal Legs	1.7500	0.2500	0.4375	0.0365	3.6251	22.9973	23.0338
	Vertical Legs	3.0000	3.0000	9.0000	9.0000	0.8751	2.2974	11.2974
3	Horizontal Legs	1.7500	0.2500	0.4375	0.0365	3.6251	22.9973	23.0338
	Vertical Legs	3.0000	3.0000	9.0000	9.0000	0.8751	2.2974	11.2974
<b>Total</b>		<b>16.01</b>		<b>62.04</b>	<b>28.05</b>		<b>122.24</b>	<b>150.30</b>
Section Losses		A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



**SECTION I**

**Coped Stringers (1-4) On Unit 2 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2011  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	3.8751 in	S <sub>top</sub> =	34.35 in <sup>3</sup>	y-bar =	3.8751 in	S <sub>top</sub> =	34.35 in <sup>3</sup>
I <sub>x</sub> =	150.30 in <sup>4</sup>	S <sub>bottom</sub> =	38.79 in <sup>3</sup>	I <sub>x</sub> =	150.30 in <sup>4</sup>	S <sub>bottom</sub> =	38.79 in <sup>3</sup>
C <sub>top</sub> =	4.3749 in	A =	16.0090 in <sup>2</sup>	C <sub>top</sub> =	4.3749 in	A =	16.0090 in <sup>2</sup>
C <sub>bottom</sub> =	3.8751 in	r <sub>x</sub> =	3.0640 in	C <sub>bottom</sub> =	3.8751 in	r <sub>x</sub> =	3.0640 in

Min Vertical Leg + Web +

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		4.2347	4.1575	17.6058	22.5286	0.0000	0.0000	22.5286
	Web		2.2743	4.1575	9.4554	0.0188	0.0000	0.0000	0.0188
2 (Left)	Horizontal Leg		1.7500	1.7500	3.0625	1.7865	2.4075	10.1431	11.9296
	Vertical Leg		3.0000	3.7500	11.2500	0.0625	0.4075	0.4982	0.5607
3 (Right)	Horizontal Leg		1.7500	6.5650	11.4888	1.7865	2.4075	10.1431	11.9296
	Vertical Leg		3.0000	4.5650	13.6950	0.0625	0.4075	0.4982	0.5607
<b>Total</b>			<b>16.01</b>		<b>66.56</b>	<b>26.25</b>		<b>21.28</b>	<b>47.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	4.1575 in	S <sub>right</sub> =	11.43 in <sup>3</sup>	x-bar =	4.1575 in	S <sub>right</sub> =	11.43 in <sup>3</sup>
I <sub>y</sub> =	47.53 in <sup>4</sup>	S <sub>left</sub> =	11.43 in <sup>3</sup>	I <sub>y</sub> =	47.53 in <sup>4</sup>	S <sub>left</sub> =	11.43 in <sup>3</sup>
C <sub>right</sub> =	4.1575 in	A =	16.0090 in <sup>2</sup>	C <sub>right</sub> =	4.1575 in	A =	16.0090 in <sup>2</sup>
C <sub>left</sub> =	4.1575 in	r <sub>y</sub> =	1.7230 in	C <sub>left</sub> =	4.1575 in	r <sub>y</sub> =	1.7230 in

**Stringer Capacity**

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

Non-composite Capacities*		
	AB	AI
<b>M</b>	131.52 k-ft	131.52 k-ft
<b>V</b>	162.33 k	162.33 k

F<sub>y</sub> = 36.00 ksi

\*Compact Section

← Shear only

**SECTION I**

**Coped Stringers (1-4) on Unit 5 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2011  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

**Partial W-Section**

$A_1 = b_f = 8.0100$  in ✓  
 $B_1 = t_f = 0.5150$  in ✓  
 $C_1 = d = 10.2500$  in ✓  
 $D_1 = t_w = 0.2950$  in ✓

**Left Angle:**

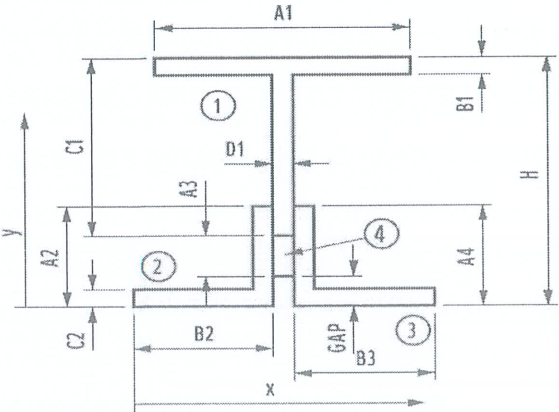
$A_2 = L_v = 6.0000$  in ✓  
 $B_2 = L_h = 4.0000$  in ✓  
 $C_2 = t = 0.5000$  in ✓

**Right Angle:**

$A_4 = L_v = 6.0000$  in ✓  
 $B_3 = L_h = 4.0000$  in ✓  
 $C_3 = t = 0.5000$  in ✓

**Miscellaneous:**

$H = 10.7500$  in ✓  
 $Gap = 0.5000$  in ✓



**Coped Stringers (1-4) On Unit 5 @ Critical Support**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		4.1252	10.4925	43.2831	0.0912	5.7903	138.3046	138.3958
	Web		2.8718	5.3675	15.4145	22.6803	0.6653	1.2710	23.9513
2	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	4.4522	34.6892	34.7257
	Vertical Legs		3.0000	3.0000	9.0000	9.0000	1.7022	8.6928	17.6928
3	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	4.4522	34.6892	34.7257
	Vertical Legs		3.0000	3.0000	9.0000	9.0000	1.7022	8.6928	17.6928
<b>Total</b>			<b>16.50</b>		<b>77.57</b>	<b>40.84</b>		<b>226.34</b>	<b>267.18</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



**SECTION I**

**Coped Stringers (1-4) on Unit 5 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2011  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	4.7022	in	S <sub>top</sub> =	44.18	in <sup>3</sup>	y-bar =	4.7022	in	S <sub>top</sub> =	44.18	in <sup>3</sup>
I <sub>x</sub> =	267.18	in <sup>4</sup>	S <sub>bott.</sub> =	56.82	in <sup>3</sup>	I <sub>x</sub> =	267.18	in <sup>4</sup>	S <sub>bott.</sub> =	56.82	in <sup>3</sup>
C <sub>top</sub> =	6.0478	in	A =	16.4970	in <sup>2</sup>	C <sub>top</sub> =	6.0478	in	A =	16.4970	in <sup>2</sup>
C <sub>bottom</sub> =	4.7022	in	r <sub>x</sub> =	4.0244	in	C <sub>bottom</sub> =	4.7022	in	r <sub>x</sub> =	4.0244	in

Min Vertical Leg + Web

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		4.1252	4.1475	17.1091	22.0558	0.0000	0.0000	22.0558
	Web		2.8718	4.1475	11.9109	0.0208	0.0000	0.0000	0.0208
2 (Left)	Horizontal Leg		1.7500	1.7500	3.0625	1.7865	2.3975	10.0590	11.8455
	Vertical Leg		3.0000	3.7500	11.2500	0.0625	0.3975	0.4740	0.5365
3 (Right)	Horizontal Leg		1.7500	6.5450	11.4538	1.7865	2.3975	10.0590	11.8455
	Vertical Leg		3.0000	4.5450	13.6350	0.0625	0.3975	0.4740	0.5365
<b>Total</b>			<b>16.50</b>		<b>68.42</b>	<b>25.77</b>		<b>21.07</b>	<b>46.84</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
x-bar =	4.1475	in	S <sub>right</sub> =	11.29	in <sup>3</sup>	x-bar =	4.1475	in	S <sub>right</sub> =	11.29	in <sup>3</sup>
I <sub>y</sub> =	46.84	in <sup>4</sup>	S <sub>left</sub> =	11.29	in <sup>3</sup>	I <sub>y</sub> =	46.84	in <sup>4</sup>	S <sub>left</sub> =	11.29	in <sup>3</sup>
C <sub>right</sub> =	4.1475	in	A =	16.4970	in <sup>2</sup>	C <sub>right</sub> =	4.1475	in	A =	16.4970	in <sup>2</sup>
C <sub>left</sub> =	4.1475	in	r <sub>y</sub> =	1.6850	in	C <sub>left</sub> =	4.1475	in	r <sub>y</sub> =	1.6850	in

**Stringer Capacity**

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

Non-composite Capacities*		
	AB	AI
M	172.17 k-ft	172.17 k-ft
V	174.80 k	174.80 k

F<sub>y</sub> = 36.00 ksi

\*Compact Section

*Shear only*

# SECTION I



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

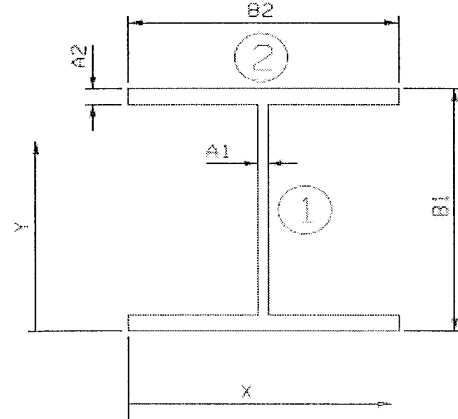
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

## Element Dimensions (without Section Losses):

$A_1 = t_w = 0.2950$  in  
 $A_2 = t_f = 0.5150$  in  
 $B_1 = d = 11.9000$  in  
 $B_2 = b_f = 8.0100$  in



W 12X40  
Stringer Unit 5 Rolled Beam

## X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		3.2067	5.9500	19.0796	31.5740	0.0000	0.0000	31.5740
2	Top Flange		4.1252	11.6425	48.0271	0.0912	5.6925	133.6737	133.7648
	Bottom Flange		4.1252	0.2575	1.0622	0.0912	5.6925	133.6737	133.7648
<b>Total</b>			<b>11.46</b>		<b>68.17</b>	<b>31.76</b>		<b>267.35</b>	<b>299.10</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	5.9500	in	$S_{top} = 50.27$	in <sup>3</sup>	y-bar =	5.9500	in	$S_{top} = 50.27$	in <sup>3</sup>		
$I_x =$	299.10	in <sup>4</sup>	$S_{bott.} = 50.27$	in <sup>3</sup>	$I_x =$	299.10	in <sup>4</sup>	$S_{bott.} = 50.27$	in <sup>3</sup>		
$C_{top} =$	5.9500	in	A =	11.4570	in <sup>2</sup>	$C_{top} =$	5.9500	in	A =	11.4570	in <sup>2</sup>
$C_{bottom} =$	5.9500	in	$r_x =$	5.1095	in	$C_{bottom} =$	5.9500	in	$r_x =$	5.1095	in
			Z =	55.68	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>



# SECTION I



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	150.81 k-ft	150.81 k-ft
V	66.95 k	66.95 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

*For Moment Only*

SECTION I

Continuous Stringers (1-4) On Unit 9



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/7/2012

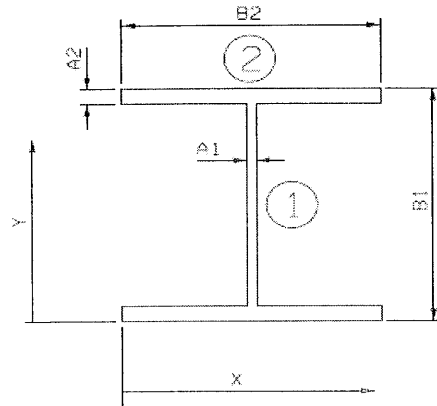
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3200$  in
- $A_2 = t_f = 0.4550$  in
- $B_1 = d = 6.3800$  in
- $B_2 = b_f = 6.0800$  in



W 6X25  
Continuous Stringers (1-4) On Unit 9

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		1.7504	3.1900	5.5838	4.3645	0.0000	0.0000	4.3645
2	Top Flange		2.7664	6.1525	17.0203	0.0477	2.9625	24.2791	24.3268
	Bottom Flange		2.7664	0.2275	0.6294	0.0477	2.9625	24.2791	24.3268
<b>Total</b>			<b>7.28</b>		<b>23.23</b>	<b>4.46</b>		<b>48.56</b>	<b>53.02</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	3.1900	in	S <sub>top</sub> = 16.62 in <sup>3</sup>	y-bar =	3.1900	in	S <sub>top</sub> = 16.62 in <sup>3</sup>
I <sub>x</sub> =	53.02	in <sup>4</sup>	S <sub>bott.</sub> = 16.62 in <sup>3</sup>	I <sub>x</sub> =	53.02	in <sup>4</sup>	S <sub>bott.</sub> = 16.62 in <sup>3</sup>
C <sub>top</sub> =	3.1900	in	A = 7.2832 in <sup>2</sup>	C <sub>top</sub> =	3.1900	in	A = 7.2832 in <sup>2</sup>
C <sub>bottom</sub> =	3.1900	in	r <sub>x</sub> = 2.6981 in	C <sub>bottom</sub> =	3.1900	in	r <sub>x</sub> = 2.6981 in
			Z = 18.78 in <sup>3</sup>				Z = 50.00 in <sup>3</sup>



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For:

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	49.86 k-ft	49.86 k-ft
<b>V</b>	36.55 k	36.55 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	36.00 ksi
------------------------	-----------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

**SECTION I**

**Coped Stringers (1-4) On Unit 10 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

**Element Dimensions (without Section Losses):**

Partial W-Section

- $A_1 = b_f = 7.9900$  in ✓
- $B_1 = t_f = 0.5300$  in ✓
- $C_1 = d = 7.7500$  in ✓
- $D_1 = t_w = 0.3150$  in ✓

Left Angle:

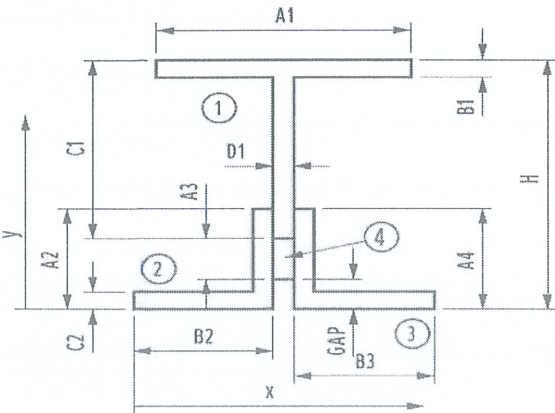
- $A_2 = L_v = 6.0000$  in ✓
- $B_2 = L_h = 4.0000$  in ✓
- $C_2 = t = 0.5000$  in ✓

Right Angle:

- $A_4 = L_v = 6.0000$  in ✓
- $B_3 = L_h = 4.0000$  in ✓
- $C_3 = t = 0.5000$  in ✓

Miscellaneous:

- $H = 8.3750$  in
- Gap = 0.6250 in



**Coped Stringers (1-4) On Unit 10 @ Critical Support**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		4.2347	8.1100	34.3434	0.0991	4.1841	74.1348	74.2340
	Web		2.2743	4.2350	9.6317	9.8796	0.3091	0.2173	10.0969
2	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	3.6759	23.6467	23.6832
	Vertical Legs		3.0000	3.0000	9.0000	9.0000	0.9259	2.5720	11.5720
3	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	3.6759	23.6467	23.6832
	Vertical Legs		3.0000	3.0000	9.0000	9.0000	0.9259	2.5720	11.5720
<b>Total</b>			<b>16.01</b>		<b>62.85</b>	<b>28.05</b>		<b>126.79</b>	<b>154.84</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



**SECTION I**

**Coped Stringers (1-4) On Unit 10 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	3.9259 in	S <sub>top</sub> =	34.80 in <sup>3</sup>	y-bar =	3.9259 in	S <sub>top</sub> =	34.80 in <sup>3</sup>
I <sub>x</sub> =	154.84 in <sup>4</sup>	S <sub>bottom</sub> =	39.44 in <sup>3</sup>	I <sub>x</sub> =	154.84 in <sup>4</sup>	S <sub>bottom</sub> =	39.44 in <sup>3</sup>
C <sub>top</sub> =	4.4491 in	A =	16.0090 in <sup>2</sup>	C <sub>top</sub> =	4.4491 in	A =	16.0090 in <sup>2</sup>
C <sub>bottom</sub> =	3.9259 in	r <sub>x</sub> =	3.1100 in	C <sub>bottom</sub> =	3.9259 in	r <sub>x</sub> =	3.1100 in

Min Vertical Leg + Web +

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		4.2347	4.1575	17.6058	22.5286	0.0000	0.0000	22.5286
	Web		2.2743	4.1575	9.4554	0.0188	0.0000	0.0000	0.0188
2 (Left)	Horizontal Leg		1.7500	1.7500	3.0625	1.7865	2.4075	10.1431	11.9296
	Vertical Leg		3.0000	3.7500	11.2500	0.0625	0.4075	0.4982	0.5607
3 (Right)	Horizontal Leg		1.7500	6.5650	11.4888	1.7865	2.4075	10.1431	11.9296
	Vertical Leg		3.0000	4.5650	13.6950	0.0625	0.4075	0.4982	0.5607
<b>Total</b>			<b>16.01</b>		<b>66.56</b>	<b>26.25</b>		<b>21.28</b>	<b>47.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	4.1575 in	S <sub>right</sub> =	11.43 in <sup>3</sup>	x-bar =	4.1575 in	S <sub>right</sub> =	11.43 in <sup>3</sup>
I <sub>y</sub> =	47.53 in <sup>4</sup>	S <sub>left</sub> =	11.43 in <sup>3</sup>	I <sub>y</sub> =	47.53 in <sup>4</sup>	S <sub>left</sub> =	11.43 in <sup>3</sup>
C <sub>right</sub> =	4.1575 in	A =	16.0090 in <sup>2</sup>	C <sub>right</sub> =	4.1575 in	A =	16.0090 in <sup>2</sup>
C <sub>left</sub> =	4.1575 in	r <sub>y</sub> =	1.7230 in	C <sub>left</sub> =	4.1575 in	r <sub>y</sub> =	1.7230 in

**Stringer Capacity**

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

Non-composite Capacities*		
	AB	AI
<b>M</b>	133.23 k-ft	133.23 k-ft
<b>V</b>	162.33 k	162.33 k

F<sub>y</sub> = 36.00 ksi

\*Compact Section

*Shear OK*

# SECTION I



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

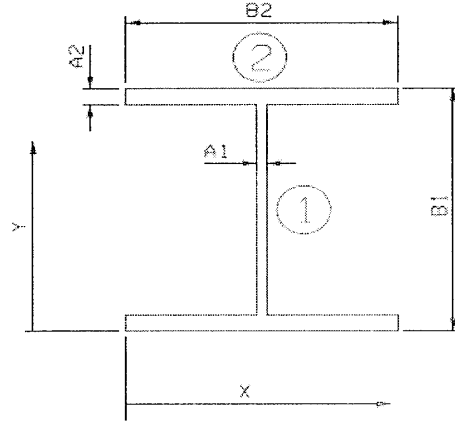
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

## Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3600$  in  
 $A_2 = t_f = 0.5600$  in  
 $B_1 = d = 8.2500$  in  
 $B_2 = b_f = 8.0700$  in



**W 8X40**  
**Stringer Unit 11 Rolled Beam**

## X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		2.5668	4.1250	10.5881	10.8740	0.0000	0.0000	10.8740
2	Top Flange		4.5192	7.9700	36.0180	0.1181	3.8450	66.8120	66.9301
	Bottom Flange		4.5192	0.2800	1.2654	0.1181	3.8450	66.8120	66.9301
<b>Total</b>			<b>11.61</b>		<b>47.87</b>	<b>11.11</b>		<b>133.62</b>	<b>144.73</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties					As-Inspected Section Properties						
y-bar =	4.1250	in	$S_{top} =$	35.09	in <sup>3</sup>	y-bar =	4.1250	in	$S_{top} =$	35.09	in <sup>3</sup>
$I_x =$	144.73	in <sup>4</sup>	$S_{bott.} =$	35.09	in <sup>3</sup>	$I_x =$	144.73	in <sup>4</sup>	$S_{bott.} =$	35.09	in <sup>3</sup>
$C_{top} =$	4.1250	in	A =	11.6052	in <sup>2</sup>	$C_{top} =$	4.1250	in	A =	11.6052	in <sup>2</sup>
$C_{bottom} =$	4.1250	in	$r_x =$	3.5315	in	$C_{bottom} =$	4.1250	in	$r_x =$	3.5315	in
			Z =	39.33	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
 Checked By DBH

Date 6/6/2012  
 Date 6/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	105.26 k-ft	105.26 k-ft
V	53.59 k	53.59 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

For Moment Only



**SECTION I**

**Coped Stringers (1-4) On Unit 11 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

**Element Dimensions (without Section Losses):**

**Partial W-Section**

$A_1 = b_f = 8.0700$  in ✓  
 $B_1 = t_f = 0.5600$  in ✓  
 $C_1 = d = 6.7500$  in ✓  
 $D_1 = t_w = 0.3600$  in ✓

**Left Angle:**

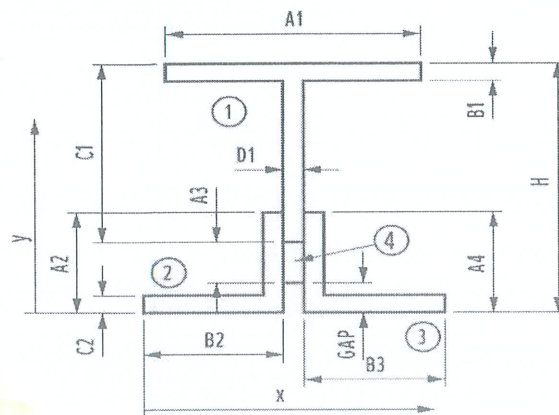
$A_2 = L_v = 6.0000$  in ✓  
 $B_2 = L_h = 4.0000$  in ✓  
 $C_2 = t = 0.5000$  in ✓

**Right Angle:**

$A_4 = L_v = 6.0000$  in ✓  
 $B_3 = L_h = 4.0000$  in ✓  
 $C_3 = t = 0.5000$  in ✓

**Miscellaneous:**

$H = 7.0000$  in  
 $Gap = 0.2500$  in



**Coped Stringers (1-4) On Unit 11 @ Critical Support**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		4.5192	6.7200	30.3690	0.1181	3.2304	47.1593	47.2774
	Web		2.2284	3.3450	7.4540	7.1153	0.1446	0.0466	7.1619
2	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	3.2396	18.3665	18.4030
	Vertical Legs		3.0000	3.0000	9.0000	9.0000	0.4896	0.7192	9.7192
3	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	3.2396	18.3665	18.4030
	Vertical Legs		3.0000	3.0000	9.0000	9.0000	0.4896	0.7192	9.7192
<b>Total</b>			<b>16.25</b>		<b>56.70</b>	<b>25.31</b>		<b>85.38</b>	<b>110.68</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



**SECTION I**

**Coped Stringers (1-4) On Unit 11 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	3.4896 in	S <sub>top</sub> =	31.53 in <sup>3</sup>	y-bar =	3.4896 in	S <sub>top</sub> =	31.53 in <sup>3</sup>
I <sub>x</sub> =	110.68 in <sup>4</sup>	S <sub>bott.</sub> =	31.72 in <sup>3</sup>	I <sub>x</sub> =	110.68 in <sup>4</sup>	S <sub>bott.</sub> =	31.72 in <sup>3</sup>
C <sub>top</sub> =	3.5104 in	A =	16.2476 in <sup>2</sup>	C <sub>top</sub> =	3.5104 in	A =	16.2476 in <sup>2</sup>
C <sub>bottom</sub> =	3.4896 in	r <sub>x</sub> =	2.6100 in	C <sub>bottom</sub> =	3.4896 in	r <sub>x</sub> =	2.6100 in

Min Vertical Leg + Web +

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		4.5192	4.1800	18.8903	24.5260	0.0000	0.0000	24.5260
	Web		2.2284	4.1800	9.3147	0.0241	0.0000	0.0000	0.0241
2 (Left)	Horizontal Leg		1.7500	1.7500	3.0625	1.7865	2.4300	10.3336	12.1200
	Vertical Leg		3.0000	3.7500	11.2500	0.0625	0.4300	0.5547	0.6172
3 (Right)	Horizontal Leg		1.7500	6.6100	11.5675	1.7865	2.4300	10.3336	12.1200
	Vertical Leg		3.0000	4.6100	13.8300	0.0625	0.4300	0.5547	0.6172
<b>Total</b>			<b>16.25</b>		<b>67.91</b>	<b>28.25</b>		<b>21.78</b>	<b>50.02</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	4.1800 in	S <sub>right</sub> =	11.97 in <sup>3</sup>	x-bar =	4.1800 in	S <sub>right</sub> =	11.97 in <sup>3</sup>
I <sub>y</sub> =	50.02 in <sup>4</sup>	S <sub>left</sub> =	11.97 in <sup>3</sup>	I <sub>y</sub> =	50.02 in <sup>4</sup>	S <sub>left</sub> =	11.97 in <sup>3</sup>
C <sub>right</sub> =	4.1800 in	A =	16.2476 in <sup>2</sup>	C <sub>right</sub> =	4.1800 in	A =	16.2476 in <sup>2</sup>
C <sub>left</sub> =	4.1800 in	r <sub>y</sub> =	1.7547 in	C <sub>left</sub> =	4.1800 in	r <sub>y</sub> =	1.7547 in

**Stringer Capacity**

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

Non-composite Capacities*		
	AB	AI
<b>M</b>	115.89 k-ft	115.89 k-ft
<b>V</b>	161.37 k	161.37 k

F<sub>y</sub> = 36.00 ksi

\*Compact Section

*Shear only*

**SECTION I**

**Continuous Stringers (1-4) On Units 12, 15, 16 17**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/7/2012

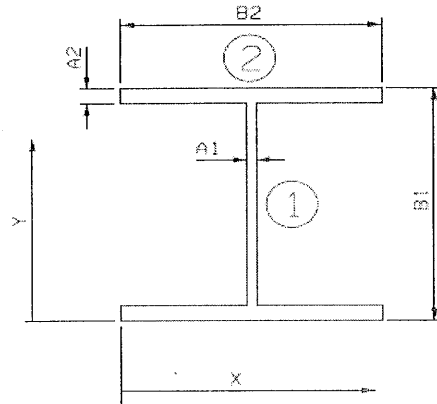
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3200$  in
- $A_2 = t_f = 0.4550$  in
- $B_1 = d = 6.3800$  in
- $B_2 = b_f = 6.0800$  in



**W 6X25**  
**Continuous Stringers (1-4) On Units 12, 15, 16 & 17**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		1.7504	3.1900	5.5838	4.3645	0.0000	0.0000	4.3645
2	Top Flange		2.7664	6.1525	17.0203	0.0477	2.9625	24.2791	24.3268
	Bottom Flange		2.7664	0.2275	0.6294	0.0477	2.9625	24.2791	24.3268
<b>Total</b>			<b>7.28</b>		<b>23.23</b>	<b>4.46</b>		<b>48.56</b>	<b>53.02</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	3.1900	in	S <sub>top</sub> = 16.62 in <sup>3</sup>	y-bar =	3.1900	in	S <sub>top</sub> = 16.62 in <sup>3</sup>
I <sub>x</sub> =	53.02	in <sup>4</sup>	S <sub>bott.</sub> = 16.62 in <sup>3</sup>	I <sub>x</sub> =	53.02	in <sup>4</sup>	S <sub>bott.</sub> = 16.62 in <sup>3</sup>
c <sub>top</sub> =	3.1900	in	A = 7.2832 in <sup>2</sup>	c <sub>top</sub> =	3.1900	in	A = 7.2832 in <sup>2</sup>
c <sub>bottom</sub> =	3.1900	in	r <sub>x</sub> = 2.6981 in	c <sub>bottom</sub> =	3.1900	in	r <sub>x</sub> = 2.6981 in
			Z = 18.78 in <sup>3</sup>				Z = 50.00 in <sup>3</sup>

SECTION I

Continuous Stringers (1-4) On Units 12, 15, 16 17



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For:

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	49.86 k-ft	49.86 k-ft
<b>V</b>	36.55 k	36.55 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	36.00 ksi
------------------------	-----------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

**SECTION I**

**Coped Stringers (1-4) On Unit 13 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

**Element Dimensions (without Section Losses):**

Partial W-Section

$A_1 = b_f = 6.0800$  in ✓  
 $B_1 = t_f = 0.4550$  in ✓  
 $C_1 = d = 5.0000$  in ✓  
 $D_1 = t_w = 0.3200$  in ✓

Left Angle:

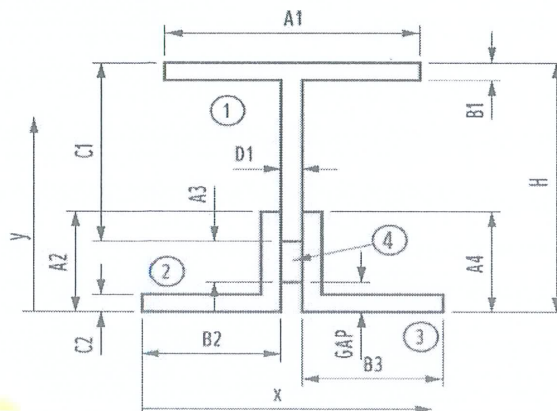
$A_2 = L_v = 4.0000$  in ✓  
 $B_2 = L_h = 4.0000$  in ✓  
 $C_2 = t = 0.5000$  in ✓

Right Angle:

$A_4 = L_v = 4.0000$  in ✓  
 $B_3 = L_h = 4.0000$  in ✓  
 $C_3 = t = 0.5000$  in ✓

Miscellaneous:

$H = 5.5000$  in ✓  
 $Gap = 0.5000$  in ✓



**Coped Stringers (1-4) On Unit 13 @ Critical Support**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		2.7664	5.2725	14.5858	0.0477	2.9268	23.6979	23.7456
	Web		1.4544	2.7725	4.0323	2.5036	0.4268	0.2650	2.7686
2	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	2.0957	7.6857	7.7222
	Vertical Legs		2.0000	2.0000	4.0000	2.6667	0.3457	0.2390	2.9056
3	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	2.0957	7.6857	7.7222
	Vertical Legs		2.0000	2.0000	4.0000	2.6667	0.3457	0.2390	2.9056
<b>Total</b>			<b>11.72</b>		<b>27.49</b>	<b>7.96</b>		<b>39.81</b>	<b>47.77</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



**SECTION I**

**Coped Stringers (1-4) On Unit 13 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	2.3457 in	S <sub>top</sub> =	15.14 in <sup>3</sup>	y-bar =	2.3457 in	S <sub>top</sub> =	15.14 in <sup>3</sup>
I <sub>x</sub> =	47.77 in <sup>4</sup>	S <sub>bottom</sub> =	20.37 in <sup>3</sup>	I <sub>x</sub> =	47.77 in <sup>4</sup>	S <sub>bottom</sub> =	20.37 in <sup>3</sup>
C <sub>top</sub> =	3.1543 in	A =	11.7208 in <sup>2</sup>	C <sub>top</sub> =	3.1543 in	A =	11.7208 in <sup>2</sup>
C <sub>bottom</sub> =	2.3457 in	r <sub>x</sub> =	2.0188 in	C <sub>bottom</sub> =	2.3457 in	r <sub>x</sub> =	2.0188 in

Min Vertical Leg + Web +

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		2.7664	4.1600	11.5082	8.5220	0.0000	0.0000	8.5220
	Web		1.4544	4.1600	6.0503	0.0124	0.0000	0.0000	0.0124
2 (Left)	Horizontal Leg		1.7500	1.7500	3.0625	1.7865	2.4100	10.1642	11.9506
	Vertical Leg		2.0000	3.7500	7.5000	0.0417	0.4100	0.3362	0.3779
3 (Right)	Horizontal Leg		1.7500	6.5700	11.4975	1.7865	2.4100	10.1642	11.9506
	Vertical Leg		2.0000	4.5700	9.1400	0.0417	0.4100	0.3362	0.3779
<b>Total</b>			<b>11.72</b>		<b>48.76</b>	<b>12.19</b>		<b>21.00</b>	<b>33.19</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	4.1600 in	S <sub>right</sub> =	7.98 in <sup>3</sup>	x-bar =	4.1600 in	S <sub>right</sub> =	7.98 in <sup>3</sup>
I <sub>y</sub> =	33.19 in <sup>4</sup>	S <sub>left</sub> =	7.98 in <sup>3</sup>	I <sub>y</sub> =	33.19 in <sup>4</sup>	S <sub>left</sub> =	7.98 in <sup>3</sup>
C <sub>right</sub> =	4.1600 in	A =	11.7208 in <sup>2</sup>	C <sub>right</sub> =	4.1600 in	A =	11.7208 in <sup>2</sup>
C <sub>left</sub> =	4.1600 in	r <sub>y</sub> =	1.6828 in	C <sub>left</sub> =	4.1600 in	r <sub>y</sub> =	1.6828 in

**Stringer Capacity**

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

Non-composite Capacities*		
	AB	AI
<b>M</b>	63.03 k-ft	63.03 k-ft
<b>V</b>	103.45 k	103.45 k

F<sub>y</sub> = 36.00 ksi

\*Compact Section

*show 0.00*

**SECTION I**

**Coped Stringers (1-4) On Unit 14 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

**Element Dimensions (without Section Losses):**

**Partial W-Section**

- $A_1 = b_f = 6.0800$  in
- $B_1 = t_f = 0.4550$  in
- $C_1 = d = 4.2500$  in
- $D_1 = t_w = 0.3200$  in

**Left Angle:**

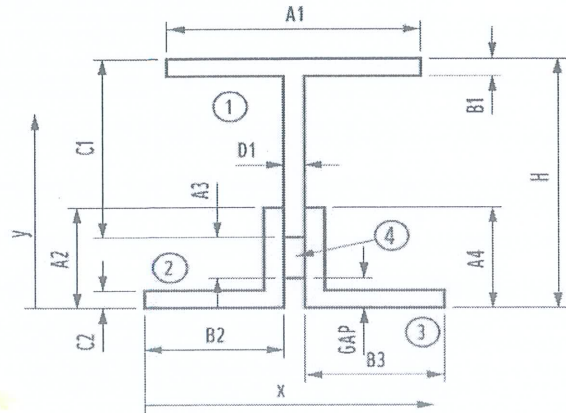
- $A_2 = L_v = 4.0000$  in
- $B_2 = L_h = 4.0000$  in
- $C_2 = t = 0.5000$  in

**Right Angle:**

- $A_4 = L_v = 4.0000$  in
- $B_3 = L_h = 4.0000$  in
- $C_3 = t = 0.5000$  in

**Miscellaneous:**

- $H = 4.7500$  in
- Gap = 0.5000 in



**Coped Stringers (1-4) On Unit 14 @ Critical Support**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		2.7664	4.5225	12.5110	0.0477	2.4061	16.0160	16.0638
	Web		1.2144	2.3975	2.9115	1.4575	0.2811	0.0960	1.5535
2	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	1.8664	6.0958	6.1323
	Vertical Legs		2.0000	2.0000	4.0000	2.6667	0.1164	0.0271	2.6937
3	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	1.8664	6.0958	6.1323
	Vertical Legs		2.0000	2.0000	4.0000	2.6667	0.1164	0.0271	2.6937
<b>Total</b>			<b>11.48</b>		<b>24.30</b>	<b>6.91</b>		<b>28.36</b>	<b>35.27</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



**SECTION I**

**Coped Stringers (1-4) On Unit 14 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	2.1164 in	S <sub>top</sub> =	13.39 in <sup>3</sup>	y-bar =	2.1164 in	S <sub>top</sub> =	13.39 in <sup>3</sup>
I <sub>x</sub> =	35.27 in <sup>4</sup>	S <sub>bott.</sub> =	16.67 in <sup>3</sup>	I <sub>x</sub> =	35.27 in <sup>4</sup>	S <sub>bott.</sub> =	16.67 in <sup>3</sup>
C <sub>top</sub> =	2.6336 in	A =	11.4808 in <sup>2</sup>	C <sub>top</sub> =	2.6336 in	A =	11.4808 in <sup>2</sup>
C <sub>bottom</sub> =	2.1164 in	r <sub>x</sub> =	1.7527 in	C <sub>bottom</sub> =	2.1164 in	r <sub>x</sub> =	1.7527 in

Min Vertical Leg + Web +

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		2.7664	4.1600	11.5082	8.5220	0.0000	0.0000	8.5220
	Web		1.2144	4.1600	5.0519	0.0104	0.0000	0.0000	0.0104
2 (Left)	Horizontal Leg		1.7500	1.7500	3.0625	1.7865	2.4100	10.1642	11.9506
	Vertical Leg		2.0000	3.7500	7.5000	0.0417	0.4100	0.3362	0.3779
3 (Right)	Horizontal Leg		1.7500	6.5700	11.4975	1.7865	2.4100	10.1642	11.9506
	Vertical Leg		2.0000	4.5700	9.1400	0.0417	0.4100	0.3362	0.3779
<b>Total</b>			<b>11.48</b>		<b>47.76</b>	<b>12.19</b>		<b>21.00</b>	<b>33.19</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	4.1600 in	S <sub>right</sub> =	7.98 in <sup>3</sup>	x-bar =	4.1600 in	S <sub>right</sub> =	7.98 in <sup>3</sup>
I <sub>y</sub> =	33.19 in <sup>4</sup>	S <sub>left</sub> =	7.98 in <sup>3</sup>	I <sub>y</sub> =	33.19 in <sup>4</sup>	S <sub>left</sub> =	7.98 in <sup>3</sup>
C <sub>right</sub> =	4.1600 in	A =	11.4808 in <sup>2</sup>	C <sub>right</sub> =	4.1600 in	A =	11.4808 in <sup>2</sup>
C <sub>left</sub> =	4.1600 in	r <sub>y</sub> =	1.7003 in	C <sub>left</sub> =	4.1600 in	r <sub>y</sub> =	1.7003 in

**Stringer Capacity**

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

Non-composite Capacities*		
	AB	AI
<b>M</b>	54.78 k-ft	54.78 k-ft
<b>V</b>	98.44 k	98.44 k

F<sub>y</sub> = 36.00 ksi

\*Compact Section

*See Out*

**SECTION I**

**Coped Stringers (1-4) On Unit 18 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

**Element Dimensions (without Section Losses):**

**Partial W-Section**

$A_1 = b_f = 6.0800$  in ✓  
 $B_1 = t_f = 0.4550$  in ✓  
 $C_1 = d = 4.0000$  in ✓  
 $D_1 = t_w = 0.3200$  in ✓

**Left Angle:**

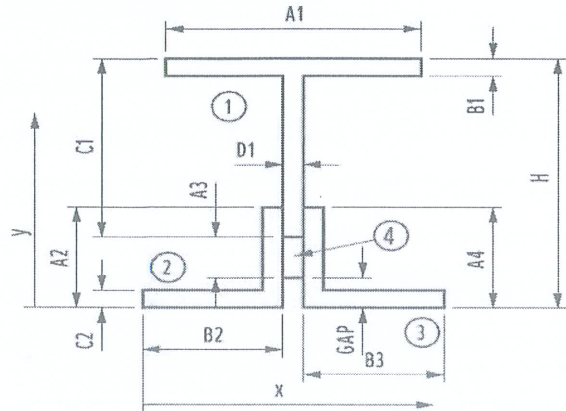
$A_2 = L_v = 4.0000$  in ✓  
 $B_2 = L_h = 3.5000$  in ✓  
 $C_2 = t = 0.5000$  in ✓

**Right Angle:**

$A_4 = L_v = 4.0000$  in ✓  
 $B_3 = L_h = 3.5000$  in ✓  
 $C_3 = t = 0.5000$  in ✓

**Miscellaneous:**

$H = 4.5000$  in ✓  
 $Gap = 0.5000$  in ✓



**Coped Stringers (1-4) On Unit 18 @ Critical Support**

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange	2.7664	4.2725	11.8194	0.0477	2.1490	12.7763	12.8240
	Web	1.1344	2.2725	2.5779	1.1880	0.1490	0.0252	1.2132
2	Horizontal Legs	1.5000	0.2500	0.3750	0.0313	1.8735	5.2648	5.2960
	Vertical Legs	2.0000	2.0000	4.0000	2.6667	0.1235	0.0305	2.6971
3	Horizontal Legs	1.5000	0.2500	0.3750	0.0313	1.8735	5.2648	5.2960
	Vertical Legs	2.0000	2.0000	4.0000	2.6667	0.1235	0.0305	2.6971
<b>Total</b>		<b>10.90</b>		<b>23.15</b>	<b>6.63</b>		<b>23.39</b>	<b>30.02</b>
Section Losses		A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



**SECTION I**

**Coped Stringers (1-4) On Unit 18 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	2.1235	in	S <sub>top</sub> =	12.63	in <sup>3</sup>	y-bar =	2.1235	in	S <sub>top</sub> =	12.63	in <sup>3</sup>
I <sub>x</sub> =	30.02	in <sup>4</sup>	S <sub>bottom</sub> =	14.14	in <sup>3</sup>	I <sub>x</sub> =	30.02	in <sup>4</sup>	S <sub>bottom</sub> =	14.14	in <sup>3</sup>
C <sub>top</sub> =	2.3765	in	A =	10.9008	in <sup>2</sup>	C <sub>top</sub> =	2.3765	in	A =	10.9008	in <sup>2</sup>
C <sub>bottom</sub> =	2.1235	in	r <sub>x</sub> =	1.6596	in	C <sub>bottom</sub> =	2.1235	in	r <sub>x</sub> =	1.6596	in

Min Vertical Leg + Web +

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		2.7664	3.6600	10.1250	8.5220	0.0000	0.0000	8.5220
	Web		1.1344	3.6600	4.1519	0.0097	0.0000	0.0000	0.0097
2 (Left)	Horizontal Leg		1.5000	1.5000	2.2500	1.1250	2.1600	6.9984	8.1234
	Vertical Leg		2.0000	3.2500	6.5000	0.0417	0.4100	0.3362	0.3779
3 (Right)	Horizontal Leg		1.5000	5.8200	8.7300	1.1250	2.1600	6.9984	8.1234
	Vertical Leg		2.0000	4.0700	8.1400	0.0417	0.4100	0.3362	0.3779
<b>Total</b>			<b>10.90</b>		<b>39.90</b>	<b>10.87</b>		<b>14.67</b>	<b>25.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
x-bar =	3.6600	in	S <sub>right</sub> =	6.98	in <sup>3</sup>	x-bar =	3.6600	in	S <sub>right</sub> =	6.98	in <sup>3</sup>
I <sub>y</sub> =	25.53	in <sup>4</sup>	S <sub>left</sub> =	6.98	in <sup>3</sup>	I <sub>y</sub> =	25.53	in <sup>4</sup>	S <sub>left</sub> =	6.98	in <sup>3</sup>
C <sub>right</sub> =	3.6600	in	A =	10.9008	in <sup>2</sup>	C <sub>right</sub> =	3.6600	in	A =	10.9008	in <sup>2</sup>
C <sub>left</sub> =	3.6600	in	r <sub>y</sub> =	1.5305	in	C <sub>left</sub> =	3.6600	in	r <sub>y</sub> =	1.5305	in

**Stringer Capacity**

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

Non-composite Capacities*		
	AB	AI
<b>M</b>	49.71 k-ft	49.71 k-ft
<b>V</b>	96.77 k	96.77 k

F<sub>y</sub> = 36.00 ksi

\*Compact Section

*Check Out*

**SECTION I**

**Coped Stringers (1-4) On Unit 19 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

**Element Dimensions (without Section Losses):**

**Partial W-Section**

$A_1 = b_f = 6.0800$  in ✓  
 $B_1 = t_f = 0.4550$  in ✓  
 $C_1 = d = 4.5000$  in ✓  
 $D_1 = t_w = 0.3200$  in ✓

**Left Angle:**

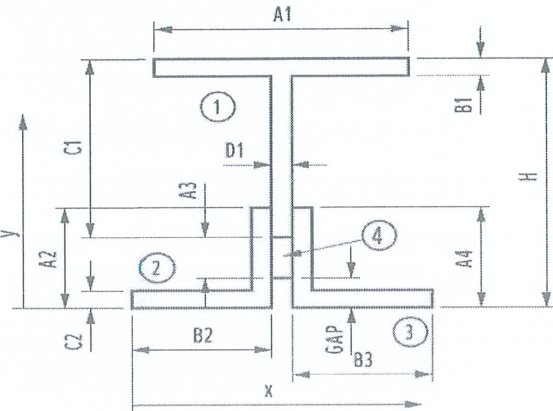
$A_2 = L_v = 4.0000$  in ✓  
 $B_2 = L_h = 4.0000$  in ✓  
 $C_2 = t = 0.5000$  in ✓

**Right Angle:**

$A_4 = L_v = 4.0000$  in ✓  
 $B_3 = L_h = 4.0000$  in ✓  
 $C_3 = t = 0.5000$  in ✓

**Miscellaneous:**

$H = 5.0000$  in  
 $Gap = 0.5000$  in



**Coped Stringers (1-4) On Unit 19 @ Critical Support**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Top Flange		2.7664	4.7725	13.2026	0.0477	2.5804	18.4196	18.4673
	Web		1.2944	2.5225	3.2651	1.7649	0.3304	0.1413	1.9062
2	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	1.9421	6.6008	6.6372
	Vertical Legs		2.0000	2.0000	4.0000	2.6667	0.1921	0.0738	2.7405
3	Horizontal Legs		1.7500	0.2500	0.4375	0.0365	1.9421	6.6008	6.6372
	Vertical Legs		2.0000	2.0000	4.0000	2.6667	0.1921	0.0738	2.7405
<b>Total</b>			<b>11.56</b>		<b>25.34</b>	<b>7.22</b>		<b>31.91</b>	<b>39.13</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



**SECTION I**

**Coped Stringers (1-4) On Unit 19 At Critical Support**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 6-7-12

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	2.1921	in	$S_{top} = 13.94 \text{ in}^3$	y-bar =	2.1921	in	$S_{top} = 13.94 \text{ in}^3$
$I_x =$	39.13	$\text{in}^4$	$S_{bott.} = 17.85 \text{ in}^3$	$I_x =$	39.13	$\text{in}^4$	$S_{bott.} = 17.85 \text{ in}^3$
$C_{top} =$	2.8079	in	$A = 11.5608 \text{ in}^2$	$C_{top} =$	2.8079	in	$A = 11.5608 \text{ in}^2$
$C_{bottom} =$	2.1921	in	$r_x = 1.8397 \text{ in}$	$C_{bottom} =$	2.1921	in	$r_x = 1.8397 \text{ in}$

Min Vertical Leg + Web

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	$I_o$	d	$Ad^2$	$I_{y,gross}$
Element	Description		( $\text{in}^2$ )	(in)	( $\text{in}^3$ )	( $\text{in}^4$ )	(in)	( $\text{in}^4$ )	( $\text{in}^4$ )
1	Top Flange		2.7664	4.1600	11.5082	8.5220	0.0000	0.0000	8.5220
	Web		1.2944	4.1600	5.3847	0.0110	0.0000	0.0000	0.0110
2 (Left)	Horizontal Leg		1.7500	1.7500	3.0625	1.7865	2.4100	10.1642	11.9506
	Vertical Leg		2.0000	3.7500	7.5000	0.0417	0.4100	0.3362	0.3779
3 (Right)	Horizontal Leg		1.7500	6.5700	11.4975	1.7865	2.4100	10.1642	11.9506
	Vertical Leg		2.0000	4.5700	9.1400	0.0417	0.4100	0.3362	0.3779
<b>Total</b>			<b>11.56</b>		<b>48.09</b>	<b>12.19</b>		<b>21.00</b>	<b>33.19</b>
Section Losses			A	x	Ax	$I_o$	d	$Ad^2$	$I_{y,loss}$
Loss #	b (in)	h (in)	( $\text{in}^2$ )	(in)	( $\text{in}^3$ )	( $\text{in}^4$ )	(in)	( $\text{in}^4$ )	( $\text{in}^4$ )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	4.1600	in	$S_{right} = 7.98 \text{ in}^3$	x-bar =	4.1600	in	$S_{right} = 7.98 \text{ in}^3$
$I_y =$	33.19	$\text{in}^4$	$S_{left} = 7.98 \text{ in}^3$	$I_y =$	33.19	$\text{in}^4$	$S_{left} = 7.98 \text{ in}^3$
$C_{right} =$	4.1600	in	$A = 11.5608 \text{ in}^2$	$C_{right} =$	4.1600	in	$A = 11.5608 \text{ in}^2$
$C_{left} =$	4.1600	in	$r_y = 1.6944 \text{ in}$	$C_{left} =$	4.1600	in	$r_y = 1.6944 \text{ in}$

**Stringer Capacity**

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

Non-composite Capacities*		
	AB	AI
M	57.48 k-ft	57.48 k-ft
V	100.11 k	100.11 k

$F_y = 36.00 \text{ ksi}$

\*Compact Section

*Shear Only*



Made By RAH  
Checked By DBH

Date 6/6/2012  
Date 6/7/2012

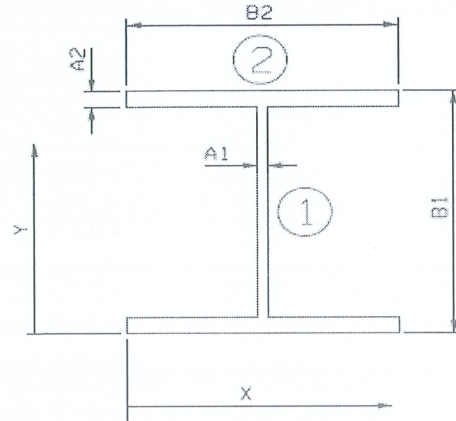
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3200$  in
- $A_2 = t_f = 0.4550$  in
- $B_1 = d = 6.3800$  in
- $B_2 = b_f = 6.0800$  in



**W 6X25**  
**Section I Stringer Unit 13 14 18 19 Rolled Beam**

X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		1.7504	3.1900	5.5838	4.3645	0.0000	0.0000	4.3645
2	Top Flange		2.7664	6.1525	17.0203	0.0477	2.9625	24.2791	24.3268
	Bottom Flange		2.7664	0.2275	0.6294	0.0477	2.9625	24.2791	24.3268
<b>Total</b>			<b>7.28</b>		<b>23.23</b>	<b>4.46</b>		<b>48.56</b>	<b>53.02</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	3.1900	in	S <sub>top</sub> = 16.62 in <sup>3</sup>	y-bar =	3.1900	in	S <sub>top</sub> = 16.62 in <sup>3</sup>
I <sub>x</sub> =	53.02	in <sup>4</sup>	S <sub>bottom</sub> = 16.62 in <sup>3</sup>	I <sub>x</sub> =	53.02	in <sup>4</sup>	S <sub>bottom</sub> = 16.62 in <sup>3</sup>
C <sub>top</sub> =	3.1900	in	A = 7.2832 in <sup>2</sup>	C <sub>top</sub> =	3.1900	in	A = 7.2832 in <sup>2</sup>
C <sub>bottom</sub> =	3.1900	in	r <sub>x</sub> = 2.6981 in	C <sub>bottom</sub> =	3.1900	in	r <sub>x</sub> = 2.6981 in
			Z = 18.78 in <sup>3</sup>				Z = 50.00 in <sup>3</sup>





Made By RAH  
 Checked By DBH

Date 6/6/2012  
 Date 6/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For:

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
M	49.86 k-ft	49.86 k-ft
V	36.55 k	36.55 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

*For Moment Only*

# FASCIA SUMMARY SHEET

## East Approach - Section I

**CUY-2-1441 Load Rating Analysis**  
**Main Ave Bridge**

Calculated: RAH 3/14/2012  
Checked: DBH 3/14/2012

As-Built Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
Fascia-2	Unit 15	2.28	3.81	6.27	5.14	5.99	5.14	n/a
Fascia-1	Unit 16	2.37	3.95	6.50	5.33	6.21	5.33	n/a
Fascia-2	Unit 19	2.46	4.10	6.74	5.54	6.46	5.54	n/a

As-Inspected Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
Fascia-2	Unit 15	2.28	3.81	6.27	5.14	5.99	5.14	n/a
Fascia-1	Unit 16	2.37	3.95	6.50	5.33	6.21	5.33	116129.00
Fascia-2	Unit 19	2.46	4.10	6.74	5.54	6.46	5.54	n/a

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 Inventory	2.28	82.08	HS45.6
HS20 Operating	3.81	137.16	HS76.2
2F1	6.27	94.05	515%
3F1	5.14	118.22	
4F1	5.99	161.73	
5C1	5.14	205.60	
Fatigue	116129.00 years remaining		



Made By RAH Date 2/27/2012  
 Checked By DBH Date 3/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

The following Fascias have the controlling configuration :  
**Fascia 1-16 w/ smallest height of & Longest tributary width (Fascia 1)**  
**Fascia 2-15 w/ smallest height (Fascia 2)**  
**Fascia 2-19 w/ Longest tributary width (Fascia 2)**

Plan Unit	Top FL Width (in)	Top FL Thickness (in)	Web Depth (in)	Web Thickness (in)	Bot.FL Width (in)	Bot. FL Thickness (in)	No. Spans *	Span Length (ft) *
Fascia 1- Unit 16	8	0.75	27	0.375	8	0.75	6	6.19 ft
Fascia 2- Unit 15	8	0.75	26.04	0.375	8	0.75	6	6.19 ft
Fascia 2- Unit 19	8	0.75	28	0.375	8	0.75	6	6.17'; 3X6.21'; 5.74'; 3.07'

No Fascia Beams found in Section "I" have noteworthy deficiencies.

- \*Fascia 1-Unit 16 Beam distribution factor (Mom. & Shear)= 0.6825 per lane
- \*Fascia 2-Unit 15 Beam distribution factor (Mom. & Shear)= 0.5128 per lane
- \*Fascia 2-Unit 19 Beam distribution factor (Mom. & Shear)= 0.674 per lane
- \*Spacing between Fascia 1-Unit 16 and Ext. Girder= 9.91 ft
- \*Spacing between Fascia 2-Unit 15 and Ext. Girder= 6.455 ft
- \*Spacing between Fascia 2-Unit 19 and Ext. Girder= 9.66 ft
- Overhang Width on all Fascia (1 or 2) Units= 3.60 ft

**Dead Loads:**

**DC1:**

- Slab Thickness (Between Girders)= 6.75 in. Lightweight Deck Concrete = 0.117 k/c.ft.
- Slab Thickness (@ Overhang)= 10 in.
- DC1 (Fascia 1- Unit 16) = 0.677 k/ft
- DC1 (Fascia 2- Unit 15) = 0.564 k/ft
- DC1 (Fascia 2- Unit 19) = 0.669 k/ft

**DW:**

- Wearing Surface = 1.25 in Gutter to Gutter = 55.75 ft
- Wearing Surface Concrete = 0.15 k/cf
- No Stringers = 9
- DW (all Fascia Units)= 0.097 k/ft

**DC2:**

- Barrier = 0.462 k/ft No of Barriers = 2
- Median = 0.499 k/ft No of medians = 1
- No Stringers = 9
- DC2 = 0.158 k/ft

Made By RAH Date 2/27/2012  
Checked By DBH Date 3/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

---

---

Impact (inv. & Op.)= 30 % (All units)

Impact (Fatigue)= 15 % (All units)

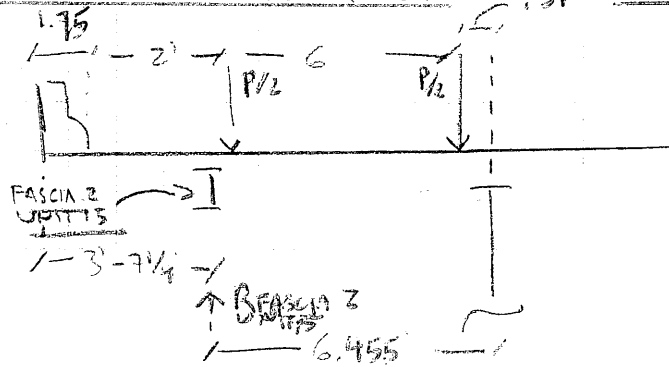
**Analysis Loads:**

Fascia-Unit	Slab	W.S.	Barrier	Self Wt (k/ft)	Total (plus 10% misc.)
Fascia 1 - Unit 16	0.68 k/ft	0.10 k/ft	0.16 k/ft	0.08	1.108 k/ft
Fascia 2 - Unit 15	0.56 k/ft	0.10 k/ft	0.16 k/ft	0.07	0.982 k/ft
Fascia 2 - Unit 19	0.67 k/ft	0.10 k/ft	0.16 k/ft	0.08	1.101 k/ft

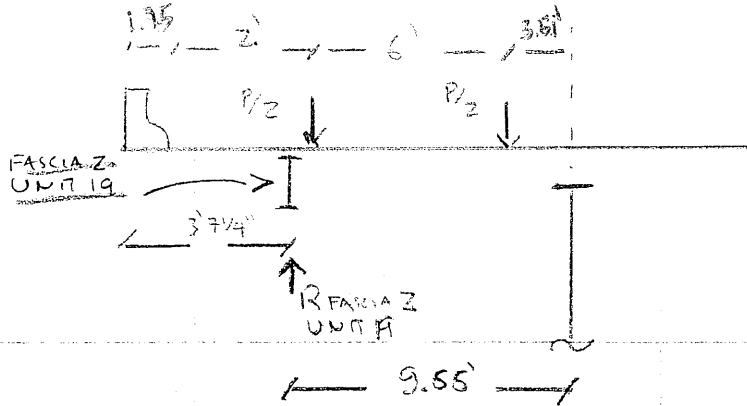
\* Spacing between fascia units and exterior girders is an average of the spacings between these at the begin and end of the fascia units. Asume a constant LL distribution Factor along each Fascia unit.



FASCIA DISTRIBUTION FACTOR

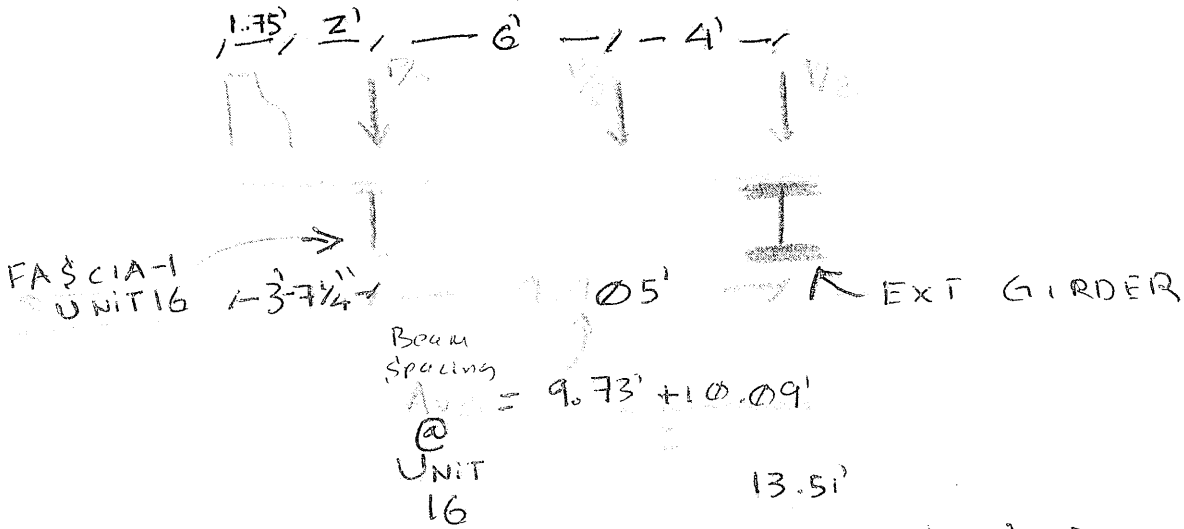


$$R_{\text{FASCIA Z UNIT 15}} = \frac{(\frac{P}{2})(0.31') + (\frac{P}{2})(6.31')}{6.455'} = 0.5129$$



$$R_{\text{FASCIA Z UNIT 19}} = \frac{(\frac{P}{2})(3.51') + (\frac{P}{2})(6 + 3.51')}{9.55'} = 0.674$$

FASCIA Distribution Factor



Beam Spacing  
 $9.73' + 10.09'$   
 @ UNIT 16  
 13.5'

EVER void  $\frac{1}{2} (3'-7\frac{1}{4}" + 9.905' - 3.75') + \frac{P}{Z} (13.5' - 9.75')$   
 $9.905'$

$= 0.6825$  Lane ← controls

But Not LESSER THAN  
 D.F. FOR INT. GIRDER  
 W/ MULTI LANES

$\frac{9.905'}{5.5} = 1.8$  per wheel

∴ 0.9 per lane

LFD STATES THAT IN NO WAY THE EXT. GIRDER COULD HAVE LESS CAPACITY THAN INTERIOR but this is void since Both Girders have overwhelming Different Capacities therefore the Spacing that will be used will be the one from the EXT. BEAM (0.6825)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	0.00	0.00	0.00	2.70	37.48	574.65	N/A	N/A	199.67	2.41	4.02	
0.619	1.46	13.91	1.29	2.02	32.93	574.65	18.97	31.62	199.67	2.76	4.60	
1.238	2.50	23.92	2.58	1.33	28.31	574.65	11.01	18.35	199.67	3.22	5.37	
1.857	3.11	30.08	3.87	0.65	23.74	574.65	8.74	14.57	199.67	3.86	6.44	
2.476	3.30	32.61	5.17	-0.04	19.30	574.65	8.06	13.44	199.67	4.77	7.95	
3.095	3.06	31.83	6.46	-0.73	22.10	574.65	8.26	13.77	199.67	4.14	6.91	
3.714	2.40	28.22	7.75	-1.41	25.87	574.65	9.33	15.56	199.67	3.52	5.88	
4.333	1.31	22.39	9.04	-2.10	29.28	574.65	11.79	19.66	199.67	3.10	5.17	
4.952	-0.20	15.28	10.33	-2.78	32.35	574.65	17.33	28.88	199.67	2.79	4.66	
5.571	-2.13	7.58	11.62	-3.47	34.96	574.65	22.68	37.80	199.67	2.57	4.29	
0	-4.49	3.45	16.00	-4.16	37.76	574.65	16.39	27.32	199.67	2.37	3.95	
0.619	-2.46	8.32	13.97	2.94	35.01	574.65	18.85	31.43	199.67	2.58	4.30	
1.238	-0.85	15.92	11.97	2.26	31.53	574.65	16.60	27.68	199.67	2.88	4.79	
1.857	0.34	22.29	10.51	1.57	27.52	574.65	11.87	19.79	199.67	3.31	5.52	
2.476	1.09	26.28	9.28	0.88	23.16	574.65	10.05	16.76	199.67	3.95	6.59	
3.095	1.43	27.50	8.51	0.20	18.67	574.65	9.60	16.00	199.67	4.92	8.21	
3.714	1.34	25.85	8.43	-0.49	22.95	574.65	10.21	17.03	199.67	4.00	6.66	
4.333	0.83	21.55	8.98	-1.17	27.06	574.65	12.27	20.45	199.67	3.37	5.62	
4.952	-0.11	15.35	10.38	-1.86	30.94	574.65	17.25	28.76	199.67	2.94	4.90	
5.571	-1.48	7.89	12.07	-2.55	34.34	574.65	21.87	36.46	199.67	2.64	4.39	
0	-3.27	4.59	13.79	3.36	37.76	574.65	19.06	31.78	199.67	2.38	3.97	
0.619	-1.40	7.95	11.70	2.68	35.15	574.65	22.57	37.62	199.67	2.57	4.29	
1.238	0.05	15.39	10.00	1.99	31.76	574.65	17.20	28.68	199.67	2.86	4.77	
1.857	1.07	21.80	8.69	1.31	27.80	574.65	12.12	20.20	199.67	3.28	5.47	
2.476	1.67	26.14	7.69	0.62	23.45	574.65	10.09	16.82	199.67	3.91	6.52	
3.095	1.84	27.65	7.26	-0.07	19.17	574.65	9.54	15.90	199.67	4.80	8.00	
3.714	1.58	26.14	7.71	-0.75	23.75	574.65	10.09	16.82	199.67	3.86	6.43	
4.333	0.91	21.83	8.86	-1.44	28.09	574.65	12.10	20.18	199.67	3.25	5.41	
4.952	-0.20	15.29	10.57	-2.12	32.05	574.65	17.31	28.85	199.67	2.83	4.72	
5.571	-1.72	7.32	12.32	-2.81	35.42	574.65	21.42	35.70	199.67	2.55	4.25	

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear			
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF	
	From Rear (Ft)	M+	M-	V		D							L+I
		D	L+I	L+I	D		L+I						
0	-3.67	4.26	14.10	-3.50	37.98	574.65	18.62	31.04	199.67	2.37	3.95		
0.619	-1.72	7.32	12.32	2.81	35.42	574.65	21.42	35.70	199.67	2.55	4.25		
1.238	-0.20	15.29	10.57	2.12	32.05	574.65	17.31	28.85	199.67	2.83	4.72		
1.857	0.91	21.83	8.86	1.44	28.09	574.65	12.10	20.18	199.67	3.25	5.41		
2.476	1.58	26.14	7.71	0.75	23.75	574.65	10.09	16.82	199.67	3.86	6.43		
3.095	1.84	27.65	7.26	0.07	19.17	574.65	9.54	15.90	199.67	4.80	8.00		
3.714	1.67	26.14	7.69	-0.62	23.45	574.65	10.09	16.82	199.67	3.91	6.52		
4.333	1.07	21.80	8.69	-1.31	27.80	574.65	12.12	20.20	199.67	3.28	5.47		
4.952	0.05	15.39	10.00	-1.99	31.76	574.65	17.20	28.68	199.67	2.86	4.77		
5.571	-1.40	7.95	11.70	-2.68	35.15	574.65	22.57	37.62	199.67	2.57	4.29		
0	-3.27	4.59	13.79	-3.36	37.76	574.65	19.06	31.78	199.67	2.38	3.97		
0.619	-1.48	7.89	12.07	2.55	34.34	574.65	21.87	36.46	199.67	2.64	4.39		
1.238	-0.11	15.35	10.38	1.86	30.94	574.65	17.25	28.76	199.67	2.94	4.90		
1.857	0.83	21.55	8.98	1.17	27.06	574.65	12.27	20.45	199.67	3.37	5.62		
2.476	1.34	25.85	8.43	0.49	22.95	574.65	10.21	17.03	199.67	4.00	6.66		
3.095	1.43	27.50	8.51	-0.20	18.67	574.65	9.60	16.00	199.67	4.92	8.21		
3.714	1.09	26.28	9.28	-0.88	23.16	574.65	10.05	16.76	199.67	3.95	6.59		
4.333	0.34	22.29	10.51	-1.57	27.52	574.65	11.87	19.79	199.67	3.31	5.52		
4.952	-0.85	15.92	11.97	-2.26	31.53	574.65	16.60	27.68	199.67	2.88	4.79		
5.571	-2.46	8.32	13.97	-2.94	35.01	574.65	18.85	31.43	199.67	2.58	4.30		
0	-4.49	3.45	16.00	4.16	37.76	574.65	16.39	27.32	199.67	2.37	3.95		
0.619	-2.13	7.58	11.62	3.47	34.96	574.65	22.68	37.80	199.67	2.57	4.29		
1.238	-0.20	15.28	10.33	2.78	32.35	574.65	17.33	28.88	199.67	2.79	4.66		
1.857	1.31	22.39	9.04	2.10	29.28	574.65	11.79	19.66	199.67	3.10	5.17		
2.476	2.40	28.22	7.75	1.41	25.87	574.65	9.33	15.56	199.67	3.52	5.88		
3.095	3.06	31.83	6.46	0.73	22.10	574.65	8.26	13.77	199.67	4.14	6.91		
3.714	3.30	32.61	5.17	0.04	19.30	574.65	8.06	13.44	199.67	4.77	7.95		
4.333	3.11	30.08	3.87	-0.65	23.74	574.65	8.74	14.57	199.67	3.86	6.44		
4.952	2.50	23.92	2.58	-1.33	28.31	574.65	11.01	18.35	199.67	3.22	5.37		
5.571	1.46	13.91	1.29	-2.02	32.93	574.65	18.97	31.62	199.67	2.76	4.60		
6.19	0.00	0.00	0.00	-2.70	37.48	574.65	N/A	N/A	199.67	2.41	4.02		

HS20-44

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.70	37.48	574.65	N/A	N/A	199.67	2.41	4.02
0.619	1.46	13.91	1.29	2.02	32.93	574.65	18.97	31.62	199.67	2.76	4.60
1.238	2.50	23.92	2.58	1.33	28.31	574.65	11.01	18.35	199.67	3.22	5.37
1.857	3.11	30.08	3.87	0.65	23.74	574.65	8.74	14.57	199.67	3.86	6.44
2.476	3.30	32.61	5.17	-0.04	19.30	574.65	8.06	13.44	199.67	4.77	7.95
3.095	3.06	31.83	6.46	-0.73	22.10	574.65	8.26	13.77	199.67	4.14	6.91
3.714	2.40	28.22	7.75	-1.41	25.87	574.65	9.33	15.56	199.67	3.52	5.88
4.333	1.31	22.39	9.04	-2.10	29.28	574.65	11.79	19.66	199.67	3.10	5.17
4.952	-0.20	15.28	10.33	-2.78	32.35	574.65	17.33	28.88	199.67	2.79	4.66
5.571	-2.13	7.58	11.62	-3.47	34.96	574.65	22.68	37.80	199.67	2.57	4.29
0	-4.49	3.45	16.00	-4.16	37.76	574.65	16.39	27.32	199.67	2.37	3.95
0.619	-2.46	8.32	13.97	2.94	35.01	574.65	18.85	31.43	199.67	2.58	4.30
1.238	-0.85	15.92	11.97	2.26	31.53	574.65	16.60	27.68	199.67	2.88	4.79
1.857	0.34	22.29	10.51	1.57	27.52	574.65	11.87	19.79	199.67	3.31	5.52
2.476	1.09	26.28	9.28	0.88	23.16	574.65	10.05	16.76	199.67	3.95	6.59
3.095	1.43	27.50	8.51	0.20	18.67	574.65	9.60	16.00	199.67	4.92	8.21
3.714	1.34	25.85	8.43	-0.49	22.95	574.65	10.21	17.03	199.67	4.00	6.66
4.333	0.83	21.55	8.98	-1.17	27.06	574.65	12.27	20.45	199.67	3.37	5.62
4.952	-0.11	15.35	10.38	-1.86	30.94	574.65	17.25	28.76	199.67	2.94	4.90
5.571	-1.48	7.89	12.07	-2.55	34.34	574.65	21.87	36.46	199.67	2.64	4.39
0	-3.27	4.59	13.79	3.36	37.76	574.65	19.06	31.78	199.67	2.38	3.97
0.619	-1.40	7.95	11.70	2.68	35.15	574.65	22.57	37.62	199.67	2.57	4.29
1.238	0.05	15.39	10.00	1.99	31.76	574.65	17.20	28.68	199.67	2.86	4.77
1.857	1.07	21.80	8.69	1.31	27.80	574.65	12.12	20.20	199.67	3.28	5.47
2.476	1.67	26.14	7.69	0.62	23.45	574.65	10.09	16.82	199.67	3.91	6.52
3.095	1.84	27.65	7.26	-0.07	19.17	574.65	9.54	15.90	199.67	4.80	8.00
3.714	1.58	26.14	7.71	-0.75	23.75	574.65	10.09	16.82	199.67	3.86	6.43
4.333	0.91	21.83	8.86	-1.44	28.09	574.65	12.10	20.18	199.67	3.25	5.41
4.952	-0.20	15.29	10.57	-2.12	32.05	574.65	17.31	28.85	199.67	2.83	4.72
5.571	-1.72	7.32	12.32	-2.81	35.42	574.65	21.42	35.70	199.67	2.55	4.25

HS20-44 (Lane)

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.67	4.26	14.10	-3.50	37.98	574.65	18.62	31.04	199.67	2.37	3.95	
0.619	-1.72	7.32	12.32	2.81	35.42	574.65	21.42	35.70	199.67	2.55	4.25	
1.238	-0.20	15.29	10.57	2.12	32.05	574.65	17.31	28.85	199.67	2.83	4.72	
1.857	0.91	21.83	8.86	1.44	28.09	574.65	12.10	20.18	199.67	3.25	5.41	
2.476	1.58	26.14	7.71	0.75	23.75	574.65	10.09	16.82	199.67	3.86	6.43	
3.095	1.84	27.65	7.26	0.07	19.17	574.65	9.54	15.90	199.67	4.80	8.00	
3.714	1.67	26.14	7.69	-0.62	23.45	574.65	10.09	16.82	199.67	3.91	6.52	
4.333	1.07	21.80	8.69	-1.31	27.80	574.65	12.12	20.20	199.67	3.28	5.47	
4.952	0.05	15.39	10.00	-1.99	31.76	574.65	17.20	28.68	199.67	2.86	4.77	
5.571	-1.40	7.95	11.70	-2.68	35.15	574.65	22.57	37.62	199.67	2.57	4.29	
0	-3.27	4.59	13.79	-3.36	37.76	574.65	19.06	31.78	199.67	2.38	3.97	
0.619	-1.48	7.89	12.07	2.55	34.34	574.65	21.87	36.46	199.67	2.64	4.39	
1.238	-0.11	15.35	10.38	1.86	30.94	574.65	17.25	28.76	199.67	2.94	4.90	
1.857	0.83	21.55	8.98	1.17	27.06	574.65	12.27	20.45	199.67	3.37	5.62	
2.476	1.34	25.85	8.43	0.49	22.95	574.65	10.21	17.03	199.67	4.00	6.66	
3.095	1.43	27.50	8.51	-0.20	18.67	574.65	9.60	16.00	199.67	4.92	8.21	
3.714	1.09	26.28	9.28	-0.88	23.16	574.65	10.05	16.76	199.67	3.95	6.59	
4.333	0.34	22.29	10.51	-1.57	27.52	574.65	11.87	19.79	199.67	3.31	5.52	
4.952	-0.85	15.92	11.97	-2.26	31.53	574.65	16.60	27.68	199.67	2.88	4.79	
5.571	-2.46	8.32	13.97	-2.94	35.01	574.65	18.85	31.43	199.67	2.58	4.30	
0	-4.49	3.45	16.00	4.16	37.76	574.65	16.39	27.32	199.67	2.37	3.95	
0.619	-2.13	7.58	11.62	3.47	34.96	574.65	22.68	37.80	199.67	2.57	4.29	
1.238	-0.20	15.28	10.33	2.78	32.35	574.65	17.33	28.88	199.67	2.79	4.66	
1.857	1.31	22.39	9.04	2.10	29.28	574.65	11.79	19.66	199.67	3.10	5.17	
2.476	2.40	28.22	7.75	1.41	25.87	574.65	9.33	15.56	199.67	3.52	5.88	
3.095	3.06	31.83	6.46	0.73	22.10	574.65	8.26	13.77	199.67	4.14	6.91	
3.714	3.30	32.61	5.17	0.04	19.30	574.65	8.06	13.44	199.67	4.77	7.95	
4.333	3.11	30.08	3.87	-0.65	23.74	574.65	8.74	14.57	199.67	3.86	6.44	
4.952	2.50	23.92	2.58	-1.33	28.31	574.65	11.01	18.35	199.67	3.22	5.37	
5.571	1.46	13.91	1.29	-2.02	32.93	574.65	18.97	31.62	199.67	2.76	4.60	
6.19	0.00	0.00	0.00	-2.70	37.48	574.65	N/A	N/A	199.67	2.41	4.02	

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.70	37.48	574.65	---	N/A	199.67	---	4.03
0.619	1.46	13.91	1.29	2.02	32.93	574.65	---	31.67	199.67	---	4.60
1.238	2.50	23.92	2.58	1.33	28.31	574.65	---	18.38	199.67	---	5.38
1.857	3.11	30.08	3.87	0.65	23.74	574.65	---	14.59	199.67	---	6.44
2.476	3.30	32.61	5.17	-0.04	19.30	574.65	---	13.45	199.67	---	7.96
3.095	3.06	31.83	6.46	-0.73	22.10	574.65	---	13.79	199.67	---	6.92
3.714	2.40	28.22	7.75	-1.41	25.87	574.65	---	15.58	199.67	---	5.88
4.333	1.31	22.39	9.04	-2.10	29.28	574.65	---	19.69	199.67	---	5.17
4.952	-0.20	15.28	10.33	-2.78	32.35	574.65	---	28.92	199.67	---	4.66
5.571	-2.13	7.58	11.62	-3.47	34.96	574.65	---	37.85	199.67	---	4.29
0	-4.49	3.45	16.00	-4.16	37.76	574.65	---	27.35	199.67	---	3.96
0.619	-2.46	8.32	13.97	2.94	35.01	574.65	---	31.47	199.67	---	4.30
1.238	-0.85	15.92	11.97	2.26	31.53	574.65	---	27.71	199.67	---	4.80
1.857	0.34	22.29	10.51	1.57	27.52	574.65	---	19.82	199.67	---	5.52
2.476	1.09	26.28	9.28	0.88	23.16	574.65	---	16.78	199.67	---	6.59
3.095	1.43	27.50	8.51	0.20	18.67	574.65	---	16.02	199.67	---	8.22
3.714	1.34	25.85	8.43	-0.49	22.95	574.65	---	17.05	199.67	---	6.67
4.333	0.83	21.55	8.98	-1.17	27.06	574.65	---	20.47	199.67	---	5.63
4.952	-0.11	15.35	10.38	-1.86	30.94	574.65	---	28.80	199.67	---	4.90
5.571	-1.48	7.89	12.07	-2.55	34.34	574.65	---	36.51	199.67	---	4.40
0	-3.27	4.59	13.79	3.36	37.76	574.65	---	31.82	199.67	---	3.98
0.619	-1.40	7.95	11.70	2.68	35.15	574.65	---	37.67	199.67	---	4.29
1.238	0.05	15.39	10.00	1.99	31.76	574.65	---	28.72	199.67	---	4.77
1.857	1.07	21.80	8.69	1.31	27.80	574.65	---	20.23	199.67	---	5.48
2.476	1.67	26.14	7.69	0.62	23.45	574.65	---	16.85	199.67	---	6.52
3.095	1.84	27.65	7.26	-0.07	19.17	574.65	---	15.92	199.67	---	8.01
3.714	1.58	26.14	7.71	-0.75	23.75	574.65	---	16.85	199.67	---	6.44
4.333	0.91	21.83	8.86	-1.44	28.09	574.65	---	20.20	199.67	---	5.42
4.952	-0.20	15.29	10.57	-2.12	32.05	574.65	---	28.89	199.67	---	4.73
5.571	-1.72	7.32	12.32	-2.81	35.42	574.65	---	35.75	199.67	---	4.26

2F1

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-3.67	4.26	14.10	-3.50	37.98	574.65	---	31.08	199.67	---	3.95
0.619	-1.72	7.32	12.32	2.81	35.42	574.65	---	35.75	199.67	---	4.26
1.238	-0.20	15.29	10.57	2.12	32.05	574.65	---	28.89	199.67	---	4.73
1.857	0.91	21.83	8.86	1.44	28.09	574.65	---	20.20	199.67	---	5.42
2.476	1.58	26.14	7.71	0.75	23.75	574.65	---	16.85	199.67	---	6.44
3.095	1.84	27.65	7.26	0.07	19.17	574.65	---	15.92	199.67	---	8.01
3.714	1.67	26.14	7.69	-0.62	23.45	574.65	---	16.85	199.67	---	6.52
4.333	1.07	21.80	8.69	-1.31	27.80	574.65	---	20.23	199.67	---	5.48
4.952	0.05	15.39	10.00	-1.99	31.76	574.65	---	28.72	199.67	---	4.77
5.571	-1.40	7.95	11.70	-2.68	35.15	574.65	---	37.67	199.67	---	4.29
0	-3.27	4.59	13.79	-3.36	37.76	574.65	---	31.82	199.67	---	3.98
0.619	-1.48	7.89	12.07	2.55	34.34	574.65	---	36.51	199.67	---	4.40
1.238	-0.11	15.35	10.38	1.86	30.94	574.65	---	28.80	199.67	---	4.90
1.857	0.83	21.55	8.98	1.17	27.06	574.65	---	20.47	199.67	---	5.63
2.476	1.34	25.85	8.43	0.49	22.95	574.65	---	17.05	199.67	---	6.67
3.095	1.43	27.50	8.51	-0.20	18.67	574.65	---	16.02	199.67	---	8.22
3.714	1.09	26.28	9.28	-0.88	23.16	574.65	---	16.78	199.67	---	6.59
4.333	0.34	22.29	10.51	-1.57	27.52	574.65	---	19.82	199.67	---	5.52
4.952	-0.85	15.92	11.97	-2.26	31.53	574.65	---	27.71	199.67	---	4.80
5.571	-2.46	8.32	13.97	-2.94	35.01	574.65	---	31.47	199.67	---	4.30
0	-4.49	3.45	16.00	4.16	37.76	574.65	---	27.35	199.67	---	3.96
0.619	-2.13	7.58	11.62	3.47	34.96	574.65	---	37.85	199.67	---	4.29
1.238	-0.20	15.28	10.33	2.78	32.35	574.65	---	28.92	199.67	---	4.66
1.857	1.31	22.39	9.04	2.10	29.28	574.65	---	19.69	199.67	---	5.17
2.476	2.40	28.22	7.75	1.41	25.87	574.65	---	15.58	199.67	---	5.88
3.095	3.06	31.83	6.46	0.73	22.10	574.65	---	13.79	199.67	---	6.92
3.714	3.30	32.61	5.17	0.04	19.30	574.65	---	13.45	199.67	---	7.96
4.333	3.11	30.08	3.87	-0.65	23.74	574.65	---	14.59	199.67	---	6.44
4.952	2.50	23.92	2.58	-1.33	28.31	574.65	---	18.38	199.67	---	5.38
5.571	1.46	13.91	1.29	-2.02	32.93	574.65	---	31.67	199.67	---	4.60
6.19	0.00	0.00	0.00	-2.70	37.48	574.65	---	N/A	199.67	---	4.03

2F1

Fascia 1, Unit 16 (6 span unit)



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.70	37.48	574.65	---	N/A	199.67	---	4.03
0.619	1.46	13.91	1.29	2.02	32.93	574.65	---	31.67	199.67	---	4.60
1.238	2.50	23.92	2.58	1.33	28.31	574.65	---	18.38	199.67	---	5.38
1.857	3.11	30.08	3.87	0.65	23.74	574.65	---	14.59	199.67	---	6.44
2.476	3.30	32.61	5.17	-0.04	19.30	574.65	---	13.45	199.67	---	7.96
3.095	3.06	31.83	6.46	-0.73	22.10	574.65	---	13.79	199.67	---	6.92
3.714	2.40	28.22	7.75	-1.41	25.87	574.65	---	15.58	199.67	---	5.88
4.333	1.31	22.39	9.04	-2.10	29.28	574.65	---	19.69	199.67	---	5.17
4.952	-0.20	15.28	10.33	-2.78	32.35	574.65	---	28.92	199.67	---	4.66
5.571	-2.13	7.58	11.62	-3.47	34.96	574.65	---	37.85	199.67	---	4.29
0	-4.49	3.45	16.00	-4.16	37.76	574.65	---	27.35	199.67	---	3.96
0.619	-2.46	8.32	13.97	2.94	35.01	574.65	---	31.47	199.67	---	4.30
1.238	-0.85	15.92	11.97	2.26	31.53	574.65	---	27.71	199.67	---	4.80
1.857	0.34	22.29	10.51	1.57	27.52	574.65	---	19.82	199.67	---	5.52
2.476	1.09	26.28	9.28	0.88	23.16	574.65	---	16.78	199.67	---	6.59
3.095	1.43	27.50	8.51	0.20	18.67	574.65	---	16.02	199.67	---	8.22
3.714	1.34	25.85	8.43	-0.49	22.95	574.65	---	17.05	199.67	---	6.67
4.333	0.83	21.55	8.98	-1.17	27.06	574.65	---	20.47	199.67	---	5.63
4.952	-0.11	15.35	10.38	-1.86	30.94	574.65	---	28.80	199.67	---	4.90
5.571	-1.48	7.89	12.07	-2.55	34.34	574.65	---	36.51	199.67	---	4.40
0	-3.27	4.59	13.79	3.36	37.76	574.65	---	31.82	199.67	---	3.98
0.619	-1.40	7.95	11.70	2.68	35.15	574.65	---	37.67	199.67	---	4.29
1.238	0.05	15.39	10.00	1.99	31.76	574.65	---	28.72	199.67	---	4.77
1.857	1.07	21.80	8.69	1.31	27.80	574.65	---	20.23	199.67	---	5.48
2.476	1.67	26.14	7.69	0.62	23.45	574.65	---	16.85	199.67	---	6.52
3.095	1.84	27.65	7.26	-0.07	19.17	574.65	---	15.92	199.67	---	8.01
3.714	1.58	26.14	7.71	-0.75	23.75	574.65	---	16.85	199.67	---	6.44
4.333	0.91	21.83	8.86	-1.44	28.09	574.65	---	20.20	199.67	---	5.42
4.952	-0.20	15.29	10.57	-2.12	32.05	574.65	---	28.89	199.67	---	4.73
5.571	-1.72	7.32	12.32	-2.81	35.42	574.65	---	35.75	199.67	---	4.26

3F1

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.67	4.26	14.10	-3.50	37.98	574.65	---	31.08	199.67	---	3.95	
0.619	-1.72	7.32	12.32	2.81	35.42	574.65	---	35.75	199.67	---	4.26	
1.238	-0.20	15.29	10.57	2.12	32.05	574.65	---	28.89	199.67	---	4.73	
1.857	0.91	21.83	8.86	1.44	28.09	574.65	---	20.20	199.67	---	5.42	
2.476	1.58	26.14	7.71	0.75	23.75	574.65	---	16.85	199.67	---	6.44	
3.095	1.84	27.65	7.26	0.07	19.17	574.65	---	15.92	199.67	---	8.01	
3.714	1.67	26.14	7.69	-0.62	23.45	574.65	---	16.85	199.67	---	6.52	
4.333	1.07	21.80	8.69	-1.31	27.80	574.65	---	20.23	199.67	---	5.48	
4.952	0.05	15.39	10.00	-1.99	31.76	574.65	---	28.72	199.67	---	4.77	
5.571	-1.40	7.95	11.70	-2.68	35.15	574.65	---	37.67	199.67	---	4.29	
0	-3.27	4.59	13.79	-3.36	37.76	574.65	---	31.82	199.67	---	3.98	
0.619	-1.48	7.89	12.07	2.55	34.34	574.65	---	36.51	199.67	---	4.40	
1.238	-0.11	15.35	10.38	1.86	30.94	574.65	---	28.80	199.67	---	4.90	
1.857	0.83	21.55	8.98	1.17	27.06	574.65	---	20.47	199.67	---	5.63	
2.476	1.34	25.85	8.43	0.49	22.95	574.65	---	17.05	199.67	---	6.67	
3.095	1.43	27.50	8.51	-0.20	18.67	574.65	---	16.02	199.67	---	8.22	
3.714	1.09	26.28	9.28	-0.88	23.16	574.65	---	16.78	199.67	---	6.59	
4.333	0.34	22.29	10.51	-1.57	27.52	574.65	---	19.82	199.67	---	5.52	
4.952	-0.85	15.92	11.97	-2.26	31.53	574.65	---	27.71	199.67	---	4.80	
5.571	-2.46	8.32	13.97	-2.94	35.01	574.65	---	31.47	199.67	---	4.30	
0	-4.49	3.45	16.00	4.16	37.76	574.65	---	27.35	199.67	---	3.96	
0.619	-2.13	7.58	11.62	3.47	34.96	574.65	---	37.85	199.67	---	4.29	
1.238	-0.20	15.28	10.33	2.78	32.35	574.65	---	28.92	199.67	---	4.66	
1.857	1.31	22.39	9.04	2.10	29.28	574.65	---	19.69	199.67	---	5.17	
2.476	2.40	28.22	7.75	1.41	25.87	574.65	---	15.58	199.67	---	5.88	
3.095	3.06	31.83	6.46	0.73	22.10	574.65	---	13.79	199.67	---	6.92	
3.714	3.30	32.61	5.17	0.04	19.30	574.65	---	13.45	199.67	---	7.96	
4.333	3.11	30.08	3.87	-0.65	23.74	574.65	---	14.59	199.67	---	6.44	
4.952	2.50	23.92	2.58	-1.33	28.31	574.65	---	18.38	199.67	---	5.38	
5.571	1.46	13.91	1.29	-2.02	32.93	574.65	---	31.67	199.67	---	4.60	
6.19	0.00	0.00	0.00	-2.70	37.48	574.65	---	N/A	199.67	---	4.03	

3F1

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.70	37.48	574.65	---	N/A	199.67	---	4.03
0.619	1.46	13.91	1.29	2.02	32.93	574.65	---	31.67	199.67	---	4.60
1.238	2.50	23.92	2.58	1.33	28.31	574.65	---	18.38	199.67	---	5.38
1.857	3.11	30.08	3.87	0.65	23.74	574.65	---	14.59	199.67	---	6.44
2.476	3.30	32.61	5.17	-0.04	19.30	574.65	---	13.45	199.67	---	7.96
3.095	3.06	31.83	6.46	-0.73	22.10	574.65	---	13.79	199.67	---	6.92
3.714	2.40	28.22	7.75	-1.41	25.87	574.65	---	15.58	199.67	---	5.88
4.333	1.31	22.39	9.04	-2.10	29.28	574.65	---	19.69	199.67	---	5.17
4.952	-0.20	15.28	10.33	-2.78	32.35	574.65	---	28.92	199.67	---	4.66
5.571	-2.13	7.58	11.62	-3.47	34.96	574.65	---	37.85	199.67	---	4.29
0	-4.49	3.45	16.00	-4.16	37.76	574.65	---	27.35	199.67	---	3.96
0.619	-2.46	8.32	13.97	2.94	35.01	574.65	---	31.47	199.67	---	4.30
1.238	-0.85	15.92	11.97	2.26	31.53	574.65	---	27.71	199.67	---	4.80
1.857	0.34	22.29	10.51	1.57	27.52	574.65	---	19.82	199.67	---	5.52
2.476	1.09	26.28	9.28	0.88	23.16	574.65	---	16.78	199.67	---	6.59
3.095	1.43	27.50	8.51	0.20	18.67	574.65	---	16.02	199.67	---	8.22
3.714	1.34	25.85	8.43	-0.49	22.95	574.65	---	17.05	199.67	---	6.67
4.333	0.83	21.55	8.98	-1.17	27.06	574.65	---	20.47	199.67	---	5.63
4.952	-0.11	15.35	10.38	-1.86	30.94	574.65	---	28.80	199.67	---	4.90
5.571	-1.48	7.89	12.07	-2.55	34.34	574.65	---	36.51	199.67	---	4.40
0	-3.27	4.59	13.79	3.36	37.76	574.65	---	31.82	199.67	---	3.98
0.619	-1.40	7.95	11.70	2.68	35.15	574.65	---	37.67	199.67	---	4.29
1.238	0.05	15.39	10.00	1.99	31.76	574.65	---	28.72	199.67	---	4.77
1.857	1.07	21.80	8.69	1.31	27.80	574.65	---	20.23	199.67	---	5.48
2.476	1.67	26.14	7.69	0.62	23.45	574.65	---	16.85	199.67	---	6.52
3.095	1.84	27.65	7.26	-0.07	19.17	574.65	---	15.92	199.67	---	8.01
3.714	1.58	26.14	7.71	-0.75	23.75	574.65	---	16.85	199.67	---	6.44
4.333	0.91	21.83	8.86	-1.44	28.09	574.65	---	20.20	199.67	---	5.42
4.952	-0.20	15.29	10.57	-2.12	32.05	574.65	---	28.89	199.67	---	4.73
5.571	-1.72	7.32	12.32	-2.81	35.42	574.65	---	35.75	199.67	---	4.26

4F1

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Operating			
0	-3.67	4.26	14.10	-3.50	37.98	574.65	---	31.08	199.67	---	3.95	
0.619	-1.72	7.32	12.32	2.81	35.42	574.65	---	35.75	199.67	---	4.26	
1.238	-0.20	15.29	10.57	2.12	32.05	574.65	---	28.89	199.67	---	4.73	
1.857	0.91	21.83	8.86	1.44	28.09	574.65	---	20.20	199.67	---	5.42	
2.476	1.58	26.14	7.71	0.75	23.75	574.65	---	16.85	199.67	---	6.44	
3.095	1.84	27.65	7.26	0.07	19.17	574.65	---	15.92	199.67	---	8.01	
3.714	1.67	26.14	7.69	-0.62	23.45	574.65	---	16.85	199.67	---	6.52	
4.333	1.07	21.80	8.69	-1.31	27.80	574.65	---	20.23	199.67	---	5.48	
4.952	0.05	15.39	10.00	-1.99	31.76	574.65	---	28.72	199.67	---	4.77	
5.571	-1.40	7.95	11.70	-2.68	35.15	574.65	---	37.67	199.67	---	4.29	
0	-3.27	4.59	13.79	-3.36	37.76	574.65	---	31.82	199.67	---	3.98	
0.619	-1.48	7.89	12.07	2.55	34.34	574.65	---	36.51	199.67	---	4.40	
1.238	-0.11	15.35	10.38	1.86	30.94	574.65	---	28.80	199.67	---	4.90	
1.857	0.83	21.55	8.98	1.17	27.06	574.65	---	20.47	199.67	---	5.63	
2.476	1.34	25.85	8.43	0.49	22.95	574.65	---	17.05	199.67	---	6.67	
3.095	1.43	27.50	8.51	-0.20	18.67	574.65	---	16.02	199.67	---	8.22	
3.714	1.09	26.28	9.28	-0.88	23.16	574.65	---	16.78	199.67	---	6.59	
4.333	0.34	22.29	10.51	-1.57	27.52	574.65	---	19.82	199.67	---	5.52	
4.952	-0.85	15.92	11.97	-2.26	31.53	574.65	---	27.71	199.67	---	4.80	
5.571	-2.46	8.32	13.97	-2.94	35.01	574.65	---	31.47	199.67	---	4.30	
0	-4.49	3.45	16.00	4.16	37.76	574.65	---	27.35	199.67	---	3.96	
0.619	-2.13	7.58	11.62	3.47	34.96	574.65	---	37.85	199.67	---	4.29	
1.238	-0.20	15.28	10.33	2.78	32.35	574.65	---	28.92	199.67	---	4.66	
1.857	1.31	22.39	9.04	2.10	29.28	574.65	---	19.69	199.67	---	5.17	
2.476	2.40	28.22	7.75	1.41	25.87	574.65	---	15.58	199.67	---	5.88	
3.095	3.06	31.83	6.46	0.73	22.10	574.65	---	13.79	199.67	---	6.92	
3.714	3.30	32.61	5.17	0.04	19.30	574.65	---	13.45	199.67	---	7.96	
4.333	3.11	30.08	3.87	-0.65	23.74	574.65	---	14.59	199.67	---	6.44	
4.952	2.50	23.92	2.58	-1.33	28.31	574.65	---	18.38	199.67	---	5.38	
5.571	1.46	13.91	1.29	-2.02	32.93	574.65	---	31.67	199.67	---	4.60	
6.19	0.00	0.00	0.00	-2.70	37.48	574.65	---	N/A	199.67	---	4.03	

4F1

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.70	37.48	574.65	---	N/A	199.67	---	4.03
0.619	1.46	13.91	1.29	2.02	32.93	574.65	---	31.67	199.67	---	4.60
1.238	2.50	23.92	2.58	1.33	28.31	574.65	---	18.38	199.67	---	5.38
1.857	3.11	30.08	3.87	0.65	23.74	574.65	---	14.59	199.67	---	6.44
2.476	3.30	32.61	5.17	-0.04	19.30	574.65	---	13.45	199.67	---	7.96
3.095	3.06	31.83	6.46	-0.73	22.10	574.65	---	13.79	199.67	---	6.92
3.714	2.40	28.22	7.75	-1.41	25.87	574.65	---	15.58	199.67	---	5.88
4.333	1.31	22.39	9.04	-2.10	29.28	574.65	---	19.69	199.67	---	5.17
4.952	-0.20	15.28	10.33	-2.78	32.35	574.65	---	28.92	199.67	---	4.66
5.571	-2.13	7.58	11.62	-3.47	34.96	574.65	---	37.85	199.67	---	4.29
0	-4.49	3.45	16.00	-4.16	37.76	574.65	---	27.35	199.67	---	3.96
0.619	-2.46	8.32	13.97	2.94	35.01	574.65	---	31.47	199.67	---	4.30
1.238	-0.85	15.92	11.97	2.26	31.53	574.65	---	27.71	199.67	---	4.80
1.857	0.34	22.29	10.51	1.57	27.52	574.65	---	19.82	199.67	---	5.52
2.476	1.09	26.28	9.28	0.88	23.16	574.65	---	16.78	199.67	---	6.59
3.095	1.43	27.50	8.51	0.20	18.67	574.65	---	16.02	199.67	---	8.22
3.714	1.34	25.85	8.43	-0.49	22.95	574.65	---	17.05	199.67	---	6.67
4.333	0.83	21.55	8.98	-1.17	27.06	574.65	---	20.47	199.67	---	5.63
4.952	-0.11	15.35	10.38	-1.86	30.94	574.65	---	28.80	199.67	---	4.90
5.571	-1.48	7.89	12.07	-2.55	34.34	574.65	---	36.51	199.67	---	4.40
0	-3.27	4.59	13.79	3.36	37.76	574.65	---	31.82	199.67	---	3.98
0.619	-1.40	7.95	11.70	2.68	35.15	574.65	---	37.67	199.67	---	4.29
1.238	0.05	15.39	10.00	1.99	31.76	574.65	---	28.72	199.67	---	4.77
1.857	1.07	21.80	8.69	1.31	27.80	574.65	---	20.23	199.67	---	5.48
2.476	1.67	26.14	7.69	0.62	23.45	574.65	---	16.85	199.67	---	6.52
3.095	1.84	27.65	7.26	-0.07	19.17	574.65	---	15.92	199.67	---	8.01
3.714	1.58	26.14	7.71	-0.75	23.75	574.65	---	16.85	199.67	---	6.44
4.333	0.91	21.83	8.86	-1.44	28.09	574.65	---	20.20	199.67	---	5.42
4.952	-0.20	15.29	10.57	-2.12	32.05	574.65	---	28.89	199.67	---	4.73
5.571	-1.72	7.32	12.32	-2.81	35.42	574.65	---	35.75	199.67	---	4.26

5C1

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.67	4.26	14.10	-3.50	37.98	574.65	---	31.08	199.67	---	3.95	
0.619	-1.72	7.32	12.32	2.81	35.42	574.65	---	35.75	199.67	---	4.26	
1.238	-0.20	15.29	10.57	2.12	32.05	574.65	---	28.89	199.67	---	4.73	
1.857	0.91	21.83	8.86	1.44	28.09	574.65	---	20.20	199.67	---	5.42	
2.476	1.58	26.14	7.71	0.75	23.75	574.65	---	16.85	199.67	---	6.44	
3.095	1.84	27.65	7.26	0.07	19.17	574.65	---	15.92	199.67	---	8.01	
3.714	1.67	26.14	7.69	-0.62	23.45	574.65	---	16.85	199.67	---	6.52	
4.333	1.07	21.80	8.69	-1.31	27.80	574.65	---	20.23	199.67	---	5.48	
4.952	0.05	15.39	10.00	-1.99	31.76	574.65	---	28.72	199.67	---	4.77	
5.571	-1.40	7.95	11.70	-2.68	35.15	574.65	---	37.67	199.67	---	4.29	
0	-3.27	4.59	13.79	-3.36	37.76	574.65	---	31.82	199.67	---	3.98	
0.619	-1.48	7.89	12.07	2.55	34.34	574.65	---	36.51	199.67	---	4.40	
1.238	-0.11	15.35	10.38	1.86	30.94	574.65	---	28.80	199.67	---	4.90	
1.857	0.83	21.55	8.98	1.17	27.06	574.65	---	20.47	199.67	---	5.63	
2.476	1.34	25.85	8.43	0.49	22.95	574.65	---	17.05	199.67	---	6.67	
3.095	1.43	27.50	8.51	-0.20	18.67	574.65	---	16.02	199.67	---	8.22	
3.714	1.09	26.28	9.28	-0.88	23.16	574.65	---	16.78	199.67	---	6.59	
4.333	0.34	22.29	10.51	-1.57	27.52	574.65	---	19.82	199.67	---	5.52	
4.952	-0.85	15.92	11.97	-2.26	31.53	574.65	---	27.71	199.67	---	4.80	
5.571	-2.46	8.32	13.97	-2.94	35.01	574.65	---	31.47	199.67	---	4.30	
0	-4.49	3.45	16.00	4.16	37.76	574.65	---	27.35	199.67	---	3.96	
0.619	-2.13	7.58	11.62	3.47	34.96	574.65	---	37.85	199.67	---	4.29	
1.238	-0.20	15.28	10.33	2.78	32.35	574.65	---	28.92	199.67	---	4.66	
1.857	1.31	22.39	9.04	2.10	29.28	574.65	---	19.69	199.67	---	5.17	
2.476	2.40	28.22	7.75	1.41	25.87	574.65	---	15.58	199.67	---	5.88	
3.095	3.06	31.83	6.46	0.73	22.10	574.65	---	13.79	199.67	---	6.92	
3.714	3.30	32.61	5.17	0.04	19.30	574.65	---	13.45	199.67	---	7.96	
4.333	3.11	30.08	3.87	-0.65	23.74	574.65	---	14.59	199.67	---	6.44	
4.952	2.50	23.92	2.58	-1.33	28.31	574.65	---	18.38	199.67	---	5.38	
5.571	1.46	13.91	1.29	-2.02	32.93	574.65	---	31.67	199.67	---	4.60	
6.19	0.00	0.00	0.00	-2.70	37.48	574.65	---	N/A	199.67	---	4.03	

5C1

Fascia 1, Unit 16 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	0.00	0.00	0.00	2.40	37.48	548.65	N/A	N/A	192.15	2.32	3.87	
0.619	1.30	10.45	0.97	1.79	32.93	548.65	24.11	40.20	192.15	2.66	4.43	
1.238	2.21	17.97	1.94	1.18	28.31	548.65	14.00	23.33	192.15	3.10	5.17	
1.857	2.76	22.60	2.91	0.57	23.74	548.65	11.11	18.52	192.15	3.72	6.19	
2.476	2.92	24.50	3.88	-0.04	19.30	548.65	10.25	17.08	192.15	4.59	7.65	
3.095	2.71	23.92	4.85	-0.64	22.10	548.65	10.50	17.51	192.15	3.99	6.65	
3.714	2.13	21.21	5.82	-1.25	25.87	548.65	11.86	19.77	192.15	3.39	5.66	
4.333	1.17	16.82	6.79	-1.86	29.28	548.65	14.99	24.99	192.15	2.99	4.98	
4.952	-0.17	11.48	7.76	-2.47	32.35	548.65	22.02	36.70	192.15	2.69	4.49	
5.571	-1.89	5.70	8.73	-3.07	34.96	548.65	28.83	48.05	192.15	2.48	4.13	
0	-3.98	2.59	12.02	-3.68	37.76	548.65	20.84	34.74	192.15	2.29	3.81	
0.619	-2.18	6.25	10.50	2.61	35.01	548.65	23.97	39.95	192.15	2.48	4.14	
1.238	-0.75	11.96	8.99	2.00	31.53	548.65	21.10	35.17	192.15	2.77	4.62	
1.857	0.30	16.75	7.90	1.39	27.52	548.65	15.09	25.15	192.15	3.19	5.31	
2.476	0.97	19.75	6.97	0.78	23.16	548.65	12.77	21.29	192.15	3.80	6.34	
3.095	1.27	20.66	6.40	0.18	18.67	548.65	12.20	20.34	192.15	4.74	7.90	
3.714	1.19	19.42	6.33	-0.43	22.95	548.65	12.98	21.64	192.15	3.85	6.41	
4.333	0.73	16.19	6.74	-1.04	27.06	548.65	15.59	25.99	192.15	3.25	5.42	
4.952	-0.10	11.53	7.80	-1.65	30.94	548.65	21.92	36.55	192.15	2.83	4.72	
5.571	-1.31	5.93	9.07	-2.26	34.34	548.65	27.80	46.34	192.15	2.54	4.23	
0	-2.89	3.45	10.36	2.98	37.76	548.65	24.23	40.40	192.15	2.30	3.83	
0.619	-1.24	5.97	8.79	2.37	35.15	548.65	28.69	47.82	192.15	2.48	4.13	
1.238	0.04	11.56	7.51	1.77	31.76	548.65	21.86	36.44	192.15	2.75	4.59	
1.857	0.95	16.38	6.53	1.16	27.80	548.65	15.40	25.67	192.15	3.16	5.27	
2.476	1.48	19.64	5.78	0.55	23.45	548.65	12.83	21.38	192.15	3.76	6.27	
3.095	1.63	20.77	5.46	-0.06	19.17	548.65	12.12	20.21	192.15	4.62	7.70	
3.714	1.40	19.64	5.80	-0.67	23.75	548.65	12.83	21.38	192.15	3.71	6.19	
4.333	0.80	16.40	6.65	-1.27	28.09	548.65	15.38	25.64	192.15	3.13	5.21	
4.952	-0.17	11.49	7.94	-1.88	32.05	548.65	22.00	36.67	192.15	2.73	4.55	
5.571	-1.53	5.50	9.25	-2.49	35.42	548.65	27.22	45.38	192.15	2.46	4.10	

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.26	3.20	10.60	3.10	37.98	548.65	23.68	39.47	192.15	2.28	3.81	
0.619	-1.53	5.50	9.25	2.49	35.42	548.65	27.22	45.38	192.15	2.46	4.10	
1.238	-0.17	11.49	7.94	1.88	32.05	548.65	22.00	36.67	192.15	2.73	4.55	
1.857	0.80	16.40	6.65	1.27	28.09	548.65	15.38	25.64	192.15	3.13	5.21	
2.476	1.40	19.64	5.80	0.67	23.75	548.65	12.83	21.38	192.15	3.71	6.19	
3.095	1.63	20.77	5.46	0.06	19.17	548.65	12.12	20.21	192.15	4.62	7.70	
3.714	1.48	19.64	5.78	-0.55	23.45	548.65	12.83	21.38	192.15	3.76	6.27	
4.333	0.95	16.38	6.53	-1.16	27.80	548.65	15.40	25.67	192.15	3.16	5.27	
4.952	0.04	11.56	7.51	-1.77	31.76	548.65	21.86	36.44	192.15	2.75	4.59	
5.571	-1.24	5.97	8.79	-2.37	35.15	548.65	28.69	47.82	192.15	2.48	4.13	
0	-2.89	3.45	10.36	-2.98	37.76	548.65	24.23	40.40	192.15	2.30	3.83	
0.619	-1.31	5.93	9.07	2.26	34.34	548.65	27.80	46.34	192.15	2.54	4.23	
1.238	-0.10	11.53	7.80	1.65	30.94	548.65	21.92	36.55	192.15	2.83	4.72	
1.857	0.73	16.19	6.74	1.04	27.06	548.65	15.59	25.99	192.15	3.25	5.42	
2.476	1.19	19.42	6.33	0.43	22.95	548.65	12.98	21.64	192.15	3.85	6.41	
3.095	1.27	20.66	6.40	-0.18	18.67	548.65	12.20	20.34	192.15	4.74	7.90	
3.714	0.97	19.75	6.97	-0.78	23.16	548.65	12.77	21.29	192.15	3.80	6.34	
4.333	0.30	16.75	7.90	-1.39	27.52	548.65	15.09	25.15	192.15	3.19	5.31	
4.952	-0.75	11.96	8.99	-2.00	31.53	548.65	21.10	35.17	192.15	2.77	4.62	
5.571	-2.18	6.25	10.50	-2.61	35.01	548.65	23.97	39.95	192.15	2.48	4.14	
0	-3.98	2.59	12.02	3.68	37.76	548.65	20.84	34.74	192.15	2.29	3.81	
0.619	-1.89	5.70	8.73	3.07	34.96	548.65	28.83	48.05	192.15	2.48	4.13	
1.238	-0.17	11.48	7.76	2.47	32.35	548.65	22.02	36.70	192.15	2.69	4.49	
1.857	1.17	16.82	6.79	1.86	29.28	548.65	14.99	24.99	192.15	2.99	4.98	
2.476	2.13	21.21	5.82	1.25	25.87	548.65	11.86	19.77	192.15	3.39	5.66	
3.095	2.71	23.92	4.85	0.64	22.10	548.65	10.50	17.51	192.15	3.99	6.65	
3.714	2.92	24.50	3.88	0.04	19.30	548.65	10.25	17.08	192.15	4.59	7.65	
4.333	2.76	22.60	2.91	-0.57	23.74	548.65	11.11	18.52	192.15	3.72	6.19	
4.952	2.21	17.97	1.94	-1.18	28.31	548.65	14.00	23.33	192.15	3.10	5.17	
5.571	1.30	10.45	0.97	-1.79	32.93	548.65	24.11	40.20	192.15	2.66	4.43	
6.19	0.00	0.00	0.00	-2.40	37.48	548.65	N/A	N/A	192.15	2.32	3.87	

HS20-44

Fascia 2, Unit 15 (6 span unit)



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.40	37.48	548.65	N/A	N/A	192.15	2.32	3.87
0.619	1.30	10.45	0.97	1.79	32.93	548.65	24.11	40.20	192.15	2.66	4.43
1.238	2.21	17.97	1.94	1.18	28.31	548.65	14.00	23.33	192.15	3.10	5.17
1.857	2.76	22.60	2.91	0.57	23.74	548.65	11.11	18.52	192.15	3.72	6.19
2.476	2.92	24.50	3.88	-0.04	19.30	548.65	10.25	17.08	192.15	4.59	7.65
3.095	2.71	23.92	4.85	-0.64	22.10	548.65	10.50	17.51	192.15	3.99	6.65
3.714	2.13	21.21	5.82	-1.25	25.87	548.65	11.86	19.77	192.15	3.39	5.66
4.333	1.17	16.82	6.79	-1.86	29.28	548.65	14.99	24.99	192.15	2.99	4.98
4.952	-0.17	11.48	7.76	-2.47	32.35	548.65	22.02	36.70	192.15	2.69	4.49
5.571	-1.89	5.70	8.73	-3.07	34.96	548.65	28.83	48.05	192.15	2.48	4.13
0	-3.98	2.59	12.02	-3.68	37.76	548.65	20.84	34.74	192.15	2.29	3.81
0.619	-2.18	6.25	10.50	2.61	35.01	548.65	23.97	39.95	192.15	2.48	4.14
1.238	-0.75	11.96	8.99	2.00	31.53	548.65	21.10	35.17	192.15	2.77	4.62
1.857	0.30	16.75	7.90	1.39	27.52	548.65	15.09	25.15	192.15	3.19	5.31
2.476	0.97	19.75	6.97	0.78	23.16	548.65	12.77	21.29	192.15	3.80	6.34
3.095	1.27	20.66	6.40	0.18	18.67	548.65	12.20	20.34	192.15	4.74	7.90
3.714	1.19	19.42	6.33	-0.43	22.95	548.65	12.98	21.64	192.15	3.85	6.41
4.333	0.73	16.19	6.74	-1.04	27.06	548.65	15.59	25.99	192.15	3.25	5.42
4.952	-0.10	11.53	7.80	-1.65	30.94	548.65	21.92	36.55	192.15	2.83	4.72
5.571	-1.31	5.93	9.07	-2.26	34.34	548.65	27.80	46.34	192.15	2.54	4.23
0	-2.89	3.45	10.36	2.98	37.76	548.65	24.23	40.40	192.15	2.30	3.83
0.619	-1.24	5.97	8.79	2.37	35.15	548.65	28.69	47.82	192.15	2.48	4.13
1.238	0.04	11.56	7.51	1.77	31.76	548.65	21.86	36.44	192.15	2.75	4.59
1.857	0.95	16.38	6.53	1.16	27.80	548.65	15.40	25.67	192.15	3.16	5.27
2.476	1.48	19.64	5.78	0.55	23.45	548.65	12.83	21.38	192.15	3.76	6.27
3.095	1.63	20.77	5.46	-0.06	19.17	548.65	12.12	20.21	192.15	4.62	7.70
3.714	1.40	19.64	5.80	-0.67	23.75	548.65	12.83	21.38	192.15	3.71	6.19
4.333	0.80	16.40	6.65	-1.27	28.09	548.65	15.38	25.64	192.15	3.13	5.21
4.952	-0.17	11.49	7.94	-1.88	32.05	548.65	22.00	36.67	192.15	2.73	4.55
5.571	-1.53	5.50	9.25	-2.49	35.42	548.65	27.22	45.38	192.15	2.46	4.10

HS20-44 (Lane)

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.26	3.20	10.60	3.10	37.98	548.65	23.68	39.47	192.15	2.28	3.81	
0.619	-1.53	5.50	9.25	2.49	35.42	548.65	27.22	45.38	192.15	2.46	4.10	
1.238	-0.17	11.49	7.94	1.88	32.05	548.65	22.00	36.67	192.15	2.73	4.55	
1.857	0.80	16.40	6.65	1.27	28.09	548.65	15.38	25.64	192.15	3.13	5.21	
2.476	1.40	19.64	5.80	0.67	23.75	548.65	12.83	21.38	192.15	3.71	6.19	
3.095	1.63	20.77	5.46	0.06	19.17	548.65	12.12	20.21	192.15	4.62	7.70	
3.714	1.48	19.64	5.78	-0.55	23.45	548.65	12.83	21.38	192.15	3.76	6.27	
4.333	0.95	16.38	6.53	-1.16	27.80	548.65	15.40	25.67	192.15	3.16	5.27	
4.952	0.04	11.56	7.51	-1.77	31.76	548.65	21.86	36.44	192.15	2.75	4.59	
5.571	-1.24	5.97	8.79	-2.37	35.15	548.65	28.69	47.82	192.15	2.48	4.13	
0	-2.89	3.45	10.36	-2.98	37.76	548.65	24.23	40.40	192.15	2.30	3.83	
0.619	-1.31	5.93	9.07	2.26	34.34	548.65	27.80	46.34	192.15	2.54	4.23	
1.238	-0.10	11.53	7.80	1.65	30.94	548.65	21.92	36.55	192.15	2.83	4.72	
1.857	0.73	16.19	6.74	1.04	27.06	548.65	15.59	25.99	192.15	3.25	5.42	
2.476	1.19	19.42	6.33	0.43	22.95	548.65	12.98	21.64	192.15	3.85	6.41	
3.095	1.27	20.66	6.40	-0.18	18.67	548.65	12.20	20.34	192.15	4.74	7.90	
3.714	0.97	19.75	6.97	-0.78	23.16	548.65	12.77	21.29	192.15	3.80	6.34	
4.333	0.30	16.75	7.90	-1.39	27.52	548.65	15.09	25.15	192.15	3.19	5.31	
4.952	-0.75	11.96	8.99	-2.00	31.53	548.65	21.10	35.17	192.15	2.77	4.62	
5.571	-2.18	6.25	10.50	-2.61	35.01	548.65	23.97	39.95	192.15	2.48	4.14	
0	-3.98	2.59	12.02	3.68	37.76	548.65	20.84	34.74	192.15	2.29	3.81	
0.619	-1.89	5.70	8.73	3.07	34.96	548.65	28.83	48.05	192.15	2.48	4.13	
1.238	-0.17	11.48	7.76	2.47	32.35	548.65	22.02	36.70	192.15	2.69	4.49	
1.857	1.17	16.82	6.79	1.86	29.28	548.65	14.99	24.99	192.15	2.99	4.98	
2.476	2.13	21.21	5.82	1.25	25.87	548.65	11.86	19.77	192.15	3.39	5.66	
3.095	2.71	23.92	4.85	0.64	22.10	548.65	10.50	17.51	192.15	3.99	6.65	
3.714	2.92	24.50	3.88	0.04	19.30	548.65	10.25	17.08	192.15	4.59	7.65	
4.333	2.76	22.60	2.91	-0.57	23.74	548.65	11.11	18.52	192.15	3.72	6.19	
4.952	2.21	17.97	1.94	-1.18	28.31	548.65	14.00	23.33	192.15	3.10	5.17	
5.571	1.30	10.45	0.97	-1.79	32.93	548.65	24.11	40.20	192.15	2.66	4.43	
6.19	0.00	0.00	0.00	-2.40	37.48	548.65	N/A	N/A	192.15	2.32	3.87	

HS20-44 (Lane)

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.40	37.48	548.65	---	N/A	192.15	---	3.88
0.619	1.30	10.45	0.97	1.79	32.93	548.65	---	40.25	192.15	---	4.43
1.238	2.21	17.97	1.94	1.18	28.31	548.65	---	23.36	192.15	---	5.18
1.857	2.76	22.60	2.91	0.57	23.74	548.65	---	18.55	192.15	---	6.20
2.476	2.92	24.50	3.88	-0.04	19.30	548.65	---	17.11	192.15	---	7.66
3.095	2.71	23.92	4.85	-0.64	22.10	548.65	---	17.53	192.15	---	6.66
3.714	2.13	21.21	5.82	-1.25	25.87	548.65	---	19.80	192.15	---	5.67
4.333	1.17	16.82	6.79	-1.86	29.28	548.65	---	25.02	192.15	---	4.98
4.952	-0.17	11.48	7.76	-2.47	32.35	548.65	---	36.75	192.15	---	4.49
5.571	-1.89	5.70	8.73	-3.07	34.96	548.65	---	48.12	192.15	---	4.14
0	-3.98	2.59	12.02	-3.68	37.76	548.65	---	34.78	192.15	---	3.82
0.619	-2.18	6.25	10.50	2.61	35.01	548.65	---	40.00	192.15	---	4.15
1.238	-0.75	11.96	8.99	2.00	31.53	548.65	---	35.22	192.15	---	4.62
1.857	0.30	16.75	7.90	1.39	27.52	548.65	---	25.18	192.15	---	5.32
2.476	0.97	19.75	6.97	0.78	23.16	548.65	---	21.32	192.15	---	6.35
3.095	1.27	20.66	6.40	0.18	18.67	548.65	---	20.37	192.15	---	7.91
3.714	1.19	19.42	6.33	-0.43	22.95	548.65	---	21.67	192.15	---	6.42
4.333	0.73	16.19	6.74	-1.04	27.06	548.65	---	26.02	192.15	---	5.42
4.952	-0.10	11.53	7.80	-1.65	30.94	548.65	---	36.59	192.15	---	4.72
5.571	-1.31	5.93	9.07	-2.26	34.34	548.65	---	46.41	192.15	---	4.24
0	-2.89	3.45	10.36	2.98	37.76	548.65	---	40.45	192.15	---	3.84
0.619	-1.24	5.97	8.79	2.37	35.15	548.65	---	47.88	192.15	---	4.14
1.238	0.04	11.56	7.51	1.77	31.76	548.65	---	36.49	192.15	---	4.60
1.857	0.95	16.38	6.53	1.16	27.80	548.65	---	25.71	192.15	---	5.28
2.476	1.48	19.64	5.78	0.55	23.45	548.65	---	21.41	192.15	---	6.28
3.095	1.63	20.77	5.46	-0.06	19.17	548.65	---	20.24	192.15	---	7.71
3.714	1.40	19.64	5.80	-0.67	23.75	548.65	---	21.41	192.15	---	6.20
4.333	0.80	16.40	6.65	-1.27	28.09	548.65	---	25.68	192.15	---	5.22
4.952	-0.17	11.49	7.94	-1.88	32.05	548.65	---	36.72	192.15	---	4.55
5.571	-1.53	5.50	9.25	-2.49	35.42	548.65	---	45.44	192.15	---	4.10

2F1

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.26	3.20	10.60	3.10	37.98	548.65	---	39.52	192.15	---	3.81	
0.619	-1.53	5.50	9.25	2.49	35.42	548.65	---	45.44	192.15	---	4.10	
1.238	-0.17	11.49	7.94	1.88	32.05	548.65	---	36.72	192.15	---	4.55	
1.857	0.80	16.40	6.65	1.27	28.09	548.65	---	25.68	192.15	---	5.22	
2.476	1.40	19.64	5.80	0.67	23.75	548.65	---	21.41	192.15	---	6.20	
3.095	1.63	20.77	5.46	0.06	19.17	548.65	---	20.24	192.15	---	7.71	
3.714	1.48	19.64	5.78	-0.55	23.45	548.65	---	21.41	192.15	---	6.28	
4.333	0.95	16.38	6.53	-1.16	27.80	548.65	---	25.71	192.15	---	5.28	
4.952	0.04	11.56	7.51	-1.77	31.76	548.65	---	36.49	192.15	---	4.60	
5.571	-1.24	5.97	8.79	-2.37	35.15	548.65	---	47.88	192.15	---	4.14	
0	-2.89	3.45	10.36	-2.98	37.76	548.65	---	40.45	192.15	---	3.84	
0.619	-1.31	5.93	9.07	2.26	34.34	548.65	---	46.41	192.15	---	4.24	
1.238	-0.10	11.53	7.80	1.65	30.94	548.65	---	36.59	192.15	---	4.72	
1.857	0.73	16.19	6.74	1.04	27.06	548.65	---	26.02	192.15	---	5.42	
2.476	1.19	19.42	6.33	0.43	22.95	548.65	---	21.67	192.15	---	6.42	
3.095	1.27	20.66	6.40	-0.18	18.67	548.65	---	20.37	192.15	---	7.91	
3.714	0.97	19.75	6.97	-0.78	23.16	548.65	---	21.32	192.15	---	6.35	
4.333	0.30	16.75	7.90	-1.39	27.52	548.65	---	25.18	192.15	---	5.32	
4.952	-0.75	11.96	8.99	-2.00	31.53	548.65	---	35.22	192.15	---	4.62	
5.571	-2.18	6.25	10.50	-2.61	35.01	548.65	---	40.00	192.15	---	4.15	
0	-3.98	2.59	12.02	3.68	37.76	548.65	---	34.78	192.15	---	3.82	
0.619	-1.89	5.70	8.73	3.07	34.96	548.65	---	48.12	192.15	---	4.14	
1.238	-0.17	11.48	7.76	2.47	32.35	548.65	---	36.75	192.15	---	4.49	
1.857	1.17	16.82	6.79	1.86	29.28	548.65	---	25.02	192.15	---	4.98	
2.476	2.13	21.21	5.82	1.25	25.87	548.65	---	19.80	192.15	---	5.67	
3.095	2.71	23.92	4.85	0.64	22.10	548.65	---	17.53	192.15	---	6.66	
3.714	2.92	24.50	3.88	0.04	19.30	548.65	---	17.11	192.15	---	7.66	
4.333	2.76	22.60	2.91	-0.57	23.74	548.65	---	18.55	192.15	---	6.20	
4.952	2.21	17.97	1.94	-1.18	28.31	548.65	---	23.36	192.15	---	5.18	
5.571	1.30	10.45	0.97	-1.79	32.93	548.65	---	40.25	192.15	---	4.43	
6.19	0.00	0.00	0.00	-2.40	37.48	548.65	---	N/A	192.15	---	3.88	

2F1

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.40	37.48	548.65	---	N/A	192.15	---	3.88
0.619	1.30	10.45	0.97	1.79	32.93	548.65	---	40.25	192.15	---	4.43
1.238	2.21	17.97	1.94	1.18	28.31	548.65	---	23.36	192.15	---	5.18
1.857	2.76	22.60	2.91	0.57	23.74	548.65	---	18.55	192.15	---	6.20
2.476	2.92	24.50	3.88	-0.04	19.30	548.65	---	17.11	192.15	---	7.66
3.095	2.71	23.92	4.85	-0.64	22.10	548.65	---	17.53	192.15	---	6.66
3.714	2.13	21.21	5.82	-1.25	25.87	548.65	---	19.80	192.15	---	5.67
4.333	1.17	16.82	6.79	-1.86	29.28	548.65	---	25.02	192.15	---	4.98
4.952	-0.17	11.48	7.76	-2.47	32.35	548.65	---	36.75	192.15	---	4.49
5.571	-1.89	5.70	8.73	-3.07	34.96	548.65	---	48.12	192.15	---	4.14
0	-3.98	2.59	12.02	-3.68	37.76	548.65	---	34.78	192.15	---	3.82
0.619	-2.18	6.25	10.50	2.61	35.01	548.65	---	40.00	192.15	---	4.15
1.238	-0.75	11.96	8.99	2.00	31.53	548.65	---	35.22	192.15	---	4.62
1.857	0.30	16.75	7.90	1.39	27.52	548.65	---	25.18	192.15	---	5.32
2.476	0.97	19.75	6.97	0.78	23.16	548.65	---	21.32	192.15	---	6.35
3.095	1.27	20.66	6.40	0.18	18.67	548.65	---	20.37	192.15	---	7.91
3.714	1.19	19.42	6.33	-0.43	22.95	548.65	---	21.67	192.15	---	6.42
4.333	0.73	16.19	6.74	-1.04	27.06	548.65	---	26.02	192.15	---	5.42
4.952	-0.10	11.53	7.80	-1.65	30.94	548.65	---	36.59	192.15	---	4.72
5.571	-1.31	5.93	9.07	-2.26	34.34	548.65	---	46.41	192.15	---	4.24
0	-2.89	3.45	10.36	2.98	37.76	548.65	---	40.45	192.15	---	3.84
0.619	-1.24	5.97	8.79	2.37	35.15	548.65	---	47.88	192.15	---	4.14
1.238	0.04	11.56	7.51	1.77	31.76	548.65	---	36.49	192.15	---	4.60
1.857	0.95	16.38	6.53	1.16	27.80	548.65	---	25.71	192.15	---	5.28
2.476	1.48	19.64	5.78	0.55	23.45	548.65	---	21.41	192.15	---	6.28
3.095	1.63	20.77	5.46	-0.06	19.17	548.65	---	20.24	192.15	---	7.71
3.714	1.40	19.64	5.80	-0.67	23.75	548.65	---	21.41	192.15	---	6.20
4.333	0.80	16.40	6.65	-1.27	28.09	548.65	---	25.68	192.15	---	5.22
4.952	-0.17	11.49	7.94	-1.88	32.05	548.65	---	36.72	192.15	---	4.55
5.571	-1.53	5.50	9.25	-2.49	35.42	548.65	---	45.44	192.15	---	4.10

3F1

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.26	3.20	10.60	3.10	37.98	548.65	---	39.52	192.15	---	3.81	
0.619	-1.53	5.50	9.25	2.49	35.42	548.65	---	45.44	192.15	---	4.10	
1.238	-0.17	11.49	7.94	1.88	32.05	548.65	---	36.72	192.15	---	4.55	
1.857	0.80	16.40	6.65	1.27	28.09	548.65	---	25.68	192.15	---	5.22	
2.476	1.40	19.64	5.80	0.67	23.75	548.65	---	21.41	192.15	---	6.20	
3.095	1.63	20.77	5.46	0.06	19.17	548.65	---	20.24	192.15	---	7.71	
3.714	1.48	19.64	5.78	-0.55	23.45	548.65	---	21.41	192.15	---	6.28	
4.333	0.95	16.38	6.53	-1.16	27.80	548.65	---	25.71	192.15	---	5.28	
4.952	0.04	11.56	7.51	-1.77	31.76	548.65	---	36.49	192.15	---	4.60	
5.571	-1.24	5.97	8.79	-2.37	35.15	548.65	---	47.88	192.15	---	4.14	
0	-2.89	3.45	10.36	-2.98	37.76	548.65	---	40.45	192.15	---	3.84	
0.619	-1.31	5.93	9.07	2.26	34.34	548.65	---	46.41	192.15	---	4.24	
1.238	-0.10	11.53	7.80	1.65	30.94	548.65	---	36.59	192.15	---	4.72	
1.857	0.73	16.19	6.74	1.04	27.06	548.65	---	26.02	192.15	---	5.42	
2.476	1.19	19.42	6.33	0.43	22.95	548.65	---	21.67	192.15	---	6.42	
3.095	1.27	20.66	6.40	-0.18	18.67	548.65	---	20.37	192.15	---	7.91	
3.714	0.97	19.75	6.97	-0.78	23.16	548.65	---	21.32	192.15	---	6.35	
4.333	0.30	16.75	7.90	-1.39	27.52	548.65	---	25.18	192.15	---	5.32	
4.952	-0.75	11.96	8.99	-2.00	31.53	548.65	---	35.22	192.15	---	4.62	
5.571	-2.18	6.25	10.50	-2.61	35.01	548.65	---	40.00	192.15	---	4.15	
0	-3.98	2.59	12.02	3.68	37.76	548.65	---	34.78	192.15	---	3.82	
0.619	-1.89	5.70	8.73	3.07	34.96	548.65	---	48.12	192.15	---	4.14	
1.238	-0.17	11.48	7.76	2.47	32.35	548.65	---	36.75	192.15	---	4.49	
1.857	1.17	16.82	6.79	1.86	29.28	548.65	---	25.02	192.15	---	4.98	
2.476	2.13	21.21	5.82	1.25	25.87	548.65	---	19.80	192.15	---	5.67	
3.095	2.71	23.92	4.85	0.64	22.10	548.65	---	17.53	192.15	---	6.66	
3.714	2.92	24.50	3.88	0.04	19.30	548.65	---	17.11	192.15	---	7.66	
4.333	2.76	22.60	2.91	-0.57	23.74	548.65	---	18.55	192.15	---	6.20	
4.952	2.21	17.97	1.94	-1.18	28.31	548.65	---	23.36	192.15	---	5.18	
5.571	1.30	10.45	0.97	-1.79	32.93	548.65	---	40.25	192.15	---	4.43	
6.19	0.00	0.00	0.00	-2.40	37.48	548.65	---	N/A	192.15	---	3.88	

3F1

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.40	37.48	548.65	---	N/A	192.15	---	3.88
0.619	1.30	10.45	0.97	1.79	32.93	548.65	---	40.25	192.15	---	4.43
1.238	2.21	17.97	1.94	1.18	28.31	548.65	---	23.36	192.15	---	5.18
1.857	2.76	22.60	2.91	0.57	23.74	548.65	---	18.55	192.15	---	6.20
2.476	2.92	24.50	3.88	-0.04	19.30	548.65	---	17.11	192.15	---	7.66
3.095	2.71	23.92	4.85	-0.64	22.10	548.65	---	17.53	192.15	---	6.66
3.714	2.13	21.21	5.82	-1.25	25.87	548.65	---	19.80	192.15	---	5.67
4.333	1.17	16.82	6.79	-1.86	29.28	548.65	---	25.02	192.15	---	4.98
4.952	-0.17	11.48	7.76	-2.47	32.35	548.65	---	36.75	192.15	---	4.49
5.571	-1.89	5.70	8.73	-3.07	34.96	548.65	---	48.12	192.15	---	4.14
0	-3.98	2.59	12.02	-3.68	37.76	548.65	---	34.78	192.15	---	3.82
0.619	-2.18	6.25	10.50	2.61	35.01	548.65	---	40.00	192.15	---	4.15
1.238	-0.75	11.96	8.99	2.00	31.53	548.65	---	35.22	192.15	---	4.62
1.857	0.30	16.75	7.90	1.39	27.52	548.65	---	25.18	192.15	---	5.32
2.476	0.97	19.75	6.97	0.78	23.16	548.65	---	21.32	192.15	---	6.35
3.095	1.27	20.66	6.40	0.18	18.67	548.65	---	20.37	192.15	---	7.91
3.714	1.19	19.42	6.33	-0.43	22.95	548.65	---	21.67	192.15	---	6.42
4.333	0.73	16.19	6.74	-1.04	27.06	548.65	---	26.02	192.15	---	5.42
4.952	-0.10	11.53	7.80	-1.65	30.94	548.65	---	36.59	192.15	---	4.72
5.571	-1.31	5.93	9.07	-2.26	34.34	548.65	---	46.41	192.15	---	4.24
0	-2.89	3.45	10.36	2.98	37.76	548.65	---	40.45	192.15	---	3.84
0.619	-1.24	5.97	8.79	2.37	35.15	548.65	---	47.88	192.15	---	4.14
1.238	0.04	11.56	7.51	1.77	31.76	548.65	---	36.49	192.15	---	4.60
1.857	0.95	16.38	6.53	1.16	27.80	548.65	---	25.71	192.15	---	5.28
2.476	1.48	19.64	5.78	0.55	23.45	548.65	---	21.41	192.15	---	6.28
3.095	1.63	20.77	5.46	-0.06	19.17	548.65	---	20.24	192.15	---	7.71
3.714	1.40	19.64	5.80	-0.67	23.75	548.65	---	21.41	192.15	---	6.20
4.333	0.80	16.40	6.65	-1.27	28.09	548.65	---	25.68	192.15	---	5.22
4.952	-0.17	11.49	7.94	-1.88	32.05	548.65	---	36.72	192.15	---	4.55
5.571	-1.53	5.50	9.25	-2.49	35.42	548.65	---	45.44	192.15	---	4.10

4F1

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.26	3.20	10.60	3.10	37.98	548.65	---	39.52	192.15	---	3.81	
0.619	-1.53	5.50	9.25	2.49	35.42	548.65	---	45.44	192.15	---	4.10	
1.238	-0.17	11.49	7.94	1.88	32.05	548.65	---	36.72	192.15	---	4.55	
1.857	0.80	16.40	6.65	1.27	28.09	548.65	---	25.68	192.15	---	5.22	
2.476	1.40	19.64	5.80	0.67	23.75	548.65	---	21.41	192.15	---	6.20	
3.095	1.63	20.77	5.46	0.06	19.17	548.65	---	20.24	192.15	---	7.71	
3.714	1.48	19.64	5.78	-0.55	23.45	548.65	---	21.41	192.15	---	6.28	
4.333	0.95	16.38	6.53	-1.16	27.80	548.65	---	25.71	192.15	---	5.28	
4.952	0.04	11.56	7.51	-1.77	31.76	548.65	---	36.49	192.15	---	4.60	
5.571	-1.24	5.97	8.79	-2.37	35.15	548.65	---	47.88	192.15	---	4.14	
0	-2.89	3.45	10.36	-2.98	37.76	548.65	---	40.45	192.15	---	3.84	
0.619	-1.31	5.93	9.07	2.26	34.34	548.65	---	46.41	192.15	---	4.24	
1.238	-0.10	11.53	7.80	1.65	30.94	548.65	---	36.59	192.15	---	4.72	
1.857	0.73	16.19	6.74	1.04	27.06	548.65	---	26.02	192.15	---	5.42	
2.476	1.19	19.42	6.33	0.43	22.95	548.65	---	21.67	192.15	---	6.42	
3.095	1.27	20.66	6.40	-0.18	18.67	548.65	---	20.37	192.15	---	7.91	
3.714	0.97	19.75	6.97	-0.78	23.16	548.65	---	21.32	192.15	---	6.35	
4.333	0.30	16.75	7.90	-1.39	27.52	548.65	---	25.18	192.15	---	5.32	
4.952	-0.75	11.96	8.99	-2.00	31.53	548.65	---	35.22	192.15	---	4.62	
5.571	-2.18	6.25	10.50	-2.61	35.01	548.65	---	40.00	192.15	---	4.15	
0	-3.98	2.59	12.02	3.68	37.76	548.65	---	34.78	192.15	---	3.82	
0.619	-1.89	5.70	8.73	3.07	34.96	548.65	---	48.12	192.15	---	4.14	
1.238	-0.17	11.48	7.76	2.47	32.35	548.65	---	36.75	192.15	---	4.49	
1.857	1.17	16.82	6.79	1.86	29.28	548.65	---	25.02	192.15	---	4.98	
2.476	2.13	21.21	5.82	1.25	25.87	548.65	---	19.80	192.15	---	5.67	
3.095	2.71	23.92	4.85	0.64	22.10	548.65	---	17.53	192.15	---	6.66	
3.714	2.92	24.50	3.88	0.04	19.30	548.65	---	17.11	192.15	---	7.66	
4.333	2.76	22.60	2.91	-0.57	23.74	548.65	---	18.55	192.15	---	6.20	
4.952	2.21	17.97	1.94	-1.18	28.31	548.65	---	23.36	192.15	---	5.18	
5.571	1.30	10.45	0.97	-1.79	32.93	548.65	---	40.25	192.15	---	4.43	
6.19	0.00	0.00	0.00	-2.40	37.48	548.65	---	N/A	192.15	---	3.88	

4F1

Fascia 2, Unit 15 (6 span unit)



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.40	37.48	548.65	---	N/A	192.15	---	3.88
0.619	1.30	10.45	0.97	1.79	32.93	548.65	---	40.25	192.15	---	4.43
1.238	2.21	17.97	1.94	1.18	28.31	548.65	---	23.36	192.15	---	5.18
1.857	2.76	22.60	2.91	0.57	23.74	548.65	---	18.55	192.15	---	6.20
2.476	2.92	24.50	3.88	-0.04	19.30	548.65	---	17.11	192.15	---	7.66
3.095	2.71	23.92	4.85	-0.64	22.10	548.65	---	17.53	192.15	---	6.66
3.714	2.13	21.21	5.82	-1.25	25.87	548.65	---	19.80	192.15	---	5.67
4.333	1.17	16.82	6.79	-1.86	29.28	548.65	---	25.02	192.15	---	4.98
4.952	-0.17	11.48	7.76	-2.47	32.35	548.65	---	36.75	192.15	---	4.49
5.571	-1.89	5.70	8.73	-3.07	34.96	548.65	---	48.12	192.15	---	4.14
0	-3.98	2.59	12.02	-3.68	37.76	548.65	---	34.78	192.15	---	3.82
0.619	-2.18	6.25	10.50	2.61	35.01	548.65	---	40.00	192.15	---	4.15
1.238	-0.75	11.96	8.99	2.00	31.53	548.65	---	35.22	192.15	---	4.62
1.857	0.30	16.75	7.90	1.39	27.52	548.65	---	25.18	192.15	---	5.32
2.476	0.97	19.75	6.97	0.78	23.16	548.65	---	21.32	192.15	---	6.35
3.095	1.27	20.66	6.40	0.18	18.67	548.65	---	20.37	192.15	---	7.91
3.714	1.19	19.42	6.33	-0.43	22.95	548.65	---	21.67	192.15	---	6.42
4.333	0.73	16.19	6.74	-1.04	27.06	548.65	---	26.02	192.15	---	5.42
4.952	-0.10	11.53	7.80	-1.65	30.94	548.65	---	36.59	192.15	---	4.72
5.571	-1.31	5.93	9.07	-2.26	34.34	548.65	---	46.41	192.15	---	4.24
0	-2.89	3.45	10.36	2.98	37.76	548.65	---	40.45	192.15	---	3.84
0.619	-1.24	5.97	8.79	2.37	35.15	548.65	---	47.88	192.15	---	4.14
1.238	0.04	11.56	7.51	1.77	31.76	548.65	---	36.49	192.15	---	4.60
1.857	0.95	16.38	6.53	1.16	27.80	548.65	---	25.71	192.15	---	5.28
2.476	1.48	19.64	5.78	0.55	23.45	548.65	---	21.41	192.15	---	6.28
3.095	1.63	20.77	5.46	-0.06	19.17	548.65	---	20.24	192.15	---	7.71
3.714	1.40	19.64	5.80	-0.67	23.75	548.65	---	21.41	192.15	---	6.20
4.333	0.80	16.40	6.65	-1.27	28.09	548.65	---	25.68	192.15	---	5.22
4.952	-0.17	11.49	7.94	-1.88	32.05	548.65	---	36.72	192.15	---	4.55
5.571	-1.53	5.50	9.25	-2.49	35.42	548.65	---	45.44	192.15	---	4.10

5C1

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	-3.26	3.20	10.60	3.10	37.98	548.65	---	39.52	192.15	---	3.81	
0.619	-1.53	5.50	9.25	2.49	35.42	548.65	---	45.44	192.15	---	4.10	
1.238	-0.17	11.49	7.94	1.88	32.05	548.65	---	36.72	192.15	---	4.55	
1.857	0.80	16.40	6.65	1.27	28.09	548.65	---	25.68	192.15	---	5.22	
2.476	1.40	19.64	5.80	0.67	23.75	548.65	---	21.41	192.15	---	6.20	
3.095	1.63	20.77	5.46	0.06	19.17	548.65	---	20.24	192.15	---	7.71	
3.714	1.48	19.64	5.78	-0.55	23.45	548.65	---	21.41	192.15	---	6.28	
4.333	0.95	16.38	6.53	-1.16	27.80	548.65	---	25.71	192.15	---	5.28	
4.952	0.04	11.56	7.51	-1.77	31.76	548.65	---	36.49	192.15	---	4.60	
5.571	-1.24	5.97	8.79	-2.37	35.15	548.65	---	47.88	192.15	---	4.14	
0	-2.89	3.45	10.36	-2.98	37.76	548.65	---	40.45	192.15	---	3.84	
0.619	-1.31	5.93	9.07	2.26	34.34	548.65	---	46.41	192.15	---	4.24	
1.238	-0.10	11.53	7.80	1.65	30.94	548.65	---	36.59	192.15	---	4.72	
1.857	0.73	16.19	6.74	1.04	27.06	548.65	---	26.02	192.15	---	5.42	
2.476	1.19	19.42	6.33	0.43	22.95	548.65	---	21.67	192.15	---	6.42	
3.095	1.27	20.66	6.40	-0.18	18.67	548.65	---	20.37	192.15	---	7.91	
3.714	0.97	19.75	6.97	-0.78	23.16	548.65	---	21.32	192.15	---	6.35	
4.333	0.30	16.75	7.90	-1.39	27.52	548.65	---	25.18	192.15	---	5.32	
4.952	-0.75	11.96	8.99	-2.00	31.53	548.65	---	35.22	192.15	---	4.62	
5.571	-2.18	6.25	10.50	-2.61	35.01	548.65	---	40.00	192.15	---	4.15	
0	-3.98	2.59	12.02	3.68	37.76	548.65	---	34.78	192.15	---	3.82	
0.619	-1.89	5.70	8.73	3.07	34.96	548.65	---	48.12	192.15	---	4.14	
1.238	-0.17	11.48	7.76	2.47	32.35	548.65	---	36.75	192.15	---	4.49	
1.857	1.17	16.82	6.79	1.86	29.28	548.65	---	25.02	192.15	---	4.98	
2.476	2.13	21.21	5.82	1.25	25.87	548.65	---	19.80	192.15	---	5.67	
3.095	2.71	23.92	4.85	0.64	22.10	548.65	---	17.53	192.15	---	6.66	
3.714	2.92	24.50	3.88	0.04	19.30	548.65	---	17.11	192.15	---	7.66	
4.333	2.76	22.60	2.91	-0.57	23.74	548.65	---	18.55	192.15	---	6.20	
4.952	2.21	17.97	1.94	-1.18	28.31	548.65	---	23.36	192.15	---	5.18	
5.571	1.30	10.45	0.97	-1.79	32.93	548.65	---	40.25	192.15	---	4.43	
6.19	0.00	0.00	0.00	-2.40	37.48	548.65	---	N/A	192.15	---	3.88	

5C1

Fascia 2, Unit 15 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	0.00	0.00	0.00	2.68	37.49	600.99	N/A	N/A	207.18	2.50	4.17	
0.617	1.44	13.70	1.28	2.00	32.94	600.99	20.16	33.60	207.18	2.86	4.77	
1.234	2.46	23.55	2.56	1.32	28.32	600.99	11.70	19.50	207.18	3.34	5.57	
1.851	3.07	29.63	3.84	0.64	23.75	600.99	9.28	15.48	207.18	4.00	6.67	
2.468	3.25	32.13	5.12	-0.04	19.31	600.99	8.56	14.27	207.18	4.94	8.24	
3.085	3.02	31.38	6.40	-0.72	22.09	600.99	8.77	14.62	207.18	4.30	7.17	
3.702	2.36	27.83	7.68	-1.40	25.86	600.99	9.90	16.50	207.18	3.66	6.10	
4.319	1.29	22.09	8.96	-2.08	29.27	600.99	12.50	20.84	207.18	3.22	5.37	
4.936	-0.21	15.07	10.24	-2.76	32.33	600.99	18.37	30.63	207.18	2.90	4.84	
5.553	-2.12	7.48	11.52	-3.44	34.94	600.99	23.94	39.90	207.18	2.67	4.46	
0	-4.45	3.38	15.70	-4.12	37.72	600.99	17.47	29.12	207.18	2.47	4.11	
0.621	-2.42	8.23	13.71	2.92	34.99	600.99	20.10	33.50	207.18	2.68	4.47	
1.242	-0.82	15.75	11.73	2.24	31.52	600.99	17.56	29.27	207.18	2.99	4.98	
1.863	0.36	22.05	10.33	1.55	27.51	600.99	12.55	20.92	207.18	3.44	5.73	
2.484	1.11	26.01	9.14	0.87	23.16	600.99	10.62	17.71	207.18	4.10	6.83	
3.105	1.44	27.23	8.38	0.19	18.65	600.99	10.14	16.90	207.18	5.11	8.52	
3.726	1.34	25.61	8.31	-0.50	22.94	600.99	10.78	17.98	207.18	4.15	6.92	
4.347	0.82	21.36	8.82	-1.18	27.06	600.99	12.94	21.57	207.18	3.50	5.84	
4.968	-0.12	15.20	10.11	-1.87	30.92	600.99	18.21	30.36	207.18	3.05	5.09	
5.589	-1.50	7.82	11.78	-2.55	34.31	600.99	23.44	39.08	207.18	2.74	4.56	
0	-3.29	4.37	13.46	3.37	37.63	600.99	20.43	34.06	207.18	2.48	4.14	
0.621	-1.41	7.87	11.58	2.68	34.97	600.99	23.84	39.74	207.18	2.68	4.47	
1.242	0.04	15.25	9.90	2.00	31.54	600.99	18.16	30.28	207.18	2.99	4.98	
1.863	1.07	21.51	8.61	1.31	27.55	600.99	12.85	21.41	207.18	3.44	5.73	
2.484	1.67	25.84	7.61	0.63	23.19	600.99	10.68	17.80	207.18	4.10	6.84	
3.105	1.85	27.30	7.13	-0.05	19.19	600.99	10.10	16.84	207.18	4.97	8.29	
3.726	1.61	25.79	7.50	-0.74	23.76	600.99	10.70	17.84	207.18	4.00	6.67	
4.347	0.94	21.55	8.42	-1.42	28.11	600.99	12.82	21.38	207.18	3.37	5.61	
4.968	-0.16	15.11	9.64	-2.11	32.05	600.99	18.32	30.54	207.18	2.94	4.90	
5.589	-1.68	7.49	11.27	-2.79	35.38	600.99	24.48	40.80	207.18	2.65	4.42	

HS20-44

Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-3.62	3.99	14.04	-3.47	37.91	600.99	19.56	32.61	207.18	2.46	4.11
0.621	-1.70	7.80	12.24	2.76	34.30	600.99	22.54	37.57	207.18	2.73	4.56
1.242	-0.19	15.22	10.44	2.08	30.74	600.99	18.19	30.33	207.18	3.07	5.11
1.863	0.89	21.27	8.67	1.40	26.76	600.99	12.99	21.66	207.18	3.54	5.90
2.484	1.54	25.33	6.91	0.71	22.55	600.99	10.90	18.16	207.18	4.22	7.03
3.105	1.77	26.69	6.03	0.03	19.15	600.99	10.34	17.23	207.18	4.98	8.31
3.726	1.58	25.19	6.24	-0.66	23.72	600.99	10.96	18.26	207.18	4.01	6.68
4.347	0.96	21.02	7.11	-1.34	28.06	600.99	13.15	21.91	207.18	3.37	5.62
4.968	-0.09	14.77	8.24	-2.02	31.98	600.99	18.75	31.26	207.18	2.95	4.91
5.589	-1.55	7.53	9.62	-2.71	35.29	600.99	28.70	47.84	207.18	2.66	4.43
0	-3.45	4.38	14.55	-3.39	37.77	600.99	18.90	31.50	207.18	2.47	4.12
0.574	-1.70	7.52	12.62	2.73	34.08	600.99	21.87	36.45	207.18	2.75	4.59
1.148	-0.31	14.35	10.69	2.10	30.36	600.99	19.29	32.15	207.18	3.10	5.17
1.722	0.71	19.71	8.76	1.47	26.17	600.99	14.03	23.39	207.18	3.61	6.03
2.296	1.37	23.13	6.83	0.83	21.83	600.99	11.94	19.90	207.18	4.35	7.25
2.87	1.67	23.99	4.90	0.20	19.94	600.99	11.51	19.18	207.18	4.78	7.97
3.444	1.60	22.21	2.98	-0.43	24.55	600.99	12.43	20.71	207.18	3.88	6.46
4.018	1.18	18.07	3.46	-1.06	28.89	600.99	15.29	25.49	207.18	3.28	5.47
4.592	0.39	12.33	4.30	-1.69	32.72	600.99	22.44	37.41	207.18	2.89	4.81
5.166	-0.77	6.01	6.87	-2.33	35.85	600.99	40.27	67.12	207.18	2.62	4.37
0	-2.28	4.74	15.78	-2.96	38.06	600.99	17.46	29.11	207.18	2.46	4.10
0.307	-1.59	4.62	14.21	2.10	34.88	600.99	19.43	32.39	207.18	2.70	4.50
0.614	-1.00	8.85	12.63	1.76	31.98	600.99	21.88	36.48	207.18	2.95	4.92
0.921	-0.51	12.37	11.05	1.42	28.71	600.99	22.36	37.28	207.18	3.30	5.49
1.228	-0.13	14.94	9.47	1.08	25.14	600.99	18.54	30.90	207.18	3.77	6.29
1.535	0.16	16.32	7.89	0.74	21.28	600.99	16.96	28.28	207.18	4.47	7.44
1.842	0.33	16.33	6.31	0.41	19.73	600.99	16.95	28.25	207.18	4.83	8.05
2.149	0.40	14.84	4.74	0.07	23.91	600.99	18.65	31.08	207.18	3.99	6.66
2.456	0.37	11.73	3.16	-0.27	28.34	600.99	23.59	39.33	207.18	3.36	5.61
2.763	0.24	6.80	1.58	-0.61	32.89	600.99	40.68	67.81	207.18	2.89	4.82
3.07	0.00	0.00	0.00	-0.95	37.44	600.99	N/A	N/A	207.18	2.54	4.23

HS20-44

Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/7/2012  
Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	0.00	0.00	0.00	2.68	37.49	600.99	N/A	N/A	207.18	2.50	4.17	
0.617	1.44	13.70	1.28	2.00	32.94	600.99	20.16	33.60	207.18	2.86	4.77	
1.234	2.46	23.55	2.56	1.32	28.32	600.99	11.70	19.50	207.18	3.34	5.57	
1.851	3.07	29.63	3.84	0.64	23.75	600.99	9.28	15.48	207.18	4.00	6.67	
2.468	3.25	32.13	5.12	-0.04	19.31	600.99	8.56	14.27	207.18	4.94	8.24	
3.085	3.02	31.38	6.40	-0.72	22.09	600.99	8.77	14.62	207.18	4.30	7.17	
3.702	2.36	27.83	7.68	-1.40	25.86	600.99	9.90	16.50	207.18	3.66	6.10	
4.319	1.29	22.09	8.96	-2.08	29.27	600.99	12.50	20.84	207.18	3.22	5.37	
4.936	-0.21	15.07	10.24	-2.76	32.33	600.99	18.37	30.63	207.18	2.90	4.84	
5.553	-2.12	7.48	11.52	-3.44	34.94	600.99	23.94	39.90	207.18	2.67	4.46	
0	-4.45	3.38	15.70	-4.12	37.72	600.99	17.47	29.12	207.18	2.47	4.11	
0.621	-2.42	8.23	13.71	2.92	34.99	600.99	20.10	33.50	207.18	2.68	4.47	
1.242	-0.82	15.75	11.73	2.24	31.52	600.99	17.56	29.27	207.18	2.99	4.98	
1.863	0.36	22.05	10.33	1.55	27.51	600.99	12.55	20.92	207.18	3.44	5.73	
2.484	1.11	26.01	9.14	0.87	23.16	600.99	10.62	17.71	207.18	4.10	6.83	
3.105	1.44	27.23	8.38	0.19	18.65	600.99	10.14	16.90	207.18	5.11	8.52	
3.726	1.34	25.61	8.31	-0.50	22.94	600.99	10.78	17.98	207.18	4.15	6.92	
4.347	0.82	21.36	8.82	-1.18	27.06	600.99	12.94	21.57	207.18	3.50	5.84	
4.968	-0.12	15.20	10.11	-1.87	30.92	600.99	18.21	30.36	207.18	3.05	5.09	
5.589	-1.50	7.82	11.78	-2.55	34.31	600.99	23.44	39.08	207.18	2.74	4.56	
0	-3.29	4.37	13.46	3.37	37.63	600.99	20.43	34.06	207.18	2.48	4.14	
0.621	-1.41	7.87	11.58	2.68	34.97	600.99	23.84	39.74	207.18	2.68	4.47	
1.242	0.04	15.25	9.90	2.00	31.54	600.99	18.16	30.28	207.18	2.99	4.98	
1.863	1.07	21.51	8.61	1.31	27.55	600.99	12.85	21.41	207.18	3.44	5.73	
2.484	1.67	25.84	7.61	0.63	23.19	600.99	10.68	17.80	207.18	4.10	6.84	
3.105	1.85	27.30	7.13	-0.05	19.19	600.99	10.10	16.84	207.18	4.97	8.29	
3.726	1.61	25.79	7.50	-0.74	23.76	600.99	10.70	17.84	207.18	4.00	6.67	
4.347	0.94	21.55	8.42	-1.42	28.11	600.99	12.82	21.38	207.18	3.37	5.61	
4.968	-0.16	15.11	9.64	-2.11	32.05	600.99	18.32	30.54	207.18	2.94	4.90	
5.589	-1.68	7.49	11.27	-2.79	35.38	600.99	24.48	40.80	207.18	2.65	4.42	

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-3.62	3.99	14.04	-3.47	37.91	600.99	19.56	32.61	207.18	2.46	4.11
0.621	-1.70	7.80	12.24	2.76	34.30	600.99	22.54	37.57	207.18	2.73	4.56
1.242	-0.19	15.22	10.44	2.08	30.74	600.99	18.19	30.33	207.18	3.07	5.11
1.863	0.89	21.27	8.67	1.40	26.76	600.99	12.99	21.66	207.18	3.54	5.90
2.484	1.54	25.33	6.91	0.71	22.55	600.99	10.90	18.16	207.18	4.22	7.03
3.105	1.77	26.69	6.03	0.03	19.15	600.99	10.34	17.23	207.18	4.98	8.31
3.726	1.58	25.19	6.24	-0.66	23.72	600.99	10.96	18.26	207.18	4.01	6.68
4.347	0.96	21.02	7.11	-1.34	28.06	600.99	13.15	21.91	207.18	3.37	5.62
4.968	-0.09	14.77	8.24	-2.02	31.98	600.99	18.75	31.26	207.18	2.95	4.91
5.589	-1.55	7.53	9.62	-2.71	35.29	600.99	28.70	47.84	207.18	2.66	4.43
0	-3.45	4.38	14.55	-3.39	37.77	600.99	18.90	31.50	207.18	2.47	4.12
0.574	-1.70	7.52	12.62	2.73	34.08	600.99	21.87	36.45	207.18	2.75	4.59
1.148	-0.31	14.35	10.69	2.10	30.36	600.99	19.29	32.15	207.18	3.10	5.17
1.722	0.71	19.71	8.76	1.47	26.17	600.99	14.03	23.39	207.18	3.61	6.03
2.296	1.37	23.13	6.83	0.83	21.83	600.99	11.94	19.90	207.18	4.35	7.25
2.87	1.67	23.99	4.90	0.20	19.94	600.99	11.51	19.18	207.18	4.78	7.97
3.444	1.60	22.21	2.98	-0.43	24.55	600.99	12.43	20.71	207.18	3.88	6.46
4.018	1.18	18.07	3.46	-1.06	28.89	600.99	15.29	25.49	207.18	3.28	5.47
4.592	0.39	12.33	4.30	-1.69	32.72	600.99	22.44	37.41	207.18	2.89	4.81
5.166	-0.77	6.01	6.87	-2.33	35.85	600.99	40.27	67.12	207.18	2.62	4.37
0	-2.28	4.74	15.78	-2.96	38.06	600.99	17.46	29.11	207.18	2.46	4.10
0.307	-1.59	4.62	14.21	2.10	34.88	600.99	19.43	32.39	207.18	2.70	4.50
0.614	-1.00	8.85	12.63	1.76	31.98	600.99	21.88	36.48	207.18	2.95	4.92
0.921	-0.51	12.37	11.05	1.42	28.71	600.99	22.36	37.28	207.18	3.30	5.49
1.228	-0.13	14.94	9.47	1.08	25.14	600.99	18.54	30.90	207.18	3.77	6.29
1.535	0.16	16.32	7.89	0.74	21.28	600.99	16.96	28.28	207.18	4.47	7.44
1.842	0.33	16.33	6.31	0.41	19.73	600.99	16.95	28.25	207.18	4.83	8.05
2.149	0.40	14.84	4.74	0.07	23.91	600.99	18.65	31.08	207.18	3.99	6.66
2.456	0.37	11.73	3.16	-0.27	28.34	600.99	23.59	39.33	207.18	3.36	5.61
2.763	0.24	6.80	1.58	-0.61	32.89	600.99	40.68	67.81	207.18	2.89	4.82
3.07	0.00	0.00	0.00	-0.95	37.44	600.99	N/A	N/A	207.18	2.54	4.23

HS20-44 (Lane)

Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model						RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)			C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V		Inventory						
		D	L+I	L+I	D		L+I	(kips)	Inventory	Operating		
0	0.00	0.00	0.00	2.68	37.49	600.99	---	N/A	207.18	---	4.18	
0.617	1.44	13.70	1.28	2.00	32.94	600.99	---	33.65	207.18	---	4.78	
1.234	2.46	23.55	2.56	1.32	28.32	600.99	---	19.52	207.18	---	5.58	
1.851	3.07	29.63	3.84	0.64	23.75	600.99	---	15.50	207.18	---	6.68	
2.468	3.25	32.13	5.12	-0.04	19.31	600.99	---	14.29	207.18	---	8.25	
3.085	3.02	31.38	6.40	-0.72	22.09	600.99	---	14.64	207.18	---	7.18	
3.702	2.36	27.83	7.68	-1.40	25.86	600.99	---	16.52	207.18	---	6.11	
4.319	1.29	22.09	8.96	-2.08	29.27	600.99	---	20.87	207.18	---	5.37	
4.936	-0.21	15.07	10.24	-2.76	32.33	600.99	---	30.67	207.18	---	4.84	
5.553	-2.12	7.48	11.52	-3.44	34.94	600.99	---	39.95	207.18	---	4.46	
0	-4.45	3.38	15.70	-4.12	37.72	600.99	---	29.16	207.18	---	4.12	
0.621	-2.42	8.23	13.71	2.92	34.99	600.99	---	33.55	207.18	---	4.47	
1.242	-0.82	15.75	11.73	2.24	31.52	600.99	---	29.31	207.18	---	4.99	
1.863	0.36	22.05	10.33	1.55	27.51	600.99	---	20.95	207.18	---	5.74	
2.484	1.11	26.01	9.14	0.87	23.16	600.99	---	17.73	207.18	---	6.84	
3.105	1.44	27.23	8.38	0.19	18.65	600.99	---	16.93	207.18	---	8.53	
3.726	1.34	25.61	8.31	-0.50	22.94	600.99	---	18.00	207.18	---	6.92	
4.347	0.82	21.36	8.82	-1.18	27.06	600.99	---	21.60	207.18	---	5.85	
4.968	-0.12	15.20	10.11	-1.87	30.92	600.99	---	30.40	207.18	---	5.09	
5.589	-1.50	7.82	11.78	-2.55	34.31	600.99	---	39.13	207.18	---	4.57	
0	-3.29	4.37	13.46	3.37	37.63	600.99	---	34.10	207.18	---	4.15	
0.621	-1.41	7.87	11.58	2.68	34.97	600.99	---	39.79	207.18	---	4.48	
1.242	0.04	15.25	9.90	2.00	31.54	600.99	---	30.32	207.18	---	4.99	
1.863	1.07	21.51	8.61	1.31	27.55	600.99	---	21.44	207.18	---	5.74	
2.484	1.67	25.84	7.61	0.63	23.19	600.99	---	17.83	207.18	---	6.85	
3.105	1.85	27.30	7.13	-0.05	19.19	600.99	---	16.87	207.18	---	8.30	
3.726	1.61	25.79	7.50	-0.74	23.76	600.99	---	17.86	207.18	---	6.68	
4.347	0.94	21.55	8.42	-1.42	28.11	600.99	---	21.41	207.18	---	5.62	
4.968	-0.16	15.11	9.64	-2.11	32.05	600.99	---	30.58	207.18	---	4.91	
5.589	-1.68	7.49	11.27	-2.79	35.38	600.99	---	40.85	207.18	---	4.43	

2F1

Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-3.62	3.99	14.04	-3.47	37.91	600.99	---	32.66	207.18	---	4.11
0.621	-1.70	7.80	12.24	2.76	34.30	600.99	---	37.62	207.18	---	4.57
1.242	-0.19	15.22	10.44	2.08	30.74	600.99	---	30.37	207.18	---	5.12
1.863	0.89	21.27	8.67	1.40	26.76	600.99	---	21.69	207.18	---	5.90
2.484	1.54	25.33	6.91	0.71	22.55	600.99	---	18.19	207.18	---	7.04
3.105	1.77	26.69	6.03	0.03	19.15	600.99	---	17.26	207.18	---	8.32
3.726	1.58	25.19	6.24	-0.66	23.72	600.99	---	18.29	207.18	---	6.69
4.347	0.96	21.02	7.11	-1.34	28.06	600.99	---	21.94	207.18	---	5.63
4.968	-0.09	14.77	8.24	-2.02	31.98	600.99	---	31.30	207.18	---	4.92
5.589	-1.55	7.53	9.62	-2.71	35.29	600.99	---	47.90	207.18	---	4.44
0	-3.45	4.38	14.55	-3.39	37.77	600.99	---	31.54	207.18	---	4.13
0.574	-1.70	7.52	12.62	2.73	34.08	600.99	---	36.50	207.18	---	4.60
1.148	-0.31	14.35	10.69	2.10	30.36	600.99	---	32.19	207.18	---	5.18
1.722	0.71	19.71	8.76	1.47	26.17	600.99	---	23.42	207.18	---	6.03
2.296	1.37	23.13	6.83	0.83	21.83	600.99	---	19.93	207.18	---	7.26
2.87	1.67	23.99	4.90	0.20	19.94	600.99	---	19.20	207.18	---	7.98
3.444	1.60	22.21	2.98	-0.43	24.55	600.99	---	20.74	207.18	---	6.47
4.018	1.18	18.07	3.46	-1.06	28.89	600.99	---	25.53	207.18	---	5.48
4.592	0.39	12.33	4.30	-1.69	32.72	600.99	---	37.46	207.18	---	4.82
5.166	-0.77	6.01	6.87	-2.33	35.85	600.99	---	67.21	207.18	---	4.38
0	-2.28	4.74	15.78	-2.96	38.06	600.99	---	29.14	207.18	---	4.11
0.307	-1.59	4.62	14.21	2.10	34.88	600.99	---	32.43	207.18	---	4.51
0.614	-1.00	8.85	12.63	1.76	31.98	600.99	---	36.53	207.18	---	4.93
0.921	-0.51	12.37	11.05	1.42	28.71	600.99	---	37.33	207.18	---	5.50
1.228	-0.13	14.94	9.47	1.08	25.14	600.99	---	30.94	207.18	---	6.30
1.535	0.16	16.32	7.89	0.74	21.28	600.99	---	28.32	207.18	---	7.45
1.842	0.33	16.33	6.31	0.41	19.73	600.99	---	28.29	207.18	---	8.06
2.149	0.40	14.84	4.74	0.07	23.91	600.99	---	31.13	207.18	---	6.66
2.456	0.37	11.73	3.16	-0.27	28.34	600.99	---	39.38	207.18	---	5.61
2.763	0.24	6.80	1.58	-0.61	32.89	600.99	---	67.90	207.18	---	4.83
3.07	0.00	0.00	0.00	-0.95	37.44	600.99	---	N/A	207.18	---	4.23

2F1

Fascia 2, Unit 19 (6 span unit)



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.68	37.49	600.99	---	N/A	207.18	---	4.18
0.617	1.44	13.70	1.28	2.00	32.94	600.99	---	33.65	207.18	---	4.78
1.234	2.46	23.55	2.56	1.32	28.32	600.99	---	19.52	207.18	---	5.58
1.851	3.07	29.63	3.84	0.64	23.75	600.99	---	15.50	207.18	---	6.68
2.468	3.25	32.13	5.12	-0.04	19.31	600.99	---	14.29	207.18	---	8.25
3.085	3.02	31.38	6.40	-0.72	22.09	600.99	---	14.64	207.18	---	7.18
3.702	2.36	27.83	7.68	-1.40	25.86	600.99	---	16.52	207.18	---	6.11
4.319	1.29	22.09	8.96	-2.08	29.27	600.99	---	20.87	207.18	---	5.37
4.936	-0.21	15.07	10.24	-2.76	32.33	600.99	---	30.67	207.18	---	4.84
5.553	-2.12	7.48	11.52	-3.44	34.94	600.99	---	39.95	207.18	---	4.46
0	-4.45	3.38	15.70	-4.12	37.72	600.99	---	29.16	207.18	---	4.12
0.621	-2.42	8.23	13.71	2.92	34.99	600.99	---	33.55	207.18	---	4.47
1.242	-0.82	15.75	11.73	2.24	31.52	600.99	---	29.31	207.18	---	4.99
1.863	0.36	22.05	10.33	1.55	27.51	600.99	---	20.95	207.18	---	5.74
2.484	1.11	26.01	9.14	0.87	23.16	600.99	---	17.73	207.18	---	6.84
3.105	1.44	27.23	8.38	0.19	18.65	600.99	---	16.93	207.18	---	8.53
3.726	1.34	25.61	8.31	-0.50	22.94	600.99	---	18.00	207.18	---	6.92
4.347	0.82	21.36	8.82	-1.18	27.06	600.99	---	21.60	207.18	---	5.85
4.968	-0.12	15.20	10.11	-1.87	30.92	600.99	---	30.40	207.18	---	5.09
5.589	-1.50	7.82	11.78	-2.55	34.31	600.99	---	39.13	207.18	---	4.57
0	-3.29	4.37	13.46	3.37	37.63	600.99	---	34.10	207.18	---	4.15
0.621	-1.41	7.87	11.58	2.68	34.97	600.99	---	39.79	207.18	---	4.48
1.242	0.04	15.25	9.90	2.00	31.54	600.99	---	30.32	207.18	---	4.99
1.863	1.07	21.51	8.61	1.31	27.55	600.99	---	21.44	207.18	---	5.74
2.484	1.67	25.84	7.61	0.63	23.19	600.99	---	17.83	207.18	---	6.85
3.105	1.85	27.30	7.13	-0.05	19.19	600.99	---	16.87	207.18	---	8.30
3.726	1.61	25.79	7.50	-0.74	23.76	600.99	---	17.86	207.18	---	6.68
4.347	0.94	21.55	8.42	-1.42	28.11	600.99	---	21.41	207.18	---	5.62
4.968	-0.16	15.11	9.64	-2.11	32.05	600.99	---	30.58	207.18	---	4.91
5.589	-1.68	7.49	11.27	-2.79	35.38	600.99	---	40.85	207.18	---	4.43

3F1

Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-3.62	3.99	14.04	-3.47	37.91	600.99	---	32.66	207.18	---	4.11
0.621	-1.70	7.80	12.24	2.76	34.30	600.99	---	37.62	207.18	---	4.57
1.242	-0.19	15.22	10.44	2.08	30.74	600.99	---	30.37	207.18	---	5.12
1.863	0.89	21.27	8.67	1.40	26.76	600.99	---	21.69	207.18	---	5.90
2.484	1.54	25.33	6.91	0.71	22.55	600.99	---	18.19	207.18	---	7.04
3.105	1.77	26.69	6.03	0.03	19.15	600.99	---	17.26	207.18	---	8.32
3.726	1.58	25.19	6.24	-0.66	23.72	600.99	---	18.29	207.18	---	6.69
4.347	0.96	21.02	7.11	-1.34	28.06	600.99	---	21.94	207.18	---	5.63
4.968	-0.09	14.77	8.24	-2.02	31.98	600.99	---	31.30	207.18	---	4.92
5.589	-1.55	7.53	9.62	-2.71	35.29	600.99	---	47.90	207.18	---	4.44
0	-3.45	4.38	14.55	-3.39	37.77	600.99	---	31.54	207.18	---	4.13
0.574	-1.70	7.52	12.62	2.73	34.08	600.99	---	36.50	207.18	---	4.60
1.148	-0.31	14.35	10.69	2.10	30.36	600.99	---	32.19	207.18	---	5.18
1.722	0.71	19.71	8.76	1.47	26.17	600.99	---	23.42	207.18	---	6.03
2.296	1.37	23.13	6.83	0.83	21.83	600.99	---	19.93	207.18	---	7.26
2.87	1.67	23.99	4.90	0.20	19.94	600.99	---	19.20	207.18	---	7.98
3.444	1.60	22.21	2.98	-0.43	24.55	600.99	---	20.74	207.18	---	6.47
4.018	1.18	18.07	3.46	-1.06	28.89	600.99	---	25.53	207.18	---	5.48
4.592	0.39	12.33	4.30	-1.69	32.72	600.99	---	37.46	207.18	---	4.82
5.166	-0.77	6.01	6.87	-2.33	35.85	600.99	---	67.21	207.18	---	4.38
0	-2.28	4.74	15.78	-2.96	38.06	600.99	---	29.14	207.18	---	4.11
0.307	-1.59	4.62	14.21	2.10	34.88	600.99	---	32.43	207.18	---	4.51
0.614	-1.00	8.85	12.63	1.76	31.98	600.99	---	36.53	207.18	---	4.93
0.921	-0.51	12.37	11.05	1.42	28.71	600.99	---	37.33	207.18	---	5.50
1.228	-0.13	14.94	9.47	1.08	25.14	600.99	---	30.94	207.18	---	6.30
1.535	0.16	16.32	7.89	0.74	21.28	600.99	---	28.32	207.18	---	7.45
1.842	0.33	16.33	6.31	0.41	19.73	600.99	---	28.29	207.18	---	8.06
2.149	0.40	14.84	4.74	0.07	23.91	600.99	---	31.13	207.18	---	6.66
2.456	0.37	11.73	3.16	-0.27	28.34	600.99	---	39.38	207.18	---	5.61
2.763	0.24	6.80	1.58	-0.61	32.89	600.99	---	67.90	207.18	---	4.83
3.07	0.00	0.00	0.00	-0.95	37.44	600.99	---	N/A	207.18	---	4.23

3F1

Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.68	37.49	600.99	---	N/A	207.18	---	4.18
0.617	1.44	13.70	1.28	2.00	32.94	600.99	---	33.65	207.18	---	4.78
1.234	2.46	23.55	2.56	1.32	28.32	600.99	---	19.52	207.18	---	5.58
1.851	3.07	29.63	3.84	0.64	23.75	600.99	---	15.50	207.18	---	6.68
2.468	3.25	32.13	5.12	-0.04	19.31	600.99	---	14.29	207.18	---	8.25
3.085	3.02	31.38	6.40	-0.72	22.09	600.99	---	14.64	207.18	---	7.18
3.702	2.36	27.83	7.68	-1.40	25.86	600.99	---	16.52	207.18	---	6.11
4.319	1.29	22.09	8.96	-2.08	29.27	600.99	---	20.87	207.18	---	5.37
4.936	-0.21	15.07	10.24	-2.76	32.33	600.99	---	30.67	207.18	---	4.84
5.553	-2.12	7.48	11.52	-3.44	34.94	600.99	---	39.95	207.18	---	4.46
0	-4.45	3.38	15.70	-4.12	37.72	600.99	---	29.16	207.18	---	4.12
0.621	-2.42	8.23	13.71	2.92	34.99	600.99	---	33.55	207.18	---	4.47
1.242	-0.82	15.75	11.73	2.24	31.52	600.99	---	29.31	207.18	---	4.99
1.863	0.36	22.05	10.33	1.55	27.51	600.99	---	20.95	207.18	---	5.74
2.484	1.11	26.01	9.14	0.87	23.16	600.99	---	17.73	207.18	---	6.84
3.105	1.44	27.23	8.38	0.19	18.65	600.99	---	16.93	207.18	---	8.53
3.726	1.34	25.61	8.31	-0.50	22.94	600.99	---	18.00	207.18	---	6.92
4.347	0.82	21.36	8.82	-1.18	27.06	600.99	---	21.60	207.18	---	5.85
4.968	-0.12	15.20	10.11	-1.87	30.92	600.99	---	30.40	207.18	---	5.09
5.589	-1.50	7.82	11.78	-2.55	34.31	600.99	---	39.13	207.18	---	4.57
0	-3.29	4.37	13.46	3.37	37.63	600.99	---	34.10	207.18	---	4.15
0.621	-1.41	7.87	11.58	2.68	34.97	600.99	---	39.79	207.18	---	4.48
1.242	0.04	15.25	9.90	2.00	31.54	600.99	---	30.32	207.18	---	4.99
1.863	1.07	21.51	8.61	1.31	27.55	600.99	---	21.44	207.18	---	5.74
2.484	1.67	25.84	7.61	0.63	23.19	600.99	---	17.83	207.18	---	6.85
3.105	1.85	27.30	7.13	-0.05	19.19	600.99	---	16.87	207.18	---	8.30
3.726	1.61	25.79	7.50	-0.74	23.76	600.99	---	17.86	207.18	---	6.68
4.347	0.94	21.55	8.42	-1.42	28.11	600.99	---	21.41	207.18	---	5.62
4.968	-0.16	15.11	9.64	-2.11	32.05	600.99	---	30.58	207.18	---	4.91
5.589	-1.68	7.49	11.27	-2.79	35.38	600.99	---	40.85	207.18	---	4.43

4F1

Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-3.62	3.99	14.04	-3.47	37.91	600.99	---	32.66	207.18	---	4.11
0.621	-1.70	7.80	12.24	2.76	34.30	600.99	---	37.62	207.18	---	4.57
1.242	-0.19	15.22	10.44	2.08	30.74	600.99	---	30.37	207.18	---	5.12
1.863	0.89	21.27	8.67	1.40	26.76	600.99	---	21.69	207.18	---	5.90
2.484	1.54	25.33	6.91	0.71	22.55	600.99	---	18.19	207.18	---	7.04
3.105	1.77	26.69	6.03	0.03	19.15	600.99	---	17.26	207.18	---	8.32
3.726	1.58	25.19	6.24	-0.66	23.72	600.99	---	18.29	207.18	---	6.69
4.347	0.96	21.02	7.11	-1.34	28.06	600.99	---	21.94	207.18	---	5.63
4.968	-0.09	14.77	8.24	-2.02	31.98	600.99	---	31.30	207.18	---	4.92
5.589	-1.55	7.53	9.62	-2.71	35.29	600.99	---	47.90	207.18	---	4.44
0	-3.45	4.38	14.55	-3.39	37.77	600.99	---	31.54	207.18	---	4.13
0.574	-1.70	7.52	12.62	2.73	34.08	600.99	---	36.50	207.18	---	4.60
1.148	-0.31	14.35	10.69	2.10	30.36	600.99	---	32.19	207.18	---	5.18
1.722	0.71	19.71	8.76	1.47	26.17	600.99	---	23.42	207.18	---	6.03
2.296	1.37	23.13	6.83	0.83	21.83	600.99	---	19.93	207.18	---	7.26
2.87	1.67	23.99	4.90	0.20	19.94	600.99	---	19.20	207.18	---	7.98
3.444	1.60	22.21	2.98	-0.43	24.55	600.99	---	20.74	207.18	---	6.47
4.018	1.18	18.07	3.46	-1.06	28.89	600.99	---	25.53	207.18	---	5.48
4.592	0.39	12.33	4.30	-1.69	32.72	600.99	---	37.46	207.18	---	4.82
5.166	-0.77	6.01	6.87	-2.33	35.85	600.99	---	67.21	207.18	---	4.38
0	-2.28	4.74	15.78	-2.96	38.06	600.99	---	29.14	207.18	---	4.11
0.307	-1.59	4.62	14.21	2.10	34.88	600.99	---	32.43	207.18	---	4.51
0.614	-1.00	8.85	12.63	1.76	31.98	600.99	---	36.53	207.18	---	4.93
0.921	-0.51	12.37	11.05	1.42	28.71	600.99	---	37.33	207.18	---	5.50
1.228	-0.13	14.94	9.47	1.08	25.14	600.99	---	30.94	207.18	---	6.30
1.535	0.16	16.32	7.89	0.74	21.28	600.99	---	28.32	207.18	---	7.45
1.842	0.33	16.33	6.31	0.41	19.73	600.99	---	28.29	207.18	---	8.06
2.149	0.40	14.84	4.74	0.07	23.91	600.99	---	31.13	207.18	---	6.66
2.456	0.37	11.73	3.16	-0.27	28.34	600.99	---	39.38	207.18	---	5.61
2.763	0.24	6.80	1.58	-0.61	32.89	600.99	---	67.90	207.18	---	4.83
3.07	0.00	0.00	0.00	-0.95	37.44	600.99	---	N/A	207.18	---	4.23

4F1  
Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	0.00	0.00	0.00	2.68	37.49	600.99	---	N/A	207.18	---	4.18
0.617	1.44	13.70	1.28	2.00	32.94	600.99	---	33.65	207.18	---	4.78
1.234	2.46	23.55	2.56	1.32	28.32	600.99	---	19.52	207.18	---	5.58
1.851	3.07	29.63	3.84	0.64	23.75	600.99	---	15.50	207.18	---	6.68
2.468	3.25	32.13	5.12	-0.04	19.31	600.99	---	14.29	207.18	---	8.25
3.085	3.02	31.38	6.40	-0.72	22.09	600.99	---	14.64	207.18	---	7.18
3.702	2.36	27.83	7.68	-1.40	25.86	600.99	---	16.52	207.18	---	6.11
4.319	1.29	22.09	8.96	-2.08	29.27	600.99	---	20.87	207.18	---	5.37
4.936	-0.21	15.07	10.24	-2.76	32.33	600.99	---	30.67	207.18	---	4.84
5.553	-2.12	7.48	11.52	-3.44	34.94	600.99	---	39.95	207.18	---	4.46
0	-4.45	3.38	15.70	-4.12	37.72	600.99	---	29.16	207.18	---	4.12
0.621	-2.42	8.23	13.71	2.92	34.99	600.99	---	33.55	207.18	---	4.47
1.242	-0.82	15.75	11.73	2.24	31.52	600.99	---	29.31	207.18	---	4.99
1.863	0.36	22.05	10.33	1.55	27.51	600.99	---	20.95	207.18	---	5.74
2.484	1.11	26.01	9.14	0.87	23.16	600.99	---	17.73	207.18	---	6.84
3.105	1.44	27.23	8.38	0.19	18.65	600.99	---	16.93	207.18	---	8.53
3.726	1.34	25.61	8.31	-0.50	22.94	600.99	---	18.00	207.18	---	6.92
4.347	0.82	21.36	8.82	-1.18	27.06	600.99	---	21.60	207.18	---	5.85
4.968	-0.12	15.20	10.11	-1.87	30.92	600.99	---	30.40	207.18	---	5.09
5.589	-1.50	7.82	11.78	-2.55	34.31	600.99	---	39.13	207.18	---	4.57
0	-3.29	4.37	13.46	3.37	37.63	600.99	---	34.10	207.18	---	4.15
0.621	-1.41	7.87	11.58	2.68	34.97	600.99	---	39.79	207.18	---	4.48
1.242	0.04	15.25	9.90	2.00	31.54	600.99	---	30.32	207.18	---	4.99
1.863	1.07	21.51	8.61	1.31	27.55	600.99	---	21.44	207.18	---	5.74
2.484	1.67	25.84	7.61	0.63	23.19	600.99	---	17.83	207.18	---	6.85
3.105	1.85	27.30	7.13	-0.05	19.19	600.99	---	16.87	207.18	---	8.30
3.726	1.61	25.79	7.50	-0.74	23.76	600.99	---	17.86	207.18	---	6.68
4.347	0.94	21.55	8.42	-1.42	28.11	600.99	---	21.41	207.18	---	5.62
4.968	-0.16	15.11	9.64	-2.11	32.05	600.99	---	30.58	207.18	---	4.91
5.589	-1.68	7.49	11.27	-2.79	35.38	600.99	---	40.85	207.18	---	4.43

5C1

Fascia 2, Unit 19 (6 span unit)

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/7/2012

Checked: DBH 3/8/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-3.62	3.99	14.04	-3.47	37.91	600.99	---	32.66	207.18	---	4.11
0.621	-1.70	7.80	12.24	2.76	34.30	600.99	---	37.62	207.18	---	4.57
1.242	-0.19	15.22	10.44	2.08	30.74	600.99	---	30.37	207.18	---	5.12
1.863	0.89	21.27	8.67	1.40	26.76	600.99	---	21.69	207.18	---	5.90
2.484	1.54	25.33	6.91	0.71	22.55	600.99	---	18.19	207.18	---	7.04
3.105	1.77	26.69	6.03	0.03	19.15	600.99	---	17.26	207.18	---	8.32
3.726	1.58	25.19	6.24	-0.66	23.72	600.99	---	18.29	207.18	---	6.69
4.347	0.96	21.02	7.11	-1.34	28.06	600.99	---	21.94	207.18	---	5.63
4.968	-0.09	14.77	8.24	-2.02	31.98	600.99	---	31.30	207.18	---	4.92
5.589	-1.55	7.53	9.62	-2.71	35.29	600.99	---	47.90	207.18	---	4.44
0	-3.45	4.38	14.55	-3.39	37.77	600.99	---	31.54	207.18	---	4.13
0.574	-1.70	7.52	12.62	2.73	34.08	600.99	---	36.50	207.18	---	4.60
1.148	-0.31	14.35	10.69	2.10	30.36	600.99	---	32.19	207.18	---	5.18
1.722	0.71	19.71	8.76	1.47	26.17	600.99	---	23.42	207.18	---	6.03
2.296	1.37	23.13	6.83	0.83	21.83	600.99	---	19.93	207.18	---	7.26
2.87	1.67	23.99	4.90	0.20	19.94	600.99	---	19.20	207.18	---	7.98
3.444	1.60	22.21	2.98	-0.43	24.55	600.99	---	20.74	207.18	---	6.47
4.018	1.18	18.07	3.46	-1.06	28.89	600.99	---	25.53	207.18	---	5.48
4.592	0.39	12.33	4.30	-1.69	32.72	600.99	---	37.46	207.18	---	4.82
5.166	-0.77	6.01	6.87	-2.33	35.85	600.99	---	67.21	207.18	---	4.38
0	-2.28	4.74	15.78	-2.96	38.06	600.99	---	29.14	207.18	---	4.11
0.307	-1.59	4.62	14.21	2.10	34.88	600.99	---	32.43	207.18	---	4.51
0.614	-1.00	8.85	12.63	1.76	31.98	600.99	---	36.53	207.18	---	4.93
0.921	-0.51	12.37	11.05	1.42	28.71	600.99	---	37.33	207.18	---	5.50
1.228	-0.13	14.94	9.47	1.08	25.14	600.99	---	30.94	207.18	---	6.30
1.535	0.16	16.32	7.89	0.74	21.28	600.99	---	28.32	207.18	---	7.45
1.842	0.33	16.33	6.31	0.41	19.73	600.99	---	28.29	207.18	---	8.06
2.149	0.40	14.84	4.74	0.07	23.91	600.99	---	31.13	207.18	---	6.66
2.456	0.37	11.73	3.16	-0.27	28.34	600.99	---	39.38	207.18	---	5.61
2.763	0.24	6.80	1.58	-0.61	32.89	600.99	---	67.90	207.18	---	4.83
3.07	0.00	0.00	0.00	-0.95	37.44	600.99	---	N/A	207.18	---	4.23

5C1

Fascia 2, Unit 19 (6 span unit)

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

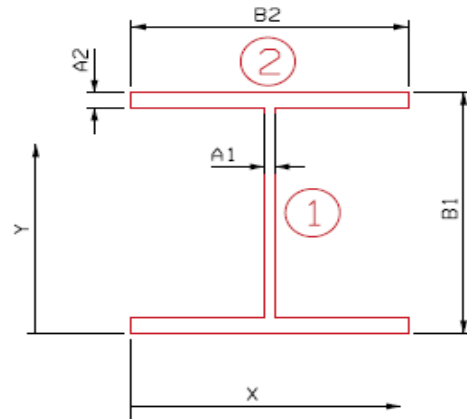
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 33.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 1

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.8125	16.5000	194.9063	976.7461	0.0000	0.0000	976.7461
2	Top Flange		6.0000	32.6250	195.7500	0.2813	16.1250	1560.0938	1560.3750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	16.1250	1560.0938	1560.3750
<b>Total</b>			<b>23.81</b>		<b>392.91</b>	<b>977.31</b>		<b>3120.19</b>	<b>4097.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$	y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$		
$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$	$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$		
$c_{top} =$	16.5000	in	A =	23.8125	$in^2$	$c_{top} =$	16.5000	in	A =	23.8125	$in^2$
$c_{bottom} =$	16.5000	in	$r_x =$	13.1177	in	$c_{bottom} =$	16.5000	in	$r_x =$	13.1177	in
			Z =	286.52	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	745.00 k-ft	745.00 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear



# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

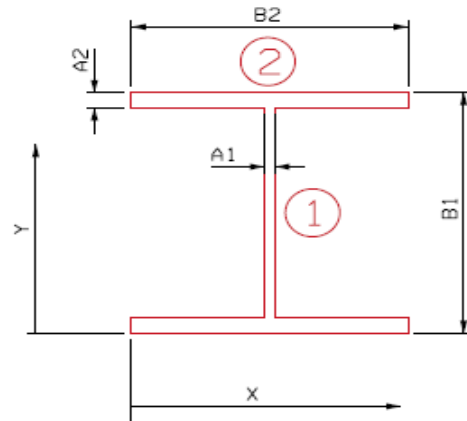
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 30.9600$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 2

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.0475	15.4800	171.0153	799.0027	0.0000	0.0000	799.0027
2	Top Flange		6.0000	30.5850	183.5100	0.2813	15.1050	1368.9662	1369.2474
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	15.1050	1368.9662	1369.2474
<b>Total</b>			<b>23.05</b>		<b>356.78</b>	<b>799.57</b>		<b>2737.93</b>	<b>3537.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	15.4800	in	$S_{top} = 228.52$	$in^3$	y-bar =	15.4800	in	$S_{top} = 228.52$	$in^3$		
$I_x =$	3537.50	$in^4$	$S_{bott.} = 228.52$	$in^3$	$I_x =$	3537.50	$in^4$	$S_{bott.} = 228.52$	$in^3$		
$c_{top} =$	15.4800	in	A =	23.0475	$in^2$	$c_{top} =$	15.4800	in	A =	23.0475	$in^2$
$c_{bottom} =$	15.4800	in	$r_x =$	12.3890	in	$c_{bottom} =$	15.4800	in	$r_x =$	12.3890	in
			Z =	262.62	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	685.56 k-ft	685.56 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

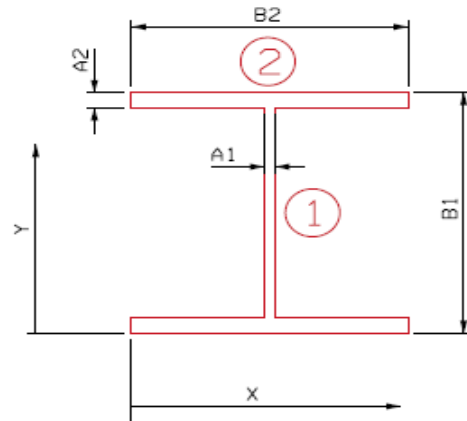
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 30.9600$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 3

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.0475	15.4800	171.0153	799.0027	0.0000	0.0000	799.0027
2	Top Flange		6.0000	30.5850	183.5100	0.2813	15.1050	1368.9662	1369.2474
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	15.1050	1368.9662	1369.2474
<b>Total</b>			<b>23.05</b>		<b>356.78</b>	<b>799.57</b>		<b>2737.93</b>	<b>3537.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	15.4800	in	$S_{top} = 228.52$	$in^3$	y-bar =	15.4800	in	$S_{top} = 228.52$	$in^3$		
$I_x =$	3537.50	$in^4$	$S_{bott.} = 228.52$	$in^3$	$I_x =$	3537.50	$in^4$	$S_{bott.} = 228.52$	$in^3$		
$c_{top} =$	15.4800	in	A =	23.0475	$in^2$	$c_{top} =$	15.4800	in	A =	23.0475	$in^2$
$c_{bottom} =$	15.4800	in	$r_x =$	12.3890	in	$c_{bottom} =$	15.4800	in	$r_x =$	12.3890	in
			Z =	262.62	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	685.56 k-ft	685.56 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

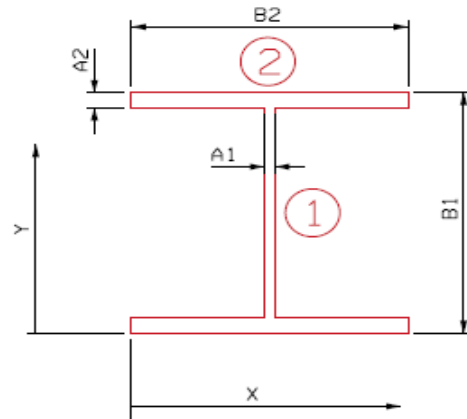
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 32.0400$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 4

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.4525	16.0200	183.4691	890.1375	0.0000	0.0000	890.1375
2	Top Flange		6.0000	31.6650	189.9900	0.2813	15.6450	1468.5962	1468.8774
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	15.6450	1468.5962	1468.8774
<b>Total</b>			<b>23.45</b>		<b>375.71</b>	<b>890.70</b>		<b>2937.19</b>	<b>3827.89</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.0200	in	$S_{top} = 238.94$	$in^3$	y-bar =	16.0200	in	$S_{top} = 238.94$	$in^3$		
$I_x =$	3827.89	$in^4$	$S_{bott.} = 238.94$	$in^3$	$I_x =$	3827.89	$in^4$	$S_{bott.} = 238.94$	$in^3$		
$c_{top} =$	16.0200	in	A =	23.4525	$in^2$	$c_{top} =$	16.0200	in	A =	23.4525	$in^2$
$c_{bottom} =$	16.0200	in	$r_x =$	12.7757	in	$c_{bottom} =$	16.0200	in	$r_x =$	12.7757	in
			Z =	275.18	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	716.83 k-ft	716.83 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

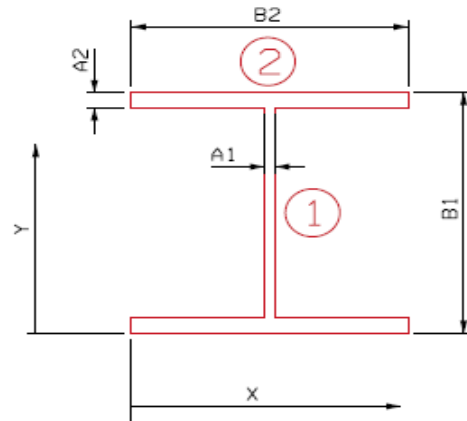
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 33.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 5

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.8125	16.5000	194.9063	976.7461	0.0000	0.0000	976.7461
2	Top Flange		6.0000	32.6250	195.7500	0.2813	16.1250	1560.0938	1560.3750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	16.1250	1560.0938	1560.3750
<b>Total</b>			<b>23.81</b>		<b>392.91</b>	<b>977.31</b>		<b>3120.19</b>	<b>4097.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$	y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$		
$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$	$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$		
$c_{top} =$	16.5000	in	A =	23.8125	$in^2$	$c_{top} =$	16.5000	in	A =	23.8125	$in^2$
$c_{bottom} =$	16.5000	in	$r_x =$	13.1177	in	$c_{bottom} =$	16.5000	in	$r_x =$	13.1177	in
			Z =	286.52	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	745.00 k-ft	745.00 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear



# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

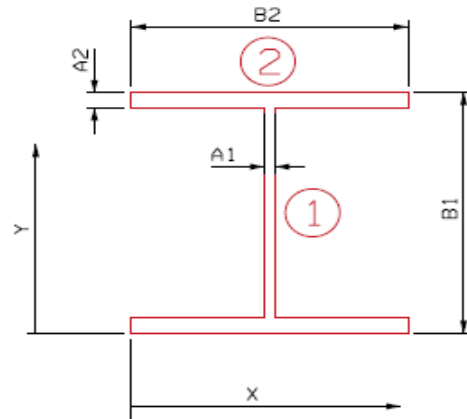
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 33.9600$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 6

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		12.1725	16.9800	206.6891	1068.7978	0.0000	0.0000	1068.7978
2	Top Flange		6.0000	33.5850	201.5100	0.2813	16.6050	1654.3562	1654.6374
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	16.6050	1654.3562	1654.6374
<b>Total</b>			<b>24.17</b>		<b>410.45</b>	<b>1069.36</b>		<b>3308.71</b>	<b>4378.07</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.9800	in	$S_{top} = 257.84$	in <sup>3</sup>	y-bar =	16.9800	in	$S_{top} = 257.84$	in <sup>3</sup>		
$I_x =$	4378.07	in <sup>4</sup>	$S_{bott.} = 257.84$	in <sup>3</sup>	$I_x =$	4378.07	in <sup>4</sup>	$S_{bott.} = 257.84$	in <sup>3</sup>		
$C_{top} =$	16.9800	in	A =	24.1725	in <sup>2</sup>	$C_{top} =$	16.9800	in	A =	24.1725	in <sup>2</sup>
$C_{bottom} =$	16.9800	in	$r_x =$	13.4580	in	$C_{bottom} =$	16.9800	in	$r_x =$	13.4580	in
			Z =	298.04	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	773.51 k-ft	773.51 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

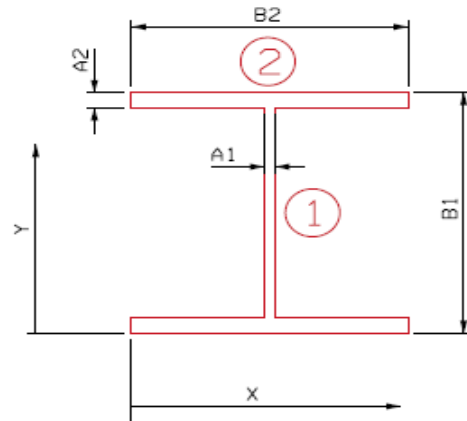
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 35.0400$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 7

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		12.5775	17.5200	220.3578	1179.0689	0.0000	0.0000	1179.0689
2	Top Flange		6.0000	34.6650	207.9900	0.2813	17.1450	1763.7062	1763.9874
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	17.1450	1763.7062	1763.9874
<b>Total</b>			<b>24.58</b>		<b>430.60</b>	<b>1179.63</b>		<b>3527.41</b>	<b>4707.04</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	17.5200	in	$S_{top} = 268.67$	$in^3$	y-bar =	17.5200	in	$S_{top} = 268.67$	$in^3$		
$I_x =$	4707.04	$in^4$	$S_{bott.} = 268.67$	$in^3$	$I_x =$	4707.04	$in^4$	$S_{bott.} = 268.67$	$in^3$		
$C_{top} =$	17.5200	in	A =	24.5775	$in^2$	$C_{top} =$	17.5200	in	A =	24.5775	$in^2$
$C_{bottom} =$	17.5200	in	$r_x =$	13.8390	in	$C_{bottom} =$	17.5200	in	$r_x =$	13.8390	in
			Z =	311.20	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	806.00 k-ft	806.00 k-ft
V	205.18 k	205.18 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

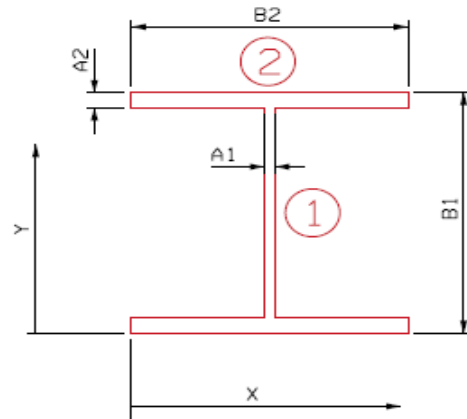
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 36.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 8

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		12.9375	18.0000	232.8750	1283.2383	0.0000	0.0000	1283.2383
2	Top Flange		6.0000	35.6250	213.7500	0.2813	17.6250	1863.8438	1864.1250
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	17.6250	1863.8438	1864.1250
<b>Total</b>			<b>24.94</b>		<b>448.88</b>	<b>1283.80</b>		<b>3727.69</b>	<b>5011.49</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	18.0000	in	$S_{top} = 278.42$	$in^3$	y-bar =	18.0000	in	$S_{top} = 278.42$	$in^3$		
$I_x =$	5011.49	$in^4$	$S_{bott.} = 278.42$	$in^3$	$I_x =$	5011.49	$in^4$	$S_{bott.} = 278.42$	$in^3$		
$c_{top} =$	18.0000	in	A =	24.9375	$in^2$	$c_{top} =$	18.0000	in	A =	24.9375	$in^2$
$c_{bottom} =$	18.0000	in	$r_x =$	14.1761	in	$c_{bottom} =$	18.0000	in	$r_x =$	14.1761	in
			Z =	323.09	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	835.25 k-ft	835.25 k-ft
V	199.47 k	199.47 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

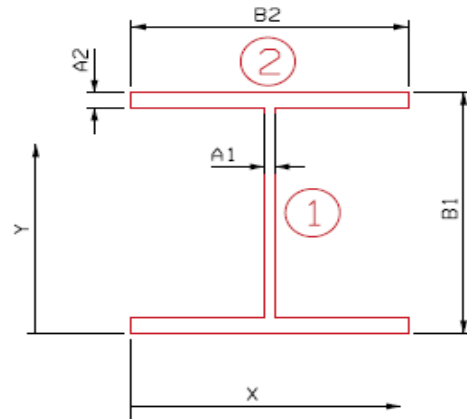
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 33.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 9

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.8125	16.5000	194.9063	976.7461	0.0000	0.0000	976.7461
2	Top Flange		6.0000	32.6250	195.7500	0.2813	16.1250	1560.0938	1560.3750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	16.1250	1560.0938	1560.3750
<b>Total</b>			<b>23.81</b>		<b>392.91</b>	<b>977.31</b>		<b>3120.19</b>	<b>4097.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$	y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$		
$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$	$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$		
$C_{top} =$	16.5000	in	A =	23.8125	$in^2$	$C_{top} =$	16.5000	in	A =	23.8125	$in^2$
$C_{bottom} =$	16.5000	in	$r_x =$	13.1177	in	$C_{bottom} =$	16.5000	in	$r_x =$	13.1177	in
			Z =	286.52	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	745.00 k-ft	745.00 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear



# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

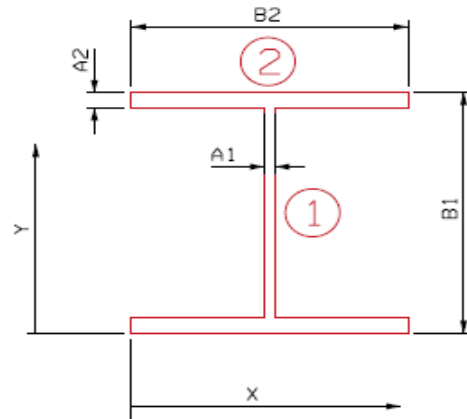
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 30.9600$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 10

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.0475	15.4800	171.0153	799.0027	0.0000	0.0000	799.0027
2	Top Flange		6.0000	30.5850	183.5100	0.2813	15.1050	1368.9662	1369.2474
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	15.1050	1368.9662	1369.2474
<b>Total</b>			<b>23.05</b>		<b>356.78</b>	<b>799.57</b>		<b>2737.93</b>	<b>3537.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties					As-Inspected Section Properties						
y-bar =	15.4800	in	$S_{top} =$	228.52	in <sup>3</sup>	y-bar =	15.4800	in	$S_{top} =$	228.52	in <sup>3</sup>
$I_x =$	3537.50	in <sup>4</sup>	$S_{bott.} =$	228.52	in <sup>3</sup>	$I_x =$	3537.50	in <sup>4</sup>	$S_{bott.} =$	228.52	in <sup>3</sup>
$c_{top} =$	15.4800	in	A =	23.0475	in <sup>2</sup>	$c_{top} =$	15.4800	in	A =	23.0475	in <sup>2</sup>
$c_{bottom} =$	15.4800	in	$r_x =$	12.3890	in	$c_{bottom} =$	15.4800	in	$r_x =$	12.3890	in
			Z =	262.62	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	685.56 k-ft	685.56 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

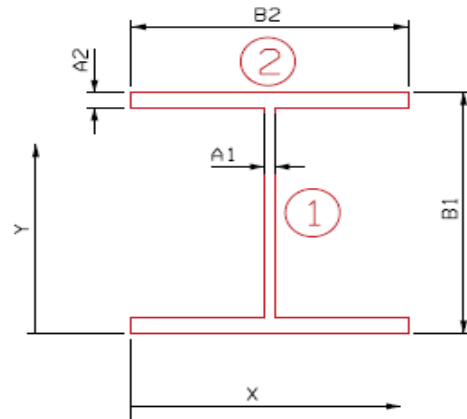
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 29.0400$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 11

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		10.3275	14.5200	149.9553	652.7424	0.0000	0.0000	652.7424
2	Top Flange		6.0000	28.6650	171.9900	0.2813	14.1450	1200.4862	1200.7674
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	14.1450	1200.4862	1200.7674
<b>Total</b>			<b>22.33</b>		<b>324.20</b>	<b>653.30</b>		<b>2400.97</b>	<b>3054.28</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	14.5200	in	$S_{top} = 210.35$	$in^3$	y-bar =	14.5200	in	$S_{top} = 210.35$	$in^3$		
$I_x =$	3054.28	$in^4$	$S_{bott.} = 210.35$	$in^3$	$I_x =$	3054.28	$in^4$	$S_{bott.} = 210.35$	$in^3$		
$c_{top} =$	14.5200	in	A =	22.3275	$in^2$	$c_{top} =$	14.5200	in	A =	22.3275	$in^2$
$c_{bottom} =$	14.5200	in	$r_x =$	11.6959	in	$c_{bottom} =$	14.5200	in	$r_x =$	11.6959	in
			Z =	240.84	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	631.05 k-ft	631.05 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

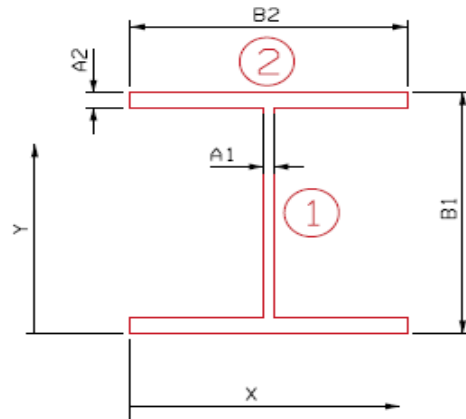
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 27.9600$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 12

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.9225	13.9800	138.7166	578.9213	0.0000	0.0000	578.9213
2	Top Flange		6.0000	27.5850	165.5100	0.2813	13.6050	1110.5762	1110.8574
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.6050	1110.5762	1110.8574
<b>Total</b>			<b>21.92</b>		<b>306.48</b>	<b>579.48</b>		<b>2221.15</b>	<b>2800.64</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>	y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>		
$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>	$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>		
$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>	$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>
$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in	$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in
			Z =	228.90	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	600.99 k-ft	600.99 k-ft
V	207.18 k	207.18 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

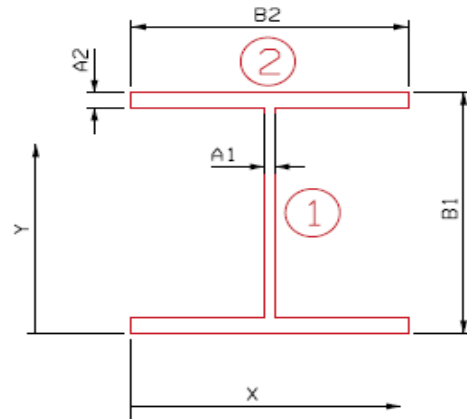
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 27.9600$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 13

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.9225	13.9800	138.7166	578.9213	0.0000	0.0000	578.9213
2	Top Flange		6.0000	27.5850	165.5100	0.2813	13.6050	1110.5762	1110.8574
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.6050	1110.5762	1110.8574
<b>Total</b>			<b>21.92</b>		<b>306.48</b>	<b>579.48</b>		<b>2221.15</b>	<b>2800.64</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>	y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>		
$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>	$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>		
$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>	$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>
$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in	$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in
			Z =	228.90	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	600.99 k-ft	600.99 k-ft
V	207.18 k	207.18 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear



# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

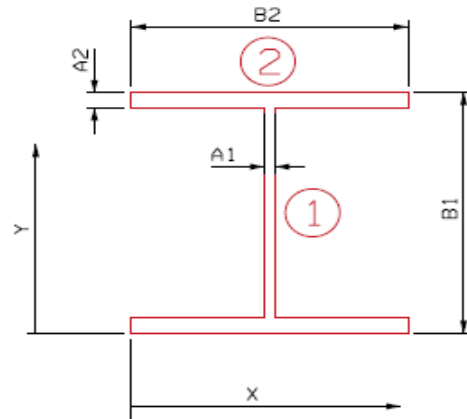
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 27.9600$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 14

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.9225	13.9800	138.7166	578.9213	0.0000	0.0000	578.9213
2	Top Flange		6.0000	27.5850	165.5100	0.2813	13.6050	1110.5762	1110.8574
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.6050	1110.5762	1110.8574
<b>Total</b>			<b>21.92</b>		<b>306.48</b>	<b>579.48</b>		<b>2221.15</b>	<b>2800.64</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>	y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>		
$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>	$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>		
$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>	$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>
$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in	$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in
			Z =	228.90	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	600.99 k-ft	600.99 k-ft
V	207.18 k	207.18 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

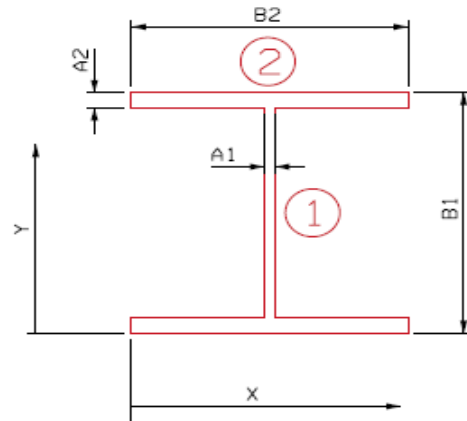
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 27.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 15

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.5625	13.5000	129.0938	518.1680	0.0000	0.0000	518.1680
2	Top Flange		6.0000	26.6250	159.7500	0.2813	13.1250	1033.5938	1033.8750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.1250	1033.5938	1033.8750
<b>Total</b>			<b>21.56</b>		<b>291.09</b>	<b>518.73</b>		<b>2067.19</b>	<b>2585.92</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.5000	in	$S_{top} = 191.55$	in <sup>3</sup>	y-bar =	13.5000	in	$S_{top} = 191.55$	in <sup>3</sup>		
$I_x =$	2585.92	in <sup>4</sup>	$S_{bott.} = 191.55$	in <sup>3</sup>	$I_x =$	2585.92	in <sup>4</sup>	$S_{bott.} = 191.55$	in <sup>3</sup>		
$C_{top} =$	13.5000	in	A =	21.5625	in <sup>2</sup>	$C_{top} =$	13.5000	in	A =	21.5625	in <sup>2</sup>
$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in	$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in
			Z =	218.46	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	574.65 k-ft	574.65 k-ft
V	199.67 k	199.67 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

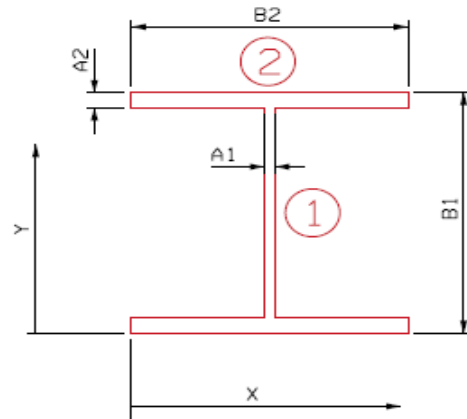
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 27.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 16

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.5625	13.5000	129.0938	518.1680	0.0000	0.0000	518.1680
2	Top Flange		6.0000	26.6250	159.7500	0.2813	13.1250	1033.5938	1033.8750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.1250	1033.5938	1033.8750
<b>Total</b>			<b>21.56</b>		<b>291.09</b>	<b>518.73</b>		<b>2067.19</b>	<b>2585.92</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.5000	in	$S_{top} = 191.55$	$in^3$	y-bar =	13.5000	in	$S_{top} = 191.55$	$in^3$		
$I_x =$	2585.92	$in^4$	$S_{bott.} = 191.55$	$in^3$	$I_x =$	2585.92	$in^4$	$S_{bott.} = 191.55$	$in^3$		
$C_{top} =$	13.5000	in	A =	21.5625	$in^2$	$C_{top} =$	13.5000	in	A =	21.5625	$in^2$
$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in	$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in
			Z =	218.46	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	574.65 k-ft	574.65 k-ft
V	199.67 k	199.67 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

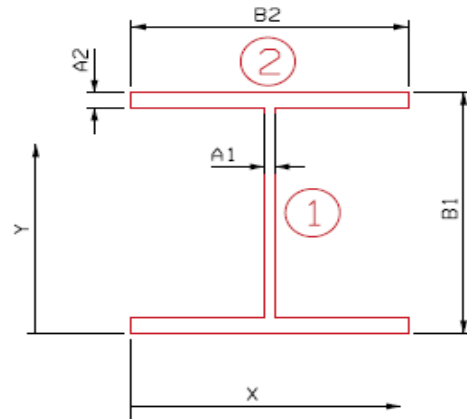
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 27.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 17

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.5625	13.5000	129.0938	518.1680	0.0000	0.0000	518.1680
2	Top Flange		6.0000	26.6250	159.7500	0.2813	13.1250	1033.5938	1033.8750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.1250	1033.5938	1033.8750
<b>Total</b>			<b>21.56</b>		<b>291.09</b>	<b>518.73</b>		<b>2067.19</b>	<b>2585.92</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.5000	in	$S_{top} = 191.55$	$in^3$	y-bar =	13.5000	in	$S_{top} = 191.55$	$in^3$		
$I_x =$	2585.92	$in^4$	$S_{bott.} = 191.55$	$in^3$	$I_x =$	2585.92	$in^4$	$S_{bott.} = 191.55$	$in^3$		
$C_{top} =$	13.5000	in	A =	21.5625	$in^2$	$C_{top} =$	13.5000	in	A =	21.5625	$in^2$
$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in	$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in
			Z =	218.46	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	574.65 k-ft	574.65 k-ft
V	199.67 k	199.67 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear



# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

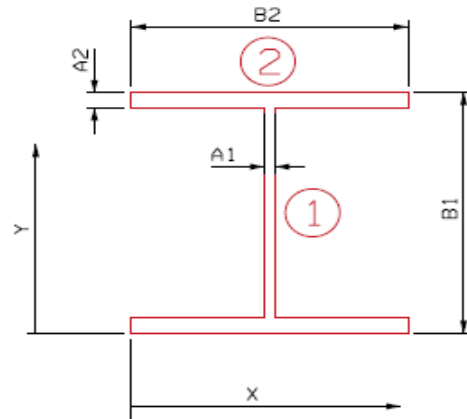
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 27.9600$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 18

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.9225	13.9800	138.7166	578.9213	0.0000	0.0000	578.9213
2	Top Flange		6.0000	27.5850	165.5100	0.2813	13.6050	1110.5762	1110.8574
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.6050	1110.5762	1110.8574
<b>Total</b>			<b>21.92</b>		<b>306.48</b>	<b>579.48</b>		<b>2221.15</b>	<b>2800.64</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>	y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>		
$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>	$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>		
$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>	$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>
$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in	$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in
			Z =	228.90	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	600.99 k-ft	600.99 k-ft
V	207.18 k	207.18 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

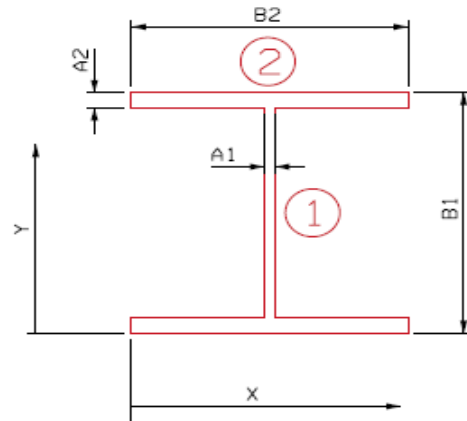
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 29.0400$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 1 North Unit 19

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		10.3275	14.5200	149.9553	652.7424	0.0000	0.0000	652.7424
2	Top Flange		6.0000	28.6650	171.9900	0.2813	14.1450	1200.4862	1200.7674
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	14.1450	1200.4862	1200.7674
<b>Total</b>			<b>22.33</b>		<b>324.20</b>	<b>653.30</b>		<b>2400.97</b>	<b>3054.28</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	14.5200	in	$S_{top} = 210.35$	$in^3$	y-bar =	14.5200	in	$S_{top} = 210.35$	$in^3$		
$I_x =$	3054.28	$in^4$	$S_{bott.} = 210.35$	$in^3$	$I_x =$	3054.28	$in^4$	$S_{bott.} = 210.35$	$in^3$		
$c_{top} =$	14.5200	in	A =	22.3275	$in^2$	$c_{top} =$	14.5200	in	A =	22.3275	$in^2$
$c_{bottom} =$	14.5200	in	$r_x =$	11.6959	in	$c_{bottom} =$	14.5200	in	$r_x =$	11.6959	in
			Z =	240.84	$in^3$				Z =	50.00	$in^3$

# SECTION I



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

## Stringer Rating Factors

Non-composite Capacities*		
	AB	AI
M	631.05 k-ft	631.05 k-ft
V	207.62 k	207.62 k

\*Noncompact Section

$F_y =$	36.00 ksi
---------	-----------

AB = As-Built  
AI = As-Inspected  
M = Moment  
V = Shear

**SECTION I**

**Fascia 2 South Unit 1 Rolled BM**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

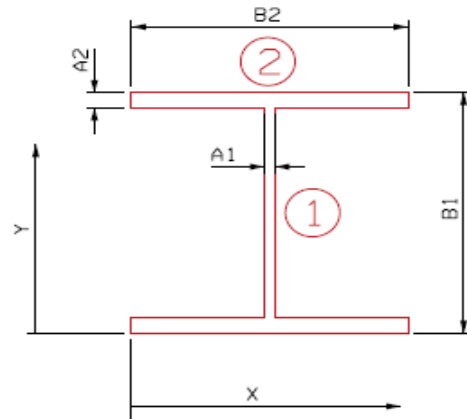
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 30.0000$  in
- $B_2 = b_f = 8.0000$  in



**Section I Fascia Beam 2 South Unit 1**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		10.6875	15.0000	160.3125	723.4102	0.0000	0.0000	723.4102
2	Top Flange		6.0000	29.6250	177.7500	0.2813	14.6250	1283.3438	1283.6250
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	14.6250	1283.3438	1283.6250
<b>Total</b>			<b>22.69</b>		<b>340.31</b>	<b>723.97</b>		<b>2566.69</b>	<b>3290.66</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	15.0000	in	$S_{top} = 219.38$	$in^3$	y-bar =	15.0000	in	$S_{top} = 219.38$	$in^3$		
$I_x =$	3290.66	$in^4$	$S_{bott.} = 219.38$	$in^3$	$I_x =$	3290.66	$in^4$	$S_{bott.} = 219.38$	$in^3$		
$C_{top} =$	15.0000	in	A =	22.6875	$in^2$	$C_{top} =$	15.0000	in	A =	22.6875	$in^2$
$C_{bottom} =$	15.0000	in	$r_x =$	12.0434	in	$C_{bottom} =$	15.0000	in	$r_x =$	12.0434	in
			Z =	251.65	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	658.13 k-ft	658.13 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

**SECTION I**

**Fascia 2 South Unit 2 Rolled BM**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

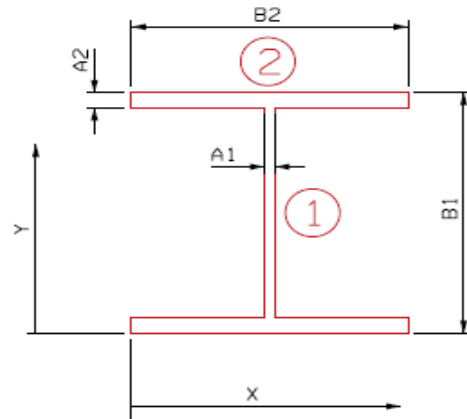
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 30.0000$  in
- $B_2 = b_f = 8.0000$  in



**Section I Fascia Beam 2 South Unit 2**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		10.6875	15.0000	160.3125	723.4102	0.0000	0.0000	723.4102
2	Top Flange		6.0000	29.6250	177.7500	0.2813	14.6250	1283.3438	1283.6250
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	14.6250	1283.3438	1283.6250
<b>Total</b>			<b>22.69</b>		<b>340.31</b>	<b>723.97</b>		<b>2566.69</b>	<b>3290.66</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	15.0000	in	$S_{top} = 219.38$	in <sup>3</sup>	y-bar =	15.0000	in	$S_{top} = 219.38$	in <sup>3</sup>		
$I_x =$	3290.66	in <sup>4</sup>	$S_{bott.} = 219.38$	in <sup>3</sup>	$I_x =$	3290.66	in <sup>4</sup>	$S_{bott.} = 219.38$	in <sup>3</sup>		
$c_{top} =$	15.0000	in	A =	22.6875	in <sup>2</sup>	$c_{top} =$	15.0000	in	A =	22.6875	in <sup>2</sup>
$c_{bottom} =$	15.0000	in	$r_x =$	12.0434	in	$c_{bottom} =$	15.0000	in	$r_x =$	12.0434	in
			Z =	251.65	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	658.13 k-ft	658.13 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear



**SECTION I**

**Fascia 2 South Unit 3 Rolled BM**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

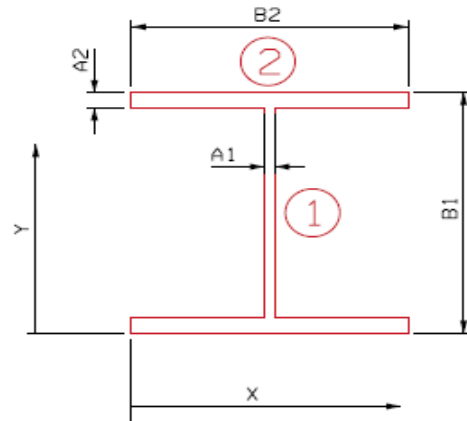
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 30.9600$  in
- $B_2 = b_f = 8.0000$  in



**Section I Fascia Beam 2 South Unit 3**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.0475	15.4800	171.0153	799.0027	0.0000	0.0000	799.0027
2	Top Flange		6.0000	30.5850	183.5100	0.2813	15.1050	1368.9662	1369.2474
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	15.1050	1368.9662	1369.2474
<b>Total</b>			<b>23.05</b>		<b>356.78</b>	<b>799.57</b>		<b>2737.93</b>	<b>3537.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	15.4800	in	$S_{top} = 228.52$	$in^3$	y-bar =	15.4800	in	$S_{top} = 228.52$	$in^3$		
$I_x =$	3537.50	$in^4$	$S_{bott.} = 228.52$	$in^3$	$I_x =$	3537.50	$in^4$	$S_{bott.} = 228.52$	$in^3$		
$C_{top} =$	15.4800	in	A =	23.0475	$in^2$	$C_{top} =$	15.4800	in	A =	23.0475	$in^2$
$C_{bottom} =$	15.4800	in	$r_x =$	12.3890	in	$C_{bottom} =$	15.4800	in	$r_x =$	12.3890	in
			Z =	262.62	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	685.56 k-ft	685.56 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I

# Fascia 2 South Unit 4 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

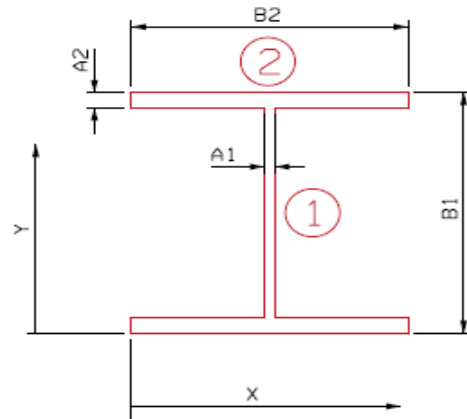
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 32.0400$  in
- $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 4

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.4525	16.0200	183.4691	890.1375	0.0000	0.0000	890.1375
2	Top Flange		6.0000	31.6650	189.9900	0.2813	15.6450	1468.5962	1468.8774
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	15.6450	1468.5962	1468.8774
<b>Total</b>			<b>23.45</b>		<b>375.71</b>	<b>890.70</b>		<b>2937.19</b>	<b>3827.89</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.0200	in	$S_{top} = 238.94$	$in^3$	y-bar =	16.0200	in	$S_{top} = 238.94$	$in^3$		
$I_x =$	3827.89	$in^4$	$S_{bott.} = 238.94$	$in^3$	$I_x =$	3827.89	$in^4$	$S_{bott.} = 238.94$	$in^3$		
$c_{top} =$	16.0200	in	A =	23.4525	$in^2$	$c_{top} =$	16.0200	in	A =	23.4525	$in^2$
$c_{bottom} =$	16.0200	in	$r_x =$	12.7757	in	$c_{bottom} =$	16.0200	in	$r_x =$	12.7757	in
			Z =	275.18	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	716.83 k-ft	716.83 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

**SECTION I**

**Fascia 2 South Unit 5 Rolled BM**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

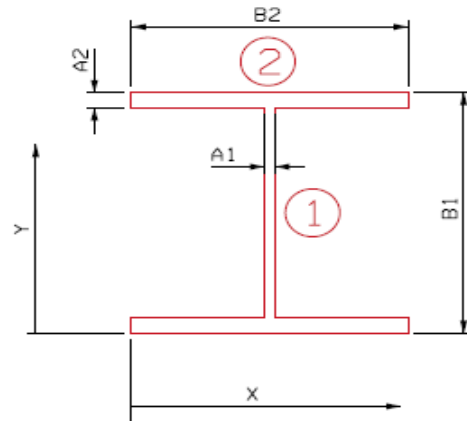
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 33.0000$  in
- $B_2 = b_f = 8.0000$  in



**Section I Fascia Beam 2 South Unit 5**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.8125	16.5000	194.9063	976.7461	0.0000	0.0000	976.7461
2	Top Flange		6.0000	32.6250	195.7500	0.2813	16.1250	1560.0938	1560.3750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	16.1250	1560.0938	1560.3750
<b>Total</b>			<b>23.81</b>		<b>392.91</b>	<b>977.31</b>		<b>3120.19</b>	<b>4097.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$	y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$		
$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$	$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$		
$c_{top} =$	16.5000	in	A =	23.8125	$in^2$	$c_{top} =$	16.5000	in	A =	23.8125	$in^2$
$c_{bottom} =$	16.5000	in	$r_x =$	13.1177	in	$c_{bottom} =$	16.5000	in	$r_x =$	13.1177	in
			Z =	286.52	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	745.00 k-ft	745.00 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

**SECTION I**

**Fascia 2 South Unit 6 Rolled BM**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

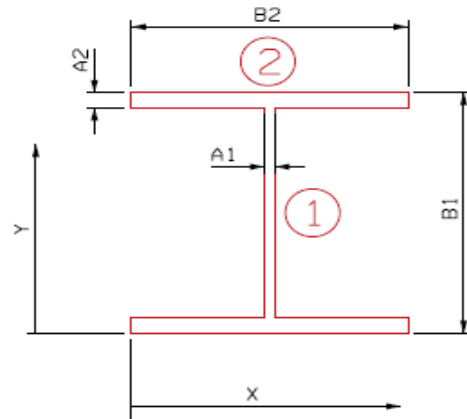
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 33.9600$  in
- $B_2 = b_f = 8.0000$  in



**Section I Fascia Beam 2 South Unit 6**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		12.1725	16.9800	206.6891	1068.7978	0.0000	0.0000	1068.7978
2	Top Flange		6.0000	33.5850	201.5100	0.2813	16.6050	1654.3562	1654.6374
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	16.6050	1654.3562	1654.6374
<b>Total</b>			<b>24.17</b>		<b>410.45</b>	<b>1069.36</b>		<b>3308.71</b>	<b>4378.07</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.9800	in	$S_{top} = 257.84$	$in^3$	y-bar =	16.9800	in	$S_{top} = 257.84$	$in^3$		
$I_x =$	4378.07	$in^4$	$S_{bott.} = 257.84$	$in^3$	$I_x =$	4378.07	$in^4$	$S_{bott.} = 257.84$	$in^3$		
$C_{top} =$	16.9800	in	A =	24.1725	$in^2$	$C_{top} =$	16.9800	in	A =	24.1725	$in^2$
$C_{bottom} =$	16.9800	in	$r_x =$	13.4580	in	$C_{bottom} =$	16.9800	in	$r_x =$	13.4580	in
			Z =	298.04	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	773.51 k-ft	773.51 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear



# SECTION I

# Fascia 2 South Unit 7 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

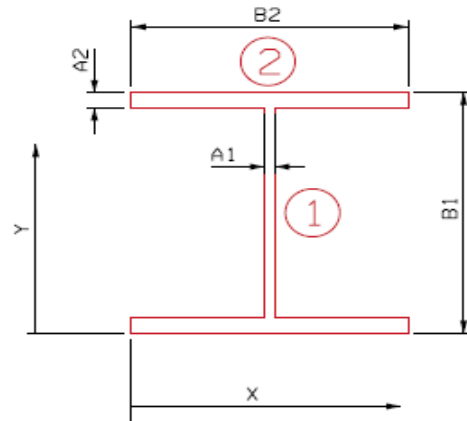
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 35.0400$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 7

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		12.5775	17.5200	220.3578	1179.0689	0.0000	0.0000	1179.0689
2	Top Flange		6.0000	34.6650	207.9900	0.2813	17.1450	1763.7062	1763.9874
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	17.1450	1763.7062	1763.9874
<b>Total</b>			<b>24.58</b>		<b>430.60</b>	<b>1179.63</b>		<b>3527.41</b>	<b>4707.04</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	17.5200	in	$S_{top} = 268.67$	$in^3$	y-bar =	17.5200	in	$S_{top} = 268.67$	$in^3$		
$I_x =$	4707.04	$in^4$	$S_{bott.} = 268.67$	$in^3$	$I_x =$	4707.04	$in^4$	$S_{bott.} = 268.67$	$in^3$		
$C_{top} =$	17.5200	in	A =	24.5775	$in^2$	$C_{top} =$	17.5200	in	A =	24.5775	$in^2$
$C_{bottom} =$	17.5200	in	$r_x =$	13.8390	in	$C_{bottom} =$	17.5200	in	$r_x =$	13.8390	in
			Z =	311.20	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	806.00 k-ft	806.00 k-ft
<b>V</b>	205.18 k	205.18 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

**SECTION I**

**Fascia 2 South Unit 8 Rolled BM**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

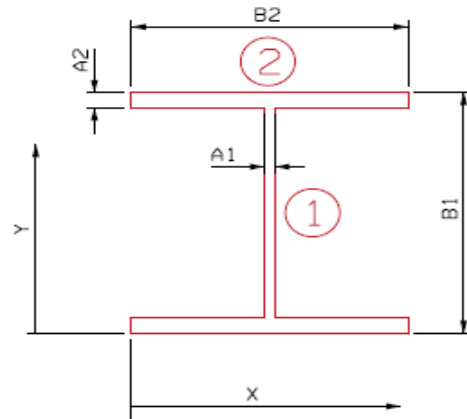
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 36.0000$  in
- $B_2 = b_f = 8.0000$  in



**Section I Fascia Beam 2 South Unit 8**

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate	12.9375	18.0000	232.8750	1283.2383	0.0000	0.0000	1283.2383
2	Top Flange	6.0000	35.6250	213.7500	0.2813	17.6250	1863.8438	1864.1250
	Bottom Flange	6.0000	0.3750	2.2500	0.2813	17.6250	1863.8438	1864.1250
<b>Total</b>		<b>24.94</b>		<b>448.88</b>	<b>1283.80</b>		<b>3727.69</b>	<b>5011.49</b>
Section Losses		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	18.0000	in	$S_{top} = 278.42$	in <sup>3</sup>	y-bar =	18.0000	in	$S_{top} = 278.42$	in <sup>3</sup>		
$I_x =$	5011.49	in <sup>4</sup>	$S_{bott.} = 278.42$	in <sup>3</sup>	$I_x =$	5011.49	in <sup>4</sup>	$S_{bott.} = 278.42$	in <sup>3</sup>		
$C_{top} =$	18.0000	in	A =	24.9375	in <sup>2</sup>	$C_{top} =$	18.0000	in	A =	24.9375	in <sup>2</sup>
$C_{bottom} =$	18.0000	in	$r_x =$	14.1761	in	$C_{bottom} =$	18.0000	in	$r_x =$	14.1761	in
			Z =	323.09	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	835.25 k-ft	835.25 k-ft
<b>V</b>	199.47 k	199.47 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

**SECTION I**

**Fascia 2 South Unit 9 Rolled BM**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

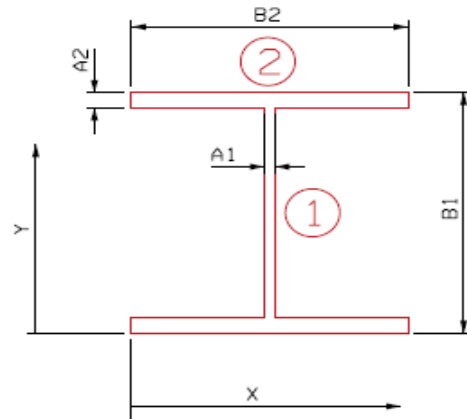
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

**Element Dimensions (without Section Losses):**

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 36.0000$  in
- $B_2 = b_f = 8.0000$  in



**Section I Fascia Beam 2 South Unit 9**

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate	12.9375	18.0000	232.8750	1283.2383	0.0000	0.0000	1283.2383
2	Top Flange	6.0000	35.6250	213.7500	0.2813	17.6250	1863.8438	1864.1250
	Bottom Flange	6.0000	0.3750	2.2500	0.2813	17.6250	1863.8438	1864.1250
<b>Total</b>		<b>24.94</b>		<b>448.88</b>	<b>1283.80</b>		<b>3727.69</b>	<b>5011.49</b>
Section Losses		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	18.0000	in	$S_{top} = 278.42$	in <sup>3</sup>	y-bar =	18.0000	in	$S_{top} = 278.42$	in <sup>3</sup>		
$I_x =$	5011.49	in <sup>4</sup>	$S_{bott.} = 278.42$	in <sup>3</sup>	$I_x =$	5011.49	in <sup>4</sup>	$S_{bott.} = 278.42$	in <sup>3</sup>		
$c_{top} =$	18.0000	in	A =	24.9375	in <sup>2</sup>	$c_{top} =$	18.0000	in	A =	24.9375	in <sup>2</sup>
$c_{bottom} =$	18.0000	in	$r_x =$	14.1761	in	$c_{bottom} =$	18.0000	in	$r_x =$	14.1761	in
			Z =	323.09	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	835.25 k-ft	835.25 k-ft
<b>V</b>	199.47 k	199.47 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I

# Fascia 2 South Unit 10 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

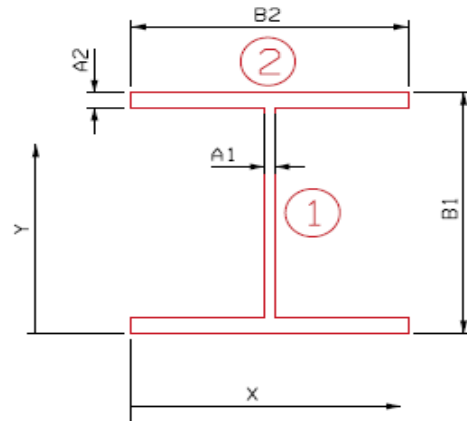
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 33.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 10

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.8125	16.5000	194.9063	976.7461	0.0000	0.0000	976.7461
2	Top Flange		6.0000	32.6250	195.7500	0.2813	16.1250	1560.0938	1560.3750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	16.1250	1560.0938	1560.3750
<b>Total</b>			<b>23.81</b>		<b>392.91</b>	<b>977.31</b>		<b>3120.19</b>	<b>4097.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$	y-bar =	16.5000	in	$S_{top} = 248.33$	$in^3$		
$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$	$I_x =$	4097.50	$in^4$	$S_{bott.} = 248.33$	$in^3$		
$c_{top} =$	16.5000	in	A =	23.8125	$in^2$	$c_{top} =$	16.5000	in	A =	23.8125	$in^2$
$c_{bottom} =$	16.5000	in	$r_x =$	13.1177	in	$c_{bottom} =$	16.5000	in	$r_x =$	13.1177	in
			Z =	286.52	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	745.00 k-ft	745.00 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear



# SECTION I

# Fascia 2 South Unit 11 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

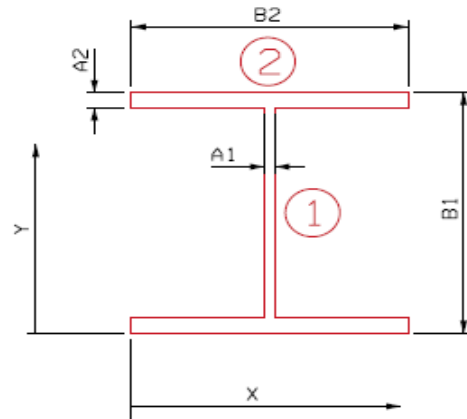
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 30.9600$  in
- $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 11

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		11.0475	15.4800	171.0153	799.0027	0.0000	0.0000	799.0027
2	Top Flange		6.0000	30.5850	183.5100	0.2813	15.1050	1368.9662	1369.2474
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	15.1050	1368.9662	1369.2474
<b>Total</b>			<b>23.05</b>		<b>356.78</b>	<b>799.57</b>		<b>2737.93</b>	<b>3537.50</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	15.4800	in	$S_{top} = 228.52$	$in^3$	y-bar =	15.4800	in	$S_{top} = 228.52$	$in^3$		
$I_x =$	3537.50	$in^4$	$S_{bott.} = 228.52$	$in^3$	$I_x =$	3537.50	$in^4$	$S_{bott.} = 228.52$	$in^3$		
$C_{top} =$	15.4800	in	A =	23.0475	$in^2$	$C_{top} =$	15.4800	in	A =	23.0475	$in^2$
$C_{bottom} =$	15.4800	in	$r_x =$	12.3890	in	$C_{bottom} =$	15.4800	in	$r_x =$	12.3890	in
			Z =	262.62	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	685.56 k-ft	685.56 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I

# Fascia 2 South Unit 12 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

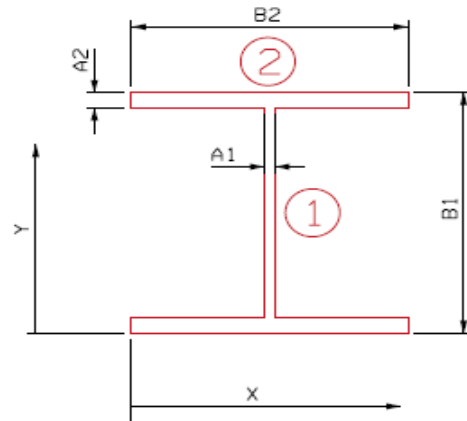
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 30.0000$  in
- $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 12

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		10.6875	15.0000	160.3125	723.4102	0.0000	0.0000	723.4102
2	Top Flange		6.0000	29.6250	177.7500	0.2813	14.6250	1283.3438	1283.6250
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	14.6250	1283.3438	1283.6250
<b>Total</b>			<b>22.69</b>		<b>340.31</b>	<b>723.97</b>		<b>2566.69</b>	<b>3290.66</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	15.0000	in	$S_{top} = 219.38$	$in^3$	y-bar =	15.0000	in	$S_{top} = 219.38$	$in^3$		
$I_x =$	3290.66	$in^4$	$S_{bott.} = 219.38$	$in^3$	$I_x =$	3290.66	$in^4$	$S_{bott.} = 219.38$	$in^3$		
$c_{top} =$	15.0000	in	A =	22.6875	$in^2$	$c_{top} =$	15.0000	in	A =	22.6875	$in^2$
$c_{bottom} =$	15.0000	in	$r_x =$	12.0434	in	$c_{bottom} =$	15.0000	in	$r_x =$	12.0434	in
			Z =	251.65	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	658.13 k-ft	658.13 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I

# Fascia 2 South Unit 13 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

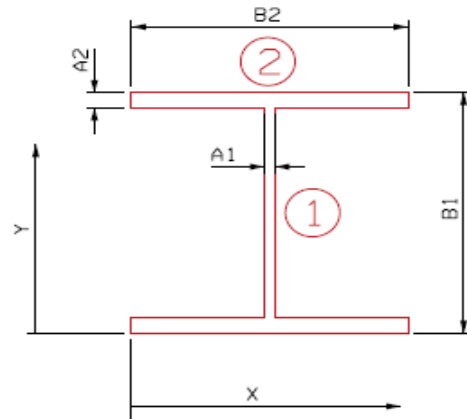
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 29.0400$  in
- $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 13

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		10.3275	14.5200	149.9553	652.7424	0.0000	0.0000	652.7424
2	Top Flange		6.0000	28.6650	171.9900	0.2813	14.1450	1200.4862	1200.7674
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	14.1450	1200.4862	1200.7674
<b>Total</b>			<b>22.33</b>		<b>324.20</b>	<b>653.30</b>		<b>2400.97</b>	<b>3054.28</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	14.5200	in	$S_{top} = 210.35$	$in^3$	y-bar =	14.5200	in	$S_{top} = 210.35$	$in^3$		
$I_x =$	3054.28	$in^4$	$S_{bott.} = 210.35$	$in^3$	$I_x =$	3054.28	$in^4$	$S_{bott.} = 210.35$	$in^3$		
$c_{top} =$	14.5200	in	A =	22.3275	$in^2$	$c_{top} =$	14.5200	in	A =	22.3275	$in^2$
$c_{bottom} =$	14.5200	in	$r_x =$	11.6959	in	$c_{bottom} =$	14.5200	in	$r_x =$	11.6959	in
			Z =	240.84	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	631.05 k-ft	631.05 k-ft
<b>V</b>	207.62 k	207.62 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I

# Fascia 2 South Unit 14 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

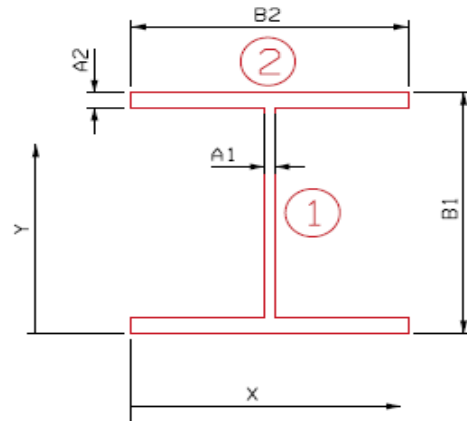
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 27.0000$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 14

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.5625	13.5000	129.0938	518.1680	0.0000	0.0000	518.1680
2	Top Flange		6.0000	26.6250	159.7500	0.2813	13.1250	1033.5938	1033.8750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.1250	1033.5938	1033.8750
<b>Total</b>			<b>21.56</b>		<b>291.09</b>	<b>518.73</b>		<b>2067.19</b>	<b>2585.92</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.5000	in	$S_{top} = 191.55$	$in^3$	y-bar =	13.5000	in	$S_{top} = 191.55$	$in^3$		
$I_x =$	2585.92	$in^4$	$S_{bott.} = 191.55$	$in^3$	$I_x =$	2585.92	$in^4$	$S_{bott.} = 191.55$	$in^3$		
$C_{top} =$	13.5000	in	A =	21.5625	$in^2$	$C_{top} =$	13.5000	in	A =	21.5625	$in^2$
$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in	$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in
			Z =	218.46	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	574.65 k-ft	574.65 k-ft
<b>V</b>	199.67 k	199.67 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear



# SECTION I

# Fascia 2 South Unit 15 Rolled BM



Made By RAH  
Checked By DBH

Date \_\_\_\_\_  
Date \_\_\_\_\_

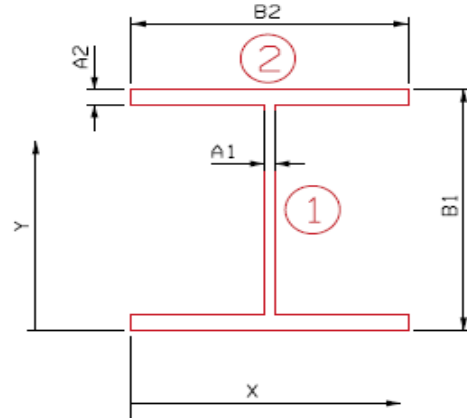
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For:

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 26.0400$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 15

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.2025	13.0200	119.8166	461.8210	0.0000	0.0000	461.8210
2	Top Flange		6.0000	25.6650	153.9900	0.2813	12.6450	959.3762	959.6574
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	12.6450	959.3762	959.6574
<b>Total</b>			<b>21.20</b>		<b>276.06</b>	<b>462.38</b>		<b>1918.75</b>	<b>2381.14</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	13.0200	in	$S_{top} = 182.88$ in <sup>3</sup>	y-bar =	13.0200	in	$S_{top} = 182.88$ in <sup>3</sup>
$I_x =$	2381.14	in <sup>4</sup>	$S_{bott.} = 182.88$ in <sup>3</sup>	$I_x =$	2381.14	in <sup>4</sup>	$S_{bott.} = 182.88$ in <sup>3</sup>
$c_{top} =$	13.0200	in	$A = 21.2025$ in <sup>2</sup>	$c_{top} =$	13.0200	in	$A = 21.2025$ in <sup>2</sup>
$c_{bottom} =$	13.0200	in	$r_x = 10.5974$ in	$c_{bottom} =$	13.0200	in	$r_x = 10.5974$ in
			$Z = 208.20$ in <sup>3</sup>				$Z = 50.00$ in <sup>3</sup>



Made By RAH  
 Checked By DBH

Date \_\_\_\_\_  
 Date \_\_\_\_\_

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For:

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	548.65 k-ft	548.65 k-ft
<b>V</b>	192.15 k	192.15 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I

# Fascia 2 South Unit 16 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

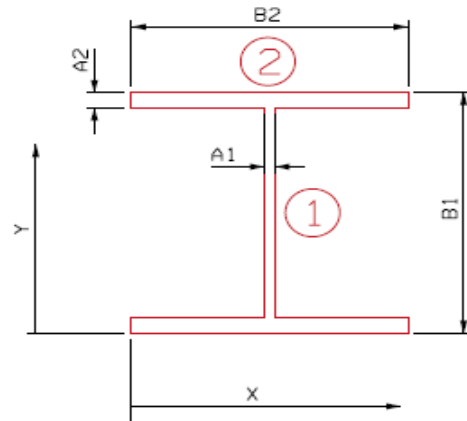
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 26.0400$  in
- $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 16

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.2025	13.0200	119.8166	461.8210	0.0000	0.0000	461.8210
2	Top Flange		6.0000	25.6650	153.9900	0.2813	12.6450	959.3762	959.6574
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	12.6450	959.3762	959.6574
<b>Total</b>			<b>21.20</b>		<b>276.06</b>	<b>462.38</b>		<b>1918.75</b>	<b>2381.14</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.0200	in	$S_{top} = 182.88$	$in^3$	y-bar =	13.0200	in	$S_{top} = 182.88$	$in^3$		
$I_x =$	2381.14	$in^4$	$S_{bott.} = 182.88$	$in^3$	$I_x =$	2381.14	$in^4$	$S_{bott.} = 182.88$	$in^3$		
$c_{top} =$	13.0200	in	A =	21.2025	$in^2$	$c_{top} =$	13.0200	in	A =	21.2025	$in^2$
$c_{bottom} =$	13.0200	in	$r_x =$	10.5974	in	$c_{bottom} =$	13.0200	in	$r_x =$	10.5974	in
			Z =	208.20	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	548.65 k-ft	548.65 k-ft
<b>V</b>	192.15 k	192.15 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I

# Fascia 2 South Unit 17 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

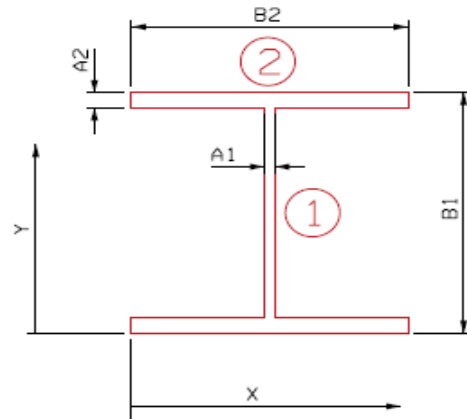
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

$A_1 = t_w = 0.3750$  in  
 $A_2 = t_f = 0.7500$  in  
 $B_1 = d = 26.0400$  in  
 $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 17

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.2025	13.0200	119.8166	461.8210	0.0000	0.0000	461.8210
2	Top Flange		6.0000	25.6650	153.9900	0.2813	12.6450	959.3762	959.6574
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	12.6450	959.3762	959.6574
<b>Total</b>			<b>21.20</b>		<b>276.06</b>	<b>462.38</b>		<b>1918.75</b>	<b>2381.14</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.0200	in	$S_{top} = 182.88$	$in^3$	y-bar =	13.0200	in	$S_{top} = 182.88$	$in^3$		
$I_x =$	2381.14	$in^4$	$S_{bott.} = 182.88$	$in^3$	$I_x =$	2381.14	$in^4$	$S_{bott.} = 182.88$	$in^3$		
$c_{top} =$	13.0200	in	A =	21.2025	$in^2$	$c_{top} =$	13.0200	in	A =	21.2025	$in^2$
$c_{bottom} =$	13.0200	in	$r_x =$	10.5974	in	$c_{bottom} =$	13.0200	in	$r_x =$	10.5974	in
			Z =	208.20	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	548.65 k-ft	548.65 k-ft
<b>V</b>	192.15 k	192.15 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# SECTION I

# Fascia 2 South Unit 18 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

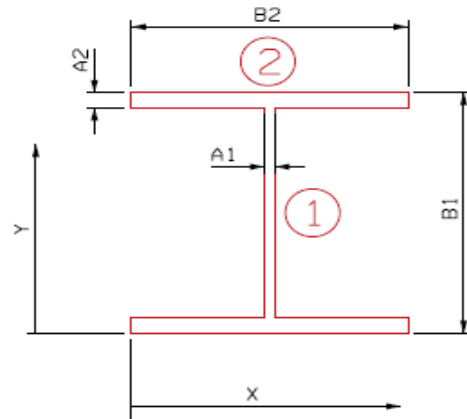
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 27.0000$  in
- $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 18

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.5625	13.5000	129.0938	518.1680	0.0000	0.0000	518.1680
2	Top Flange		6.0000	26.6250	159.7500	0.2813	13.1250	1033.5938	1033.8750
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.1250	1033.5938	1033.8750
<b>Total</b>			<b>21.56</b>		<b>291.09</b>	<b>518.73</b>		<b>2067.19</b>	<b>2585.92</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.5000	in	$S_{top} = 191.55$	$in^3$	y-bar =	13.5000	in	$S_{top} = 191.55$	$in^3$		
$I_x =$	2585.92	$in^4$	$S_{bott.} = 191.55$	$in^3$	$I_x =$	2585.92	$in^4$	$S_{bott.} = 191.55$	$in^3$		
$C_{top} =$	13.5000	in	A =	21.5625	$in^2$	$C_{top} =$	13.5000	in	A =	21.5625	$in^2$
$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in	$C_{bottom} =$	13.5000	in	$r_x =$	10.9511	in
			Z =	218.46	$in^3$				Z =	50.00	$in^3$



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	574.65 k-ft	574.65 k-ft
<b>V</b>	199.67 k	199.67 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear



# SECTION I

# Fascia 2 South Unit 19 Rolled BM



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

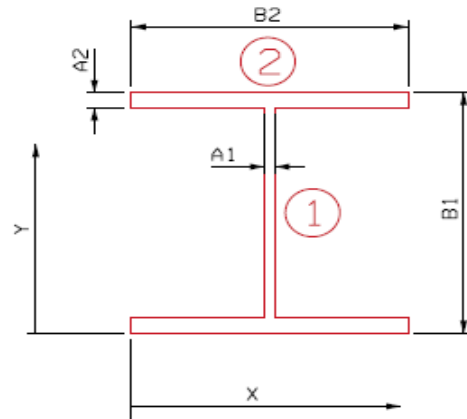
Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Red text indicates user input

### Element Dimensions (without Section Losses):

- $A_1 = t_w = 0.3750$  in
- $A_2 = t_f = 0.7500$  in
- $B_1 = d = 27.9600$  in
- $B_2 = b_f = 8.0000$  in



### Section I Fascia Beam 2 South Unit 19

### X-Axis Section Properties:

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Web plate		9.9225	13.9800	138.7166	578.9213	0.0000	0.0000	578.9213
2	Top Flange		6.0000	27.5850	165.5100	0.2813	13.6050	1110.5762	1110.8574
	Bottom Flange		6.0000	0.3750	2.2500	0.2813	13.6050	1110.5762	1110.8574
<b>Total</b>			<b>21.92</b>		<b>306.48</b>	<b>579.48</b>		<b>2221.15</b>	<b>2800.64</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x,loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties							
y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>	y-bar =	13.9800	in	$S_{top} = 200.33$	in <sup>3</sup>		
$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>	$I_x =$	2800.64	in <sup>4</sup>	$S_{bott.} = 200.33$	in <sup>3</sup>		
$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>	$C_{top} =$	13.9800	in	A =	21.9225	in <sup>2</sup>
$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in	$C_{bottom} =$	13.9800	in	$r_x =$	11.3027	in
			Z =	228.90	in <sup>3</sup>				Z =	50.00	in <sup>3</sup>



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Stringer Rating Factors**

Non-composite Capacities*		
	AB	AI
<b>M</b>	600.99 k-ft	600.99 k-ft
<b>V</b>	207.18 k	207.18 k

\*Noncompact Section

<b>F<sub>y</sub> =</b>	<b>36.00 ksi</b>
------------------------	------------------

AB = As-Built  
 AI = As-Inspected  
 M = Moment  
 V = Shear

# INTERIOR FLOOR BEAM SUMMARY SHEET

## East Approach - Section I

**CUY-2-1441 Load Rating Analysis**  
**Main Ave Bridge**

Calculated: RAH 3/17/2012  
Checked: DBH 3/17/2012

As-Built Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
Floorbeam	Unit 5, FB 40	1.27	2.13	3.51	2.48	2.63	2.45	n/a
Floorbeam	Unit 6, FB 46	1.67	2.79	4.89	3.41	3.69	3.36	n/a
Floorbeam	Unit 8, FB 68	1.68	2.81	4.89	3.39	3.66	3.34	n/a
Floorbeam	Unit 17, FB 131	2.00	3.34	5.92	4.08	4.34	4.00	n/a

As-Inspected Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
Floorbeam	Unit 5, FB 40	1.27	2.13	3.51	2.48	2.63	2.45	n/a
Floorbeam	Unit 6, FB 46	1.38	2.31	4.06	2.83	3.06	2.79	n/a
Floorbeam	Unit 8, FB 68	1.60	2.68	4.67	3.24	3.49	3.19	n/a
Floorbeam	Unit 17, FB 131	1.91	3.20	5.68	3.91	4.16	3.83	n/a

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 Inventory	1.27	45.72	HS25.4
HS20 Operating	2.13	76.68	HS42.6
2F1	3.51	52.65	245%
3F1	2.48	57.04	
4F1	2.63	71.01	
5C1	2.45	98.00	
Fatigue	0.00 years remaining		

# CANTILEVER FLOOR BEAM SUMMARY SHEET

## East Approach - Section I

**CUY-2-1441 Load Rating Analysis**  
**Main Ave Bridge**

Calculated: RAH 3/17/2012  
Checked: DBH 3/17/2012

As-Built Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
Floorbeam	Unit 12, FB 99	1.02	1.71	2.83	1.98	2.08	1.96	n/a
Floorbeam	Unit 14, FB 112	1.93	3.23	5.52	3.90	4.19	3.84	n/a
Floorbeam	Unit 16, FB 127	1.82	3.05	5.03	3.52	3.70	3.49	n/a
Floorbeam	Unit 13, FB 107	2.15	3.59	6.31	4.37	4.67	4.30	n/a
Floorbeam	Unit 14, FB 112	1.01	1.69	2.89	2.04	2.19	2.01	n/a
Floorbeam	Unit 19, FB 146	2.56	4.28	6.82	7.96	9.60	7.91	n/a

As-Inspected Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
Floorbeam	Unit 12, FB 99	1.02	1.71	2.83	1.98	2.08	1.96	n/a
Floorbeam	Unit 14, FB 112	1.93	3.23	5.52	3.90	4.19	3.84	n/a
Floorbeam	Unit 16, FB 127	1.82	3.05	5.03	3.52	3.70	3.49	n/a
Floorbeam	Unit 13, FB 107	2.15	3.59	6.31	4.37	4.67	4.30	n/a
Floorbeam	Unit 14, FB 112	1.01	1.69	2.89	2.04	2.19	2.01	n/a
Floorbeam	Unit 19, FB 146	2.56	4.28	6.82	7.96	9.60	7.91	n/a

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 Inventory	1.01	36.36	HS20.2
HS20 Operating	1.69	60.84	HS33.8
2F1	2.83	42.45	195%
3F1	1.98	45.54	
4F1	2.08	56.16	
5C1	1.96	78.40	
Fatigue	0.00 years remaining		



Made By RAH  
Checked By DBH

Date 3/9/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

The following FB's have the controlling configuration (Deficiencies were found on Last Inspection) :  
**FB 40 Between North Girder & Stringer 1; 1.5" L X 0.75" H 100% Loss in FB Web near North Girder Connection**  
**FB 46 Between North & Central Girders; 1/16" Pitting on Web of FB (typ. On Span)**  
**FB 68 Between Central Girder & Stringer 3; 1/16" Loss @ Top FLG. Of FB**  
**FB 131 Between Stringer 2 & Central Girder; Next to Central Girder; 1/4" Pitting @ Top FLG of FB.**

Plan Unit	FB Unit Weight (kip/ft)	Stringer Type along Unit	Stringer Unit Weight (kip/ft)	No. Spans *	Span Length along Unit (ft) *	Tributary Stringer Length On FB (ft)
FB 40- Unit 5 (Double MC18X42.7)	0.0854	W12 x 40	0.04	9	3X4.88'; 5X6.08'; 6.06'	6.07
FB 46- Unit 6 (W18X55)	0.055	W12 x 40	0.04	10	6.06 ft	6.06
FB 68- Unit 8 (W18X55)	0.055	W12 x 40	0.04	9	4X6.06'; 5X6.08'	6.08
FB 131- Unit 17 (W21X59)	0.059	W6 x 25	0.025	6	6.19 ft	6.19

\*Interior Stringer distribution factor (Shear)= 0.538 per lane  
 \*Exterior Stringer distribution factor (Shear)= 0.7212 per lane

**Dead Loads:**

**DC1:**

Slab Thickness (Between Girders)=	6.75	in.		Lightweight Deck Concrete =	0.117 k/c.ft.
Spacing between Stringers	6.5	ft			
DC1 (FB-40 Unit 5)=	2.597	kip			
DC1 (FB-46 Unit 6)=	2.592	kip			
DC1 (FB-68 Unit 8)=	2.601	kip			
DC1 (FB-131 Unit 17)=	2.648	kip			

**DW:**

Wearing Surface =		1.25 in	Gutter to Gutter =	55.75 ft	
DW (FB-40 Unit 5)=	0.588	kip	Wearing Surface Concrete =		0.15 k/cf
DW (FB-46 Unit 6)=	0.587	kip	No Stringers =	9	
DW (FB-68 Unit 8)=	0.588	kip			
DW (FB-131 Unit 17)=	0.599	kip			

**DC2:**

Barrier =	0.462	k/ft	No of Barriers =	2
Median =	0.499	k/ft	No of medians =	1
DW (FB-40 Unit 5)=	0.960	kip	No Stringers =	9
DW (FB-46 Unit 6)=	0.958	kip		
DW (FB-68 Unit 8)=	0.961	kip		
DW (FB-131 Unit 17)=	0.979	kip		



Made By RAH  
Checked By DBH

Date 3/9/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

Impact (inv. & Op.)= 30 % (All units)      Impact (Fatigue)= 15 % (All units)

Analysis Loads:

FB-Unit	Slab (kip)	W.S. (kip)	Barrier (kip)	Stringer Self Wt (kip)	Total in Kip (plus 10% misc.)
FB-40	2.60 k/ft	0.59 k/ft	0.96 k/ft	0.24	4.825 kip
FB-46	2.59 k/ft	0.59 k/ft	0.96 k/ft	0.24	4.817 kip
FB-68	2.60 k/ft	0.59 k/ft	0.96 k/ft	0.24	4.833 kip
FB-131	2.65 k/ft	0.60 k/ft	0.98 k/ft	0.15	4.819 kip

The Interior and Exterior Stringers contribute with the same DC amount on the FB, but the LL contribution of each stringer (interior or exterior) is different (Distribution Factor)



Made By RAH  
Checked By DBH

Date 3/9/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

AS BUILT (AB).

FB# (Interior)	Un-factored DL (Shear) @ Ext. Girder locations (kip)	Shear Area Ashear (sq. in)	Section Modulus Sx (c. in.)	Fy Bending (ksi)	Fy Shear (ksi)	AB Mom. Capacity (kip-ft) Fy*Sx	AB Shear Capacity (kip) 0.58*Fy*Ashear	Factored DL Shear @ Exterior Girder Locations(Kip )	Factored DL Moment (Kip-ft)
FB 40 (MC18X42.7)	5.66	16.2	123.11	33	33	338.5525	310.068	7.358	30.6683
FB 46 (W18X55)	5.363		98.3	33	33	478.02	114.51	6.9719	29.4047
FB 68 (W18X55)	5.363		98.3	33	33	478.02	114.51	6.9719	29.4775
FB 131 (W21X59)	5.401		119.3	33	33	602.99	136.3	7.0213	29.5633

FB# (Interior)	Un-Factored Shear Due to Stringer Reaction (Kip) HS-20 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) HS-20 Lane: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) OH2F1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) OH3F1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) OH4F1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) OH5C1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) HS15 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0
FB 40 (MC18X42.7)	22.564	21.014	13.687	19.387	18.282	19.634	16.533
FB 46 (W18X55)	22.788	20.853	12.998	18.63	17.223	18.915	16.513
FB 68 (W18X55)	22.034	20.295	12.657	18.227	16.926	18.522	16.097
FB 131 (W21X59)	22.874	20.946	12.905	18.716	17.618	19.122	16.52

FB# (Interior)	Un-Factored LL Mom (Kip-ft) HS-20 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) HS-20 Lane: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) OH2F1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) OH3F1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) OH4F1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) OH5C1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) HS15 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0
FB 40 (MC18X42.7)	85.398	79.526	51.793	73.368	69.191	74.316	62.573
FB 46 (W18X55)	86.23	78.923	49.194	70.497	65.186	71.588	62.487
FB 68 (W18X55)	94.392	86.942	54.222	78.082	72.509	79.348	68.961
FB 131 (W21X59)	86.563	79.268	48.84	70.83	66.67	72.367	62.517



Made By RAH  
Checked By DBH

Date 3/9/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

FB# (Interior)	Factored LL Shear (Kip) HS-20 Truck Inv. : 1.3*1.67*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) HS-20 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) HS-20 Lane Inv. : 1.3*1.67*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) HS-20 Lane Op.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) OH2F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) OH3F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) OH4F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) OH5C1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) HS15 Truck Fatigue.: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.15
FB 40 (MC18X42.7)	63.682	38.133	59.308	35.514	23.131	32.764	30.897	33.181	19.013
FB 46 (W18X55)	64.315	38.512	58.853	35.242	21.967	31.485	29.107	31.966	18.990
FB 68 (W18X55)	62.187	37.237	57.279	34.299	21.390	30.804	28.605	31.302	18.512
FB 131 (W21X59)	64.557	38.657	59.116	35.399	21.809	31.630	29.774	32.316	18.998

FB# (Interior)	Factored LL Mom (Kip-ft) HS-20 Truck Inv. : 1.3*1.67*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) HS-20 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) HS-20 Lane Inv. : 1.3*1.67*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) HS-20 Lane Op.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) OH2F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) OH3F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) OH4F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) OH5C1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) HS15 Truck Fatigue.: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.15
FB 40 (MC18X42.7)	241.019	144.323	224.446	134.399	87.530	123.992	116.933	125.594	71.959
FB 46 (W18X55)	243.367	145.729	222.744	133.380	83.138	119.140	110.164	120.984	71.860
FB 68 (W18X55)	266.403	159.522	245.376	146.932	91.635	131.959	122.540	134.098	79.305
FB 131 (W21X59)	244.307	146.291	223.718	133.963	82.540	119.703	112.672	122.300	71.895

FB# (Interior)	Shear (RF) HS-20 Truck Inv. : 4.753	Shear (RF) HS-20 Lane Inv. : 5.104	Shear (RF) HS-20 Truck Op. : 7.938	Shear (RF) HS-20 Lane Op. : 8.524	Shear (RF) OH2F1 Truck Op. : 13.087	Shear (RF) OH3F1 Truck Op. : 9.239	Shear (RF) OH4F1 Truck Op. : 9.798	Shear (RF) OH5C1 Truck Op. : 9.123	Shear (RF) HS-15 Truck Fatigue: 15.921
FB 40	4.753	5.104	7.938	8.524	13.087	9.239	9.798	9.123	15.921
FB 46	1.672	1.827	2.792	3.051	4.896	3.416	3.695	3.364	5.663
FB 68	1.729	1.877	2.888	3.135	5.027	3.491	3.759	3.435	5.809
FB 131	2.003	2.187	3.344	3.652	5.928	4.087	4.342	4.000	6.805

FB# (Interior)	Mom (RF) HS-20 Truck Inv. : 1.277	Mom (RF) HS-20 Lane Inv. : 1.372	Mom (RF) HS-20 Truck Op. : 2.133	Mom (RF) HS-20 Lane Op. : 2.291	Mom (RF) OH2F1 Truck Op. : 3.517	Mom (RF) OH3F1 Truck Op. : 2.483	Mom (RF) OH4F1 Truck Op. : 2.633	Mom (RF) OH5C1 Truck Op. : 2.451	Mom (RF) HS-15 Truck Fatigue: 4.279
FB 40	1.277	1.372	2.133	2.291	3.517	2.483	2.633	2.451	4.279
FB 46	1.843	2.014	3.078	3.363	5.396	3.765	4.072	3.708	6.243
FB 68	1.684	1.828	2.812	3.053	4.895	3.399	3.660	3.345	5.656
FB 131	2.347	2.563	3.920	4.280	6.947	4.790	5.089	4.689	7.976





Made By RAH  
Checked By DBH

Date 3/9/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

AS INSPECTED (AI).

FB# (Interior)	Un-factored DL (Shear) @ Ext. Girder locations (kip)	Shear Area Ashear (sq. in)	Section Modulus Sx (c. in.)	Fy Bending (ksi)	Fy Shear (ksi)	AB Mom. Capacity (kip-ft) Fy*Sx	AB Shear Capacity (kip) 0.58*Fy*Ashear	Factored DL Shear @ Exterior Girder Locations(Kip )	Factored DL Moment (Kip-ft)
FB 40 (MC18X42.7)	5.66	15.8625	123.109353	33	33	338.5507216	303.60825	7.358	30.6683
FB 46 (W18X55)	5.363			33	33	472.31	96.16	6.9719	29.4047
FB 68 (W18X55)	5.363			33	33	457.8	114.51	6.9719	29.4775
FB 131 (W21X59)	5.401			33	33	498.35	136.3	7.0213	29.5633

FB# (Interior)	Un-Factored Shear Due to Stringer Reaction (Kip) HS-20 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) HS-20 Lane: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) OH2F1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) OH3F1 Truck: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) OH4F1 Truck: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) OH5C1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored Shear due to Stringer Reaction (Kip) HS15 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0
FB 40 (MC18X42.7)	22.564	21.014	13.687	19.387	18.282	19.634	16.533
FB 46 (W18X55)	22.788	20.853	12.998	18.63	17.223	18.915	16.513
FB 68 (W18X55)	22.034	20.295	12.657	18.227	16.926	18.522	16.097
FB 131 (W21X59)	22.874	20.946	12.905	18.716	17.618	19.122	16.52

FB# (Interior)	Un-Factored LL Mom (Kip-ft) HS-20 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) HS-20 Lane: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) OH2F1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) OH3F1 Truck: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) OH4F1 Truck: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) OH5C1 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0	Un-Factored LL Mom (Kip-ft) HS15 Truck: 1.0*1.0*(LL+I M)*DF. DF=Varies & IM=1.0
FB 40 (MC18X42.7)	85.398	79.526	51.793	73.368	69.191	74.316	62.573
FB 46 (W18X55)	86.23	78.923	49.194	70.497	65.186	71.588	62.487
FB 68 (W18X55)	94.392	86.942	54.222	78.082	72.509	79.348	68.961
FB 131 (W21X59)	86.563	79.268	48.84	70.83	66.67	72.367	62.517



Made By RAH  
Checked By DBH

Date 3/9/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For:

CUY-2-1441

FB# (Interior)	Factored LL Shear (Kip) HS-20 Truck Inv.: 1.3*1.67*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) HS-20 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) HS-20 Lane Inv.: 1.3*1.67*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) HS-20 Lane Op.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) OH2F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) OH3F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) OH4F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) OH5C1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Shear (Kip) HS15 Truck Fatigue.: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.15
FB 40 (MC18X42.7)	63.682	38.133	59.308	35.514	23.131	32.764	30.897	33.181	19.013
FB 46 (W18X55)	64.315	38.512	58.853	35.242	21.967	31.485	29.107	31.966	18.990
FB 68 (W18X55)	62.187	37.237	57.279	34.299	21.390	30.804	28.605	31.302	18.512
FB 131 (W21X59)	64.557	38.657	59.116	35.399	21.809	31.630	29.774	32.316	18.998

FB# (Interior)	Factored LL Mom (Kip-ft) HS-20 Truck Inv.: 1.3*1.67*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) HS-20 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) HS-20 Lane Inv.: 1.3*1.67*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) HS-20 Lane Op.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) OH2F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) OH3F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) OH4F1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) OH5C1 Truck OP.: 1.3*1.0*(LL+IM)*DF. DF=Varies & IM=1.3	Factored LL Mom (Kip-ft) HS15 Truck Fatigue.: 1.0*1.0*(LL+IM)*DF. DF=Varies & IM=1.15
FB 40 (MC18X42.7)	241.019	144.323	224.446	134.399	87.530	123.992	116.933	125.594	71.959
FB 46 (W18X55)	243.367	145.729	222.744	133.380	83.138	119.140	110.164	120.984	71.860
FB 68 (W18X55)	266.403	159.522	245.376	146.932	91.635	131.959	122.540	134.098	79.305
FB 131 (W21X59)	244.307	146.291	223.718	133.963	82.540	119.703	112.672	122.300	71.895



Made By RAH  
Checked By DBH

Date 3/9/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

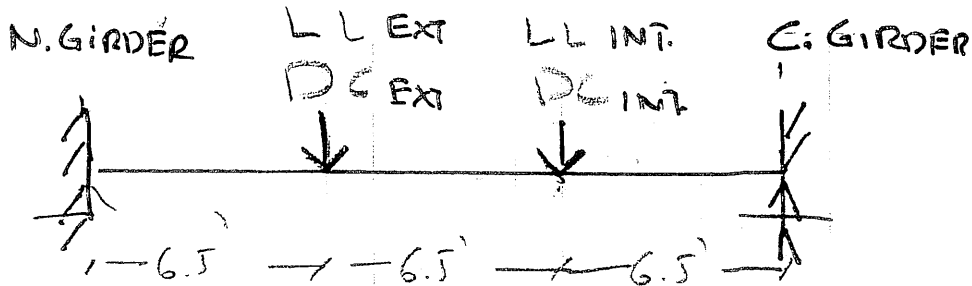
Calculations For:

**CUY-2-1441**

FB# (Interior)	Shear (RF) HS-20 Truck Inv.	Shear (RF) HS-20 Lane Inv.	Shear (RF) HS-20 Truck Op.	Shear (RF) HS-20 Lane Op.	Shear (RF) OH2F1 Truck Op.	Shear (RF) OH3F1 Truck Op.	Shear (RF) OH4F1 Truck Op.	Shear (RF) OH5C1 Truck Op.	Shear (RF) HS- 15 Truck Fatigue:
FB 40	4.652	4.995	7.769	8.342	12.807	9.042	9.588	8.928	15.581
FB 46	1.387	1.515	2.316	2.531	4.060	2.833	3.064	2.790	4.697
FB 68	1.729	1.877	2.888	3.135	5.027	3.491	3.759	3.435	5.809
FB 131	2.003	2.187	3.344	3.652	5.928	4.087	4.342	4.000	6.805

FB# (Interior)	Mom (RF) HS-20 Truck Inv.	Mom (RF) HS-20 Lane Inv.	Mom (RF) HS-20 Truck Op.	Mom (RF) HS-20 Lane Op.	Mom (RF) OH2F1 Truck Op.	Mom (RF) OH3F1 Truck Op.	Mom (RF) OH4F1 Truck Op.	Mom (RF) OH5C1 Truck Op.	Mom (RF) HS- 15 Truck Fatigue:
FB 40	1.277	1.372	2.133	2.291	3.517	2.483	2.633	2.451	4.279
FB 46	1.820	1.988	3.039	3.321	5.327	3.718	4.020	3.661	6.163
FB 68	1.608	1.746	2.685	2.915	4.674	3.246	3.495	3.194	5.401
FB 131	1.919	2.095	3.204	3.499	5.680	3.916	4.161	3.833	6.520

FB (Single Span Fixed supports), FB - 40', 46 # 131



DC Contribution From both Stringers  
is the same. REPRESENT DC FROM FB AS A UDL  
UNIFORM DL

LL Contribution From INT STRINGER  $\times 0.538$

P FROM EXT STRINGER  $\times 0.7212$

Max Shear  
adjacent to  
S. Girder  
(DC)

Max Mom  
@ Midspan  
(DC)

Max Shear  
adjacent to  
S Girder.  
(LL)

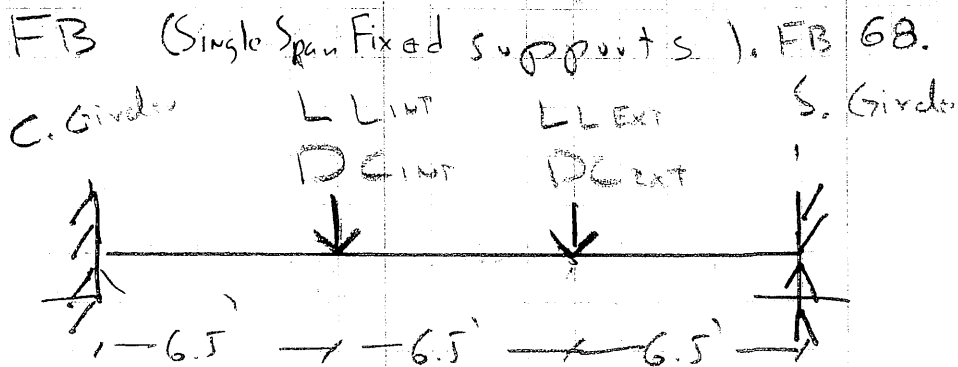
Max Mom  
Approx. @  
Midspan (LL)

From CONSYS

W 21 X 59 SECTION (FB 131)  
338 of 1221

$A = 17.36 \text{ in}^2$   
 $d = 20.91 \text{ in}$   
 $t_w = 0.39 \text{ in}$   
 $t_f = 0.23 \text{ in}$

$t_s = 0.575 \text{ in}$   
 $I_x = 1246.8 \text{ in}^4$   
 $S_x = 119.3 \text{ in}^3$



DC Contribution From both Stringers  
 LS the same. REPRESENT DC FROM FB AS A UDL

LL Contribution From INT STRINGER  $\times 0.538$

P FROM EXT STRINGER  $\times 0.7212$

Max Shear  
 adjacent to  
 S. Girder  
 (DC)

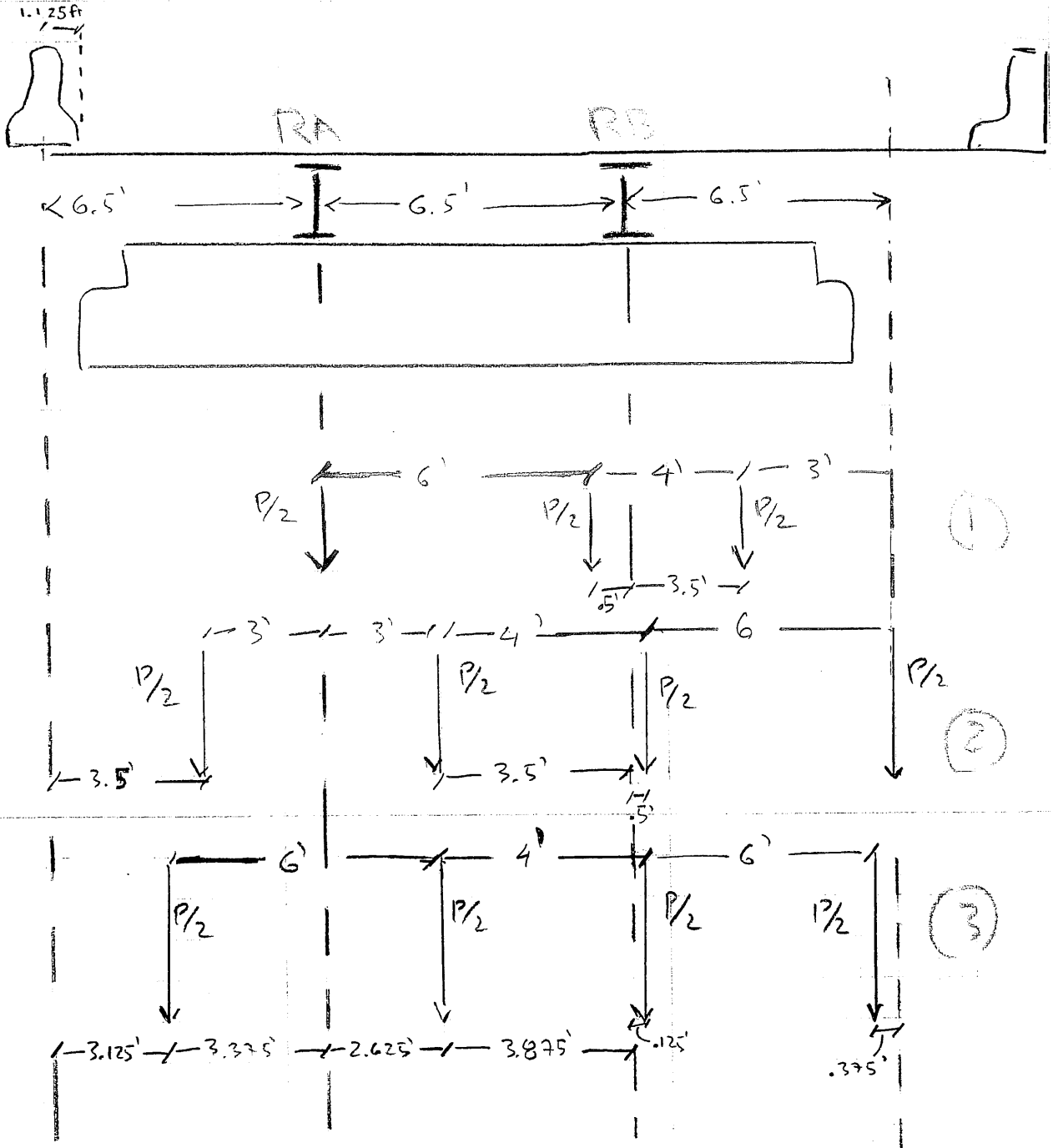
Max Mom  
 @ Midspan  
 (DC)

Max Shear  
 adjacent to  
 S. Girder  
 (LL)

Max Mom  
 Approx. @  
 Midspan (LL)

From Consys

W 21 x 59 Section (FB131)  $\left\{ \begin{array}{l} A = 17.36 \text{ in}^2 \\ d = 20.91 \text{ in} \\ t_w = 0.39 \text{ in} \\ b_f = 8.23 \text{ in} \end{array} \right. \left\{ \begin{array}{l} t_f = 0.595 \text{ in} \\ I_x = 1246.8 \text{ in}^4 \\ S_x = 119.3 \text{ in}^3 \end{array} \right.$



①  $R_A = \frac{P}{2} + \frac{P/2(6')}{6.5'} = 0.538$  ;  $R_B = \frac{P/2(6')}{6.5'} + \frac{P/2(3')}{6.5'} = 0.6923$

②  $R_A = \frac{P/2(3.5')}{6.5'} + \frac{P/2(3.5')}{6.5'} = 0.538$  ;  $R_B = \frac{P/2(3')}{6.5'} + \frac{P/2(6')}{6.5'} = 0.6923$

③  $R_A = \frac{P/2(3.125')}{6.5'} + \frac{P/2(3.875')}{6.5'} = 0.538$  ;  $R_B = \frac{P/2(2.625')}{6.5'} + \frac{P/2(6.375')}{6.5'} + \frac{P/2(3.375')}{6.5'} = 0.721$

CONTROL

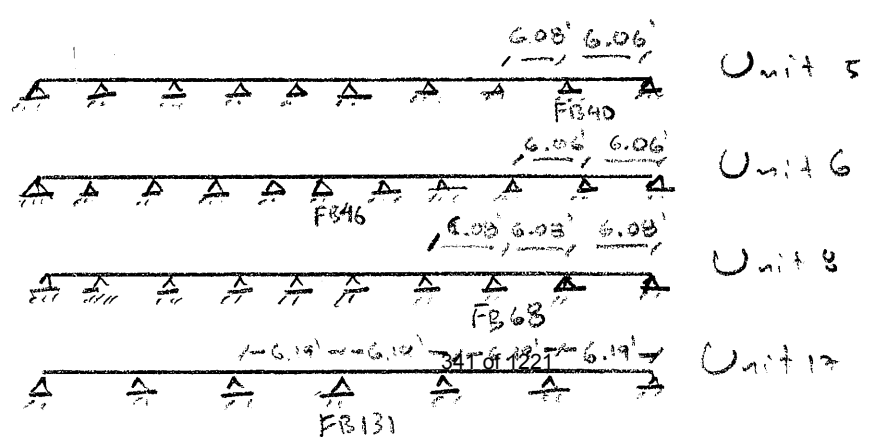
FB w/ Deficiencies

- FB 40 (Unit 5) BETWEEN North Girder & Stringer 1:  
1 1/2" L x 3/4" High 100%. Loss (40%) N FB WEB near North Girder Connection
- FB'S 46 (Unit 6) Between North & Central Girder w/ 1/16" Pitting on web (typ. on span)
- FB 68 (Unit 8) Between Central Girder & Stringer 3  
1/16" Loss to top FLG. of FB
- FB 131 (Unit 17) w/ 1/4" Pitting to top FLG. @ Central Girder

Unit	Span Length	# of Spans
5	3x4.08'; 5x6.06'; 6.06'	9
6	6.06'	10
8	4x6.06'; 5x6.08'	9
17	6.19'	6

D.F. FOR INTERIOR Stringer = 0.538

" " EXTERIOR " " = 0.7212



Id Live Load HS15 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-16.533
	1.95	-37.699	16.533	0.05	
	3.9	-5.46	16.533	0.15	
	5.85	26.78	16.533	0.26	
	7.8	35.145	-0.957	0.34	
	9.75	33.279	-0.957	0.36	
	11.7	31.413	-0.957	0.33	
	13.65	19.368	-14.007	0.25	
	15.6	-7.946	-14.007	0.14	
	17.55	-35.259	-14.007	0.04	
	19.5	-62.573/	-14.007/	0	-14.007



Id Live Load HS20 Lane Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-21.014
	1.95	-47.916	21.014	0.06	
	3.9	-6.938	21.014	0.19	
	5.85	34.04	21.014	0.33	
	7.8	44.672	-1.218	0.43	
	9.75	42.297	-1.218	0.45	
	11.7	39.923	-1.218	0.41	
	13.65	24.613	-17.802	0.31	
	15.6	-10.1	-17.802	0.18	
	17.55	-44.813	-17.802	0.05	
	19.5	-79.526/	-17.802/	0	-17.802

Id Live Load HS20 Truck Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-22.564
	1.95	-51.45	22.564	0.06	
	3.9	-7.451	22.564	0.21	
	5.85	36.548	22.564	0.36	
	7.8	47.965	-1.306	0.46	
	9.75	45.418	-1.306	0.49	
	11.7	42.871	-1.306	0.45	
	13.65	26.432	-19.116	0.34	
	15.6	-10.844	-19.116	0.19	
	17.55	-48.121	-19.116	0.06	
	19.5	-85.398/	-19.116/	0	-19.116

Id Live Load OH2F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-13.687
	1.95	-31.207	13.687	0.04	
	3.9	-4.518	13.687	0.12	
	5.85	22.171	13.687	0.22	
	7.8	29.094	-0.793	0.28	
	9.75	27.547	-0.793	0.3	
	11.7	26	-0.793	0.27	
	13.65	16.029	-11.593	0.2	
	15.6	-6.578	-11.593	0.11	
	17.55	-29.185	-11.593	0.03	
	19.5	-51.793/	-11.593/	0	-11.593

Id Live Load OH3F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-19.387
	1.95	-44.205	19.387	0.05	
	3.9	-6.401	19.387	0.18	
	5.85	31.404	19.387	0.31	
	7.8	41.212	-1.123	0.4	
	9.75	39.022	-1.123	0.42	
	11.7	36.832	-1.123	0.38	
	13.65	22.707	-16.423	0.29	
	15.6	-9.318	-16.423	0.16	
	17.55	-41.343	-16.423	0.05	
	19.5	-73.368/	-16.423/	0	-16.423

Id Live Load OH4F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-18.282
	1.95	-41.686	18.282	0.05	
	3.9	-6.037	18.282	0.17	
	5.85	29.612	18.282	0.29	
	7.8	38.863	-1.058	0.37	
	9.75	36.799	-1.058	0.4	
	11.7	34.735	-1.058	0.36	
	13.65	21.416	-15.488	0.27	
	15.6	-8.786	-15.488	0.15	
	17.55	-38.989	-15.488	0.05	
	19.5	-69.191/	-15.488/	0	-15.488

Id Live Load OH5C1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-19.634
	1.95	-44.771	19.634	0.05	
	3.9	-6.485	19.634	0.18	
	5.85	31.802	19.634	0.31	
	7.8	41.738	-1.136	0.4	
	9.75	39.523	-1.136	0.42	
	11.7	37.308	-1.136	0.39	
	13.65	23.004	-16.636	0.29	
	15.6	-9.436	-16.636	0.16	
	17.55	-41.876	-16.636	0.05	
	19.5	-74.316/	-16.636/	0	-16.636

Id Dead Loads Unfactored (WS+Deck+Barriers+Stringers+FB\_Self)  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-5.363
	1.95	-12.298	5.255	0.01	
	3.9	-2.154	5.148	0.05	
	5.85	7.78	5.041	0.09	
	7.8	11.208	0.114	0.11	
	9.75	11.325	0.006	0.12	
	11.7	11.233	-0.101	0.11	
	13.65	7.736	-5.028	0.09	
	15.6	-2.173	-5.135	0.05	
	17.55	-12.291	-5.243	0.01	
	19.5	-22.619/	-5.350/	0	-5.35

Id Live Load HS15 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-16.513
	1.95	-37.651	16.513	0.05	
	3.9	-5.451	16.513	0.15	
	5.85	26.749	16.513	0.26	
	7.8	35.102	-0.957	0.34	
	9.75	33.235	-0.957	0.36	
	11.7	31.369	-0.957	0.33	
	13.65	19.339	-13.987	0.25	
	15.6	-7.937	-13.987	0.14	
	17.55	-35.212	-13.987	0.04	
	19.5	-62.487/	-13.987/	0	-13.987



Id Live Load HS20 Lane Unfactored No Im WITH DF  
 Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-20.853
	1.95	-47.55	20.853	0.06	
	3.9	-6.886	20.853	0.19	
	5.85	33.777	20.853	0.33	
	7.8	44.329	-1.207	0.43	
	9.75	41.975	-1.207	0.45	
	11.7	39.621	-1.207	0.41	
	13.65	24.429	-17.667	0.31	
	15.6	-10.022	-17.667	0.17	
	17.55	-44.473	-17.667	0.05	
	19.5	-78.923/	-17.667/	0	-17.667

Id Live Load HS20 Truck Unfactored No Im WITH DF  
 Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-22.788
	1.95	-51.959	22.788	0.06	
	3.9	-7.522	22.788	0.21	
	5.85	36.915	22.788	0.36	
	7.8	48.442	-1.322	0.47	
	9.75	45.865	-1.322	0.49	
	11.7	43.287	-1.322	0.45	
	13.65	26.685	-19.302	0.34	
	15.6	-10.953	-19.302	0.19	
	17.55	-48.591	-19.302	0.06	
	19.5	-86.230/	-19.302/	0	-19.302

Id Live Load OH2F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-12.998
	1.95	-29.638	12.998	0.04	
	3.9	-4.292	12.998	0.12	
	5.85	21.053	12.998	0.21	
	7.8	27.63	-0.752	0.27	
	9.75	26.163	-0.752	0.28	
	11.7	24.697	-0.752	0.26	
	13.65	15.227	-11.012	0.19	
	15.6	-6.247	-11.012	0.11	
	17.55	-27.721	-11.012	0.03	
	19.5	-49.194/	-11.012/	0	-11.012

Id Live Load OH2F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-12.998
	1.95	-29.638	12.998	0.04	
	3.9	-4.292	12.998	0.12	
	5.85	21.053	12.998	0.21	
	7.8	27.63	-0.752	0.27	
	9.75	26.163	-0.752	0.28	
	11.7	24.697	-0.752	0.26	
	13.65	15.227	-11.012	0.19	
	15.6	-6.247	-11.012	0.11	
	17.55	-27.721	-11.012	0.03	
	19.5	-49.194/	-11.012/	0	-11.012

Id Live Load OH4F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-17.223
	1.95	-39.273	17.223	0.05	
	3.9	-5.688	17.223	0.16	
	5.85	27.898	17.223	0.27	
	7.8	36.612	-0.997	0.35	
	9.75	34.668	-0.997	0.37	
	11.7	32.725	-0.997	0.34	
	13.65	20.177	-14.592	0.26	
	15.6	-8.278	-14.592	0.14	
	17.55	-36.732	-14.592	0.04	
	19.5	-65.186/	-14.592/	0	-14.592

Id Live Load OH5C1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-18.915
	1.95	-43.13	18.915	0.05	
	3.9	-6.246	18.915	0.17	
	5.85	30.638	18.915	0.3	
	7.8	40.209	-1.095	0.39	
	9.75	38.074	-1.095	0.41	
	11.7	35.939	-1.095	0.37	
	13.65	22.158	-16.025	0.28	
	15.6	-9.091	-16.025	0.16	
	17.55	-40.339	-16.025	0.05	
	19.5	-71.588/	-16.025/	0	-16.025

Id Dead Loads Unfactored (WS+Deck+Barriers+Stringers+FB\_Self)  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-5.376
	1.95	-12.329	5.268	0.01	
	3.9	-2.16	5.161	0.05	
	5.85	7.8	5.054	0.09	
	7.8	11.236	0.114	0.11	
	9.75	11.353	0.006	0.12	
	11.7	11.261	-0.101	0.11	
	13.65	7.756	-5.041	0.09	
	15.6	-2.179	-5.148	0.05	
	17.55	-12.322	-5.256	0.01	
	19.5	-22.675/	-5.363/	0	-5.363

Id Live Load HS15 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-14.39
	1.95	-35.546	14.39	0.04	
	3.9	-7.487	14.39	0.14	
	5.85	20.573	14.39	0.25	
	7.8	30.852	1.364	0.33	
	9.75	33.511	1.364	0.36	
	11.7	36.17	1.364	0.34	
	13.65	25.209	-16.097	0.26	
	15.6	-6.181	-16.097	0.15	
	17.55	-37.571	-16.097	0.05	
	19.5	-68.961/	-16.097/	0	-16.097



Id Dead Loads Unfactored (WS+Deck+Barriers+Stringers+FB\_Self)  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-5.66
	1.95	-12.747	5.494	0.02	
	3.9	-2.194	5.329	0.05	
	5.85	8.035	5.163	0.09	
	7.8	11.637	0.172	0.12	
	9.75	11.811	0.006	0.13	
	11.7	11.662	-0.159	0.12	
	13.65	7.991	-5.15	0.09	
	15.6	-2.213	-5.316	0.05	
	17.55	-12.741	-5.482	0.02	
	19.5	-23.591/	-5.647/	0	-5.647

Id Live Load HS20 Lane Unfactored No Im WITH DF  
 Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear ( K)	Deflect (in)	Reaction ( K)
1	0	+0.000/	+0.000/	0	-18.14
	1.95	-44.812	18.14	0.05	
	3.9	-9.439	18.14	0.18	
	5.85	25.934	18.14	0.31	
	7.8	38.893	1.72	0.41	
	9.75	42.247	1.72	0.45	
	11.7	45.601	1.72	0.43	
	13.65	31.784	-20.295	0.33	
	15.6	-7.791	-20.295	0.19	
	17.55	-47.367	-20.295	0.06	
	19.5	-86.942/	-20.295/	0	-20.295

Id Live Load HS20 Truck Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-19.696
	1.95	-48.655	19.696	0.06	
	3.9	-10.247	19.696	0.19	
	5.85	28.16	19.696	0.34	
	7.8	42.23	1.866	0.45	
	9.75	45.869	1.866	0.49	
	11.7	49.508	1.866	0.46	
	13.65	34.505	-22.034	0.36	
	15.6	-8.46	-22.034	0.2	
	17.55	-51.426	-22.034	0.06	
	19.5	-94.392/	-22.034/	0	-22.034

Id Live Load OH2F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-11.313
	1.95	-27.947	11.313	0.03	
	3.9	-5.887	11.313	0.11	
	5.85	16.173	11.313	0.2	
	7.8	24.256	1.073	0.26	
	9.75	26.348	1.073	0.28	
	11.7	28.44	1.073	0.27	
	13.65	19.822	-12.657	0.21	
	15.6	-4.859	-12.657	0.12	
	17.55	-29.54	-12.657	0.04	
	19.5	-54.222/	-12.657/	0	-12.657

Id Live Load OH3F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-16.293
	1.95	-40.249	16.293	0.05	
	3.9	-8.477	16.293	0.16	
	5.85	23.296	16.293	0.28	
	7.8	34.934	1.543	0.37	
	9.75	37.944	1.543	0.41	
	11.7	40.954	1.543	0.38	
	13.65	28.543	-18.227	0.3	
	15.6	-6.999	-18.227	0.17	
	17.55	-42.541	-18.227	0.05	
	19.5	-78.082/	-18.227/	0	-18.227

Id Live Load OH4F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-15.129
	1.95	-37.374	15.129	0.04	
	3.9	-7.872	15.129	0.15	
	5.85	21.63	15.129	0.26	
	7.8	32.438	1.434	0.34	
	9.75	35.235	1.434	0.38	
	11.7	38.031	1.434	0.36	
	13.65	26.507	-16.926	0.28	
	15.6	-6.498	-16.926	0.16	
	17.55	-39.504	-16.926	0.05	
	19.5	-72.509/	-16.926/	0	-16.926

Id Live Load OH5C1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-16.558
	1.95	-40.902	16.558	0.05	
	3.9	-8.614	16.558	0.16	
	5.85	23.675	16.558	0.29	
	7.8	35.502	1.568	0.38	
	9.75	38.559	1.568	0.41	
	11.7	41.617	1.568	0.39	
	13.65	29.005	-18.522	0.3	
	15.6	-7.113	-18.522	0.17	
	17.55	-43.23	-18.522	0.05	
	19.5	-79.348/	-18.522/	0	-18.522

Id            Dead Loads Unfactored (WS+Deck+Barriers+Stringers+FB\_Self)  
Type        Static

Factors        1

Span	Location (ft)	Moment (kft)	Shear ( K)	Deflect (in)	Reaction ( K)
1	0	+0.000/	+0.000/	0	-5.401
	1.95	-12.354	5.286	0.01	
	3.9	-2.159	5.171	0.05	
	5.85	7.812	5.056	0.09	
	7.8	11.262	0.121	0.11	
	9.75	11.386	0.006	0.12	
	11.7	11.287	-0.109	0.11	
	13.65	7.768	-5.043	0.09	
	15.6	-2.178	-5.158	0.05	
	17.55	-12.347	-5.273	0.01	
	19.5	-22.741/	-5.388/	0	-5.388



Id Live Load HS15 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-16.52
	1.95	-37.668	16.52	0.05	
	3.9	-5.454	16.52	0.15	
	5.85	26.76	16.52	0.26	
	7.8	35.117	-0.957	0.34	
	9.75	33.251	-0.957	0.36	
	11.7	31.384	-0.957	0.33	
	13.65	19.349	-13.994	0.25	
	15.6	-7.94	-13.994	0.14	
	17.55	-35.228	-13.994	0.04	
	19.5	-62.517/	-13.994/	0	-13.994

Id Live Load HS20 Lane Unfactored No Im WITH DF  
 Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear ( K)	Deflect (in)	Reaction ( K)
1	0	+0.000/	+0.000/	0	-20.946
	1.95	-47.761	20.946	0.06	
	3.9	-6.915	20.946	0.19	
	5.85	33.93	20.946	0.33	
	7.8	44.527	-1.214	0.43	
	9.75	42.16	-1.214	0.45	
	11.7	39.793	-1.214	0.41	
	13.65	24.533	-17.744	0.31	
	15.6	-10.067	-17.744	0.17	
	17.55	-44.668	-17.744	0.05	
	19.5	-79.268/	-17.744/	0	-17.744

Id Live Load HS20 Truck Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-22.874
	1.95	-52.157	22.874	0.06	
	3.9	-7.552	22.874	0.21	
	5.85	37.053	22.874	0.36	
	7.8	48.625	-1.326	0.47	
	9.75	46.04	-1.326	0.49	
	11.7	43.455	-1.326	0.45	
	13.65	26.79	-19.377	0.34	
	15.6	-10.994	-19.377	0.19	
	17.55	-48.779	-19.377	0.06	
	19.5	-86.563/	-19.377/	0	-19.377

Id Live Load OH2F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-12.905
	1.95	-29.426	12.905	0.04	
	3.9	-4.261	12.905	0.12	
	5.85	20.905	12.905	0.21	
	7.8	27.434	-0.748	0.26	
	9.75	25.976	-0.748	0.28	
	11.7	24.518	-0.748	0.25	
	13.65	15.116	-10.933	0.19	
	15.6	-6.203	-10.933	0.11	
	17.55	-27.521	-10.933	0.03	
	19.5	-48.840/	-10.933/	0	-10.933

Id Live Load OH3F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-18.63
	1.95	-42.478	18.63	0.05	
	3.9	-6.15	18.63	0.17	
	5.85	30.178	18.63	0.3	
	7.8	39.602	-1.08	0.38	
	9.75	37.496	-1.08	0.4	
	11.7	35.39	-1.08	0.37	
	13.65	21.817	-15.78	0.28	
	15.6	-8.954	-15.78	0.16	
	17.55	-39.726	-15.78	0.05	
	19.5	-70.497/	-15.780/	0	-15.78

Id Live Load OH3F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-18.716
	1.95	-42.676	18.716	0.05	
	3.9	-6.18	18.716	0.17	
	5.85	30.316	18.716	0.3	
	7.8	39.786	-1.084	0.38	
	9.75	37.672	-1.084	0.4	
	11.7	35.558	-1.084	0.37	
	13.65	21.922	-15.855	0.28	
	15.6	-8.995	-15.855	0.16	
	17.55	-39.913	-15.855	0.05	
	19.5	-70.830/	-15.855/	0	-15.855

Id Live Load OH4F1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-17.618
	1.95	-40.172	17.618	0.05	
	3.9	-5.816	17.618	0.16	
	5.85	28.54	17.618	0.28	
	7.8	37.452	-1.022	0.36	
	9.75	35.46	-1.022	0.38	
	11.7	33.468	-1.022	0.35	
	13.65	20.633	-14.924	0.26	
	15.6	-8.468	-14.924	0.15	
	17.55	-37.569	-14.924	0.04	
	19.5	-66.670/	-14.924/	0	-14.924

Id Live Load OH5C1 Unfactored No Im WITH DF  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	+0.000/	+0.000/	0	-19.122
	1.95	-43.602	19.122	0.05	
	3.9	-6.313	19.122	0.17	
	5.85	30.975	19.122	0.3	
	7.8	40.65	-1.108	0.39	
	9.75	38.489	-1.108	0.41	
	11.7	36.329	-1.108	0.38	
	13.65	22.397	-16.199	0.28	
	15.6	-9.191	-16.199	0.16	
	17.55	-40.779	-16.199	0.05	
	19.5	-72.367/	-16.199/	0	-16.199



Id HS15  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	24.002	-1.897	24.002	0	0	0
	0.488	10.234	20.971	-3.029	20.971	10.234	0	0.01
	0.976	17.535	17.966	-6.034	17.966	17.535	0	0.01
	1.464	22.026	15.045	-8.955	15.045	22.026	0	0.01
	1.952	23.893	12.24	-11.76	12.24	23.893	0	0.02
	2.44	23.399	9.59	-14.41	9.59	23.399	0	0.02
	2.928	20.883	7.132	-16.868	7.132	20.883	0	0.02
	3.416	16.763	4.907	-19.093	4.907	16.763	0	0.01
	3.904	11.523	2.952	-21.048	2.952	11.523	0	0.01
	4.392	5.728	1.304	-22.696	1.304	5.728	0	0
2	0	2.554	0.523	-2.617	24.126	0	-0.193	0
	0.488	6.278	22.127	-1.873	22.248	6.219	0	0
	0.976	11.993	19.965	-4.115	19.965	11.993	0	0.01
	1.464	16.524	17.396	-6.604	17.396	16.524	0	0.01
	1.952	19.36	14.652	-9.348	14.652	19.36	0	0.01
	2.44	20.27	11.846	-12.154	11.846	20.27	0	0.01
	2.928	19.168	9.052	-14.948	9.052	19.168	0	0.01
	3.416	16.174	6.37	-17.63	6.37	16.174	0	0.01
	3.904	11.608	3.9	-20.1	3.9	11.608	0	0.01
	4.392	5.985	1.745	-22.255	3.36	2.482	0	0
3	0	4.465	1.72	-3.77	24.208	0	-0.288	0
	0.488	5.968	22.262	-1.738	22.474	5.853	0	0
	0.976	11.59	20.125	-3.875	20.306	11.581	0	0.01
	1.464	16.238	17.819	-6.181	17.819	16.238	0	0.01
	1.952	19.302	15.115	-8.885	15.115	19.302	0	0.01
	2.44	20.449	12.294	-11.706	12.294	20.449	0	0.01
	2.928	19.553	9.458	-14.542	9.458	19.553	0	0.01
	3.416	16.734	6.727	-17.273	6.727	16.734	0	0.01
	3.904	12.218	4.179	-19.821	4.179	12.218	0	0.01
	4.392	6.431	1.904	-22.096	2.739	1.813	0	0
4	0	4.135	1.457	-2.739	24.159	0	-0.32	0
	0.608	6.854	22.368	-1.632	22.549	6.714	0	0.01
	1.216	13.598	20.261	-3.739	20.436	13.569	0	0.01
	1.824	19.286	17.95	-6.05	17.95	19.286	0	0.02
	2.432	23.109	15.21	-8.79	15.21	23.109	0	0.02
	3.04	24.568	12.332	-11.668	12.332	24.568	0	0.02
	3.648	23.478	9.433	-14.567	9.433	23.478	0	0.02
	4.256	19.941	6.632	-17.368	6.632	19.941	0	0.02
	4.864	14.416	4.067	-19.933	4.067	14.416	0	0.01
	5.472	7.466	1.818	-22.182	1.888	1.416	0	0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5	0	3.383	0.721	-2.618	24.153	0	-0.291	0
	0.608	7.39	22.242	-1.758	22.416	7.271	0	0.01
	1.216	14.35	20.06	-3.94	20.221	14.338	0	0.01
	1.824	20.047	17.694	-6.306	17.694	20.047	0	0.02
	2.432	23.734	14.946	-9.054	14.946	23.734	0	0.02
	3.04	25	12.086	-11.914	12.086	25	0	0.02
	3.648	23.717	9.225	-14.775	9.225	23.717	0	0.02
	4.256	20.059	6.413	-17.587	6.474	20.026	0	0.02
	4.864	14.409	3.965	-20.035	3.965	14.409	0	0.01
	5.472	7.434	1.771	-22.229	2.581	1.943	0	0.01
6	0	3.514	2.579	-0.888	24.154	0	-0.291	0
	0.608	7.429	22.233	-1.767	22.409	7.31	0	0.01
	1.216	14.404	20.045	-3.955	20.209	14.393	0	0.01
	1.824	20.104	17.68	-6.32	17.68	20.104	0	0.02
	2.432	23.783	14.93	-9.07	14.93	23.783	0	0.02
	3.04	25.037	12.071	-11.929	12.071	25.037	0	0.02
	3.648	23.777	9.082	-14.918	9.215	23.736	0	0.02
	4.256	20.105	6.333	-17.667	6.47	20.031	0	0.02
	4.864	14.412	3.967	-20.033	3.967	14.412	0	0.01
	5.472	7.441	1.779	-22.221	2.586	1.749	0	0.01
7	0	3.482	0.792	-2.645	24.177	0	-0.309	0
	0.608	7.442	22.232	-1.768	22.441	7.3	0	0.01
	1.216	14.415	20.046	-3.954	20.25	14.401	0	0.01
	1.824	20.136	17.727	-6.273	17.727	20.136	0	0.02
	2.432	23.839	14.98	-9.02	14.98	23.839	0	0.02
	3.04	25.109	12.118	-11.882	12.118	25.109	0	0.02
	3.648	23.812	9.088	-14.912	9.249	23.806	0	0.02
	4.256	20.144	6.339	-17.661	6.483	20.065	0	0.02
	4.864	14.446	3.977	-20.023	3.977	14.446	0	0.01
	5.472	7.465	1.783	-22.217	2.607	1.752	0	0.01
8	0	4.225	1.004	-3.165	24.029	0	-0.287	0
	0.608	7.412	22.265	-1.735	22.302	7.253	0	0.01
	1.216	14.403	20.114	-3.886	20.137	14.32	0	0.01
	1.824	20.091	17.647	-6.353	17.651	20.08	0	0.02
	2.432	23.9	14.936	-9.064	14.972	23.813	0	0.02
	3.04	25.332	12.104	-11.896	12.177	25.198	0	0.02
	3.648	24.215	9.258	-14.742	9.369	24.08	0	0.02
	4.256	20.633	6.503	-17.497	6.646	20.547	0	0.02
	4.864	14.93	4.109	-19.891	4.109	14.93	0	0.01
	5.472	7.806	1.859	-22.141	2.562	1.562	0	0.01
9	0	3.12	2.562	-0.515	24.022	0	-0.278	0
	0.606	7.101	22.698	-1.302	22.726	6.95	0	0.01
	1.212	14.305	21.049	-2.951	21.066	14.222	0	0.02
	1.818	20.819	19.092	-4.908	19.099	20.789	0	0.02
	2.424	26.021	16.844	-7.156	16.874	25.91	0	0.03
	3.03	29.211	14.359	-9.641	14.417	29.036	0	0.03
	3.636	29.859	11.682	-12.318	11.767	29.653	0	0.03
	4.242	27.537	8.853	-15.147	8.961	27.34	0	0.03
	4.848	21.919	5.915	-18.085	6.039	21.769	0	0.02

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5.454	12.781	2.909	-21.091	3.038	12.703	0	0.01
6.06	0	1.922	-24.093	1.922	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	24.002	-1.897	-1.897	0	0	0
	0.488	-0.926	0	-1.897	-3.047	10.225	0	0
	0.976	-1.852	0	-1.897	-6.048	17.521	0	0
	1.464	-2.777	0	-1.897	-8.984	21.984	0	0
	1.952	-3.703	0	-1.897	-11.799	23.816	0	-0.01
	2.44	-4.629	0	-1.897	-14.455	23.289	0	-0.01
	2.928	-5.555	0	-1.897	-16.915	20.744	0	-0.01
	3.416	-6.481	0	-1.897	-19.14	16.601	0	-0.01
	3.904	-7.407	0	-1.897	-21.093	11.35	0	0
	4.392	-8.332	0	-1.897	-22.735	5.556	0	0
2	0	-12.274	3.36	-16.915	-24.017	0	-0.202	0
	0.488	-10.634	3.36	0	-2.617	1.277	0	0
	0.976	-9.013	3.131	0	-4.115	11.993	0	0
	1.464	-7.485	3.131	0	-6.644	16.504	0	-0.01
	1.952	-5.957	3.131	0	-9.36	19.348	0	-0.01
	2.44	-4.429	3.131	0	-12.185	20.225	0	-0.01
	2.928	-5.109	0	-2.617	-14.996	19.075	0	0
	3.416	-6.386	0	-2.617	-17.688	16.034	0	0
	3.904	-7.663	0	-2.617	-20.162	11.425	0	0
	4.392	-8.941	0	-2.617	-22.319	5.767	0	0
3	0	-10.218	15.84	-2.617	-24.059	0	-0.229	0
	0.488	-8.881	2.739	0	-3.77	2.625	0	0
	0.976	-7.544	2.739	0	-3.875	11.59	0	0
	1.464	-6.286	2.545	0	-6.323	16.176	0	0
	1.952	-5.044	2.545	0	-8.986	19.209	0	-0.01
	2.44	-5.093	0	-3.605	-11.765	20.365	0	-0.01
	2.928	-6.852	0	-3.605	-14.564	19.512	0	-0.01
	3.416	-8.612	0	-3.605	-17.294	16.684	0	-0.01
	3.904	-10.371	0	-3.605	-19.862	12.1	0	-0.01
	4.392	-12.13	0	-3.605	-22.151	6.247	0	0
4	0	-13.931	15.785	-3.77	-24.053	0	-0.125	0
	0.608	-7.769	1.888	0	-2.739	2.47	0	0
	1.216	-6.626	1.85	0	-3.739	13.598	0	-0.01
	1.824	-5.501	1.85	0	-6.204	19.218	0	-0.01
	2.432	-4.388	1.828	0	-8.913	22.981	0	-0.01
	3.04	-4.45	0	-2.688	-11.753	24.427	0	-0.01
	3.648	-6.084	0	-2.688	-14.614	23.371	0	-0.01
	4.256	-7.719	0	-2.688	-17.382	19.902	0	-0.01
	4.864	-9.353	0	-2.688	-19.975	14.377	0	-0.01
	5.472	-10.987	0	-2.688	-22.253	7.395	0	0
5	0	-12.622	15.02	-2.688	-24.082	0	-0.207	0
	0.608	-10.611	2.581	0	-2.618	1.791	0	0
	1.216	-9.042	2.581	0	-3.94	14.35	0	-0.01
	1.824	-7.555	2.409	0	-6.443	19.974	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

	2.432	-6.091	2.409	0	-9.158	23.615	0	-0.01
	3.04	-4.709	0	-2.479	-11.981	24.883	0	-0.01
	3.648	-6.217	0	-2.479	-14.834	23.678	0	-0.01
	4.256	-7.76	0	-2.618	-17.587	20.059	0	-0.01
	4.864	-9.352	0	-2.618	-20.128	14.403	0	-0.01
	5.472	-10.943	0	-2.618	-22.344	7.356	0	0
6	0	-12.535	15.005	-2.618	-24.109	0	-0.232	0
	0.608	-10.827	2.586	0	-2.633	1.803	0	0
	1.216	-9.255	2.586	0	-3.955	14.404	0	-0.01
	1.824	-7.721	2.464	0	-6.46	20.028	0	-0.01
	2.432	-6.224	2.459	0	-9.204	23.727	0	-0.01
	3.04	-4.738	0	-2.468	-12.06	25.025	0	-0.01
	3.648	-6.238	0	-2.468	-14.918	23.777	0	-0.01
	4.256	-7.802	0	-2.633	-17.667	20.105	0	-0.01
	4.864	-9.403	0	-2.633	-20.198	14.4	0	-0.01
	5.472	-11.004	0	-2.633	-22.401	7.32	0	0
7	0	-12.605	15.119	-2.633	-24.149	0	-0.284	0
	0.608	-10.926	2.607	0	-2.645	1.874	0	0
	1.216	-9.341	2.607	0	-3.954	14.415	0	-0.01
	1.824	-7.757	2.607	0	-6.455	20.038	0	-0.01
	2.432	-6.242	2.454	0	-9.198	23.746	0	-0.01
	3.04	-4.803	0	-2.503	-12.054	25.054	0	-0.01
	3.648	-6.325	0	-2.503	-14.912	23.812	0	-0.01
	4.256	-7.849	0	-2.508	-17.661	20.144	0	-0.01
	4.864	-9.389	0	-2.644	-20.193	14.435	0	-0.01
	5.472	-10.996	0	-2.644	-22.398	7.343	0	0
8	0	-12.604	15.727	-2.644	-24.152	0	-0.286	0
	0.608	-10.902	2.562	0	-3.165	2.3	0	0
	1.216	-9.344	2.562	0	-3.886	14.403	0	-0.01
	1.824	-7.796	2.342	0	-6.353	20.091	0	-0.01
	2.432	-6.377	2.328	0	-9.064	23.9	0	-0.01
	3.04	-5.781	0	-2.801	-11.896	25.332	0	-0.01
	3.648	-7.508	0	-3.004	-14.742	24.215	0	-0.01
	4.256	-9.335	0	-3.004	-17.497	20.633	0	-0.01
	4.864	-11.171	0	-3.165	-20.056	14.93	0	-0.01
	5.472	-13.095	0	-3.165	-22.313	7.701	0	-0.01
9	0	-15.019	16.023	-3.165	-24.148	0	-0.268	0
	0.606	-10.48	1.922	0	-1.302	7.101	0	0
	1.212	-9.316	1.922	0	-2.951	14.305	0	-0.01
	1.818	-8.151	1.922	0	-4.908	20.819	0	-0.01
	2.424	-6.987	1.922	0	-7.156	26.021	0	-0.01
	3.03	-5.822	1.922	0	-9.641	29.211	0	-0.01
	3.636	-4.658	1.922	0	-12.318	29.859	0	-0.01
	4.242	-3.493	1.922	0	-15.147	27.537	0	-0.01
	4.848	-2.329	1.922	0	-18.085	21.919	0	-0.01
	5.454	-1.164	1.922	0	-21.091	12.781	0	0
	6.06	0	1.922	-24.093	-24.093	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.897	-24.033
2	3.141	-24.305
3	5.489	-24.282
4	4.197	-24.377
5	3.339	-24.215
6	3.467	-24.215
7	3.436	-24.233
8	4.169	-24.211
9	3.077	-24.251
10	1.922	-24.124

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	17.744	-0.985	17.744	0	0	0
	0.619	9.158	14.795	0	14.795	9.158	0	0.01
	1.238	14.828	11.977	-2.023	11.977	14.828	0	0.01
	1.857	17.407	9.374	-4.626	9.374	17.407	0	0.02
	2.476	17.733	7.162	-6.838	7.162	17.733	0	0.02
	3.095	17.743	5.733	-8.267	5.733	17.743	0	0.02
	3.714	16.238	4.372	-9.628	4.372	16.238	0	0.02
	4.333	13.996	2.154	-11.846	2.698	11.692	0	0.02
	4.952	9.641	0	-14.745	1.696	8.398	0	0.01
	5.571	4.654	0.835	-11.165	0.835	4.654	0	0.01
2	0	1.631	0.264	-1.318	20.297	0	-12.462	0
	0.619	4.257	10.618	-1.382	17.99	0	-4.463	0
	1.238	8.937	11.873	-2.175	15.42	2.282	0	0.01
	1.857	11.795	9.446	-4.554	12.707	7.325	0	0.01
	2.476	12.723	7.253	-6.747	10.622	9.409	0	0.01
	3.095	13.393	6.212	-5.788	9.132	11.67	0	0.01
	3.714	12.962	4.851	-7.149	7.287	12.834	0	0.01
	4.333	12.38	5.102	-8.898	5.102	12.38	0	0.01
	4.952	9.879	2.631	-11.369	2.79	7.391	0	0.01
	5.571	5.118	0	-14.028	2.111	4.629	0	0
3	0	2.726	2.084	-0.558	20.004	0	-11.018	0
	0.619	5.811	10.641	-1.359	17.736	0	-3.362	0
	1.238	10.16	11.536	-2.464	15.218	3.041	0	0.01
	1.857	12.74	9.132	-4.868	12.565	7.78	0	0.01
	2.476	13.403	6.847	-5.153	10.344	10.078	0	0.01
	3.095	13.646	5.462	-6.538	8.819	12.234	0	0.01
	3.714	13.202	6.982	-7.018	6.982	13.202	0	0.01
	4.333	12.546	4.828	-9.172	4.828	12.546	0	0.01
	4.952	9.882	2.404	-11.596	2.404	9.882	0	0.01
	5.571	5.023	0	-14.199	1.313	0.904	0	0
4	0	1.716	1.313	-1.313	20.033	0	-10.98	0
	0.619	5.023	14.199	0	17.786	0	-3.33	0
	1.238	9.882	11.596	-2.404	15.285	3.09	0	0.01
	1.857	12.546	9.172	-4.828	12.643	7.861	0	0.01
	2.476	13.202	7.018	-6.982	10.406	9.832	0	0.01
	3.095	13.646	6.538	-5.462	8.82	12.316	0	0.01
	3.714	13.403	5.153	-6.847	7.001	13.329	0	0.01
	4.333	12.74	4.868	-9.132	4.868	12.74	0	0.01
	4.952	10.16	2.464	-11.536	2.474	9.141	0	0.01
	5.571	5.811	1.359	-10.641	1.403	0.96	0	0

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

5	0	2.726	0.558	-2.084	19.83	0	-11.017	0
	0.619	5.118	14.028	0	17.522	0	-3.378	0
	1.238	9.879	11.369	-2.631	14.977	3.006	0	0.01
	1.857	12.38	8.898	-5.102	12.318	7.686	0	0.01
	2.476	12.962	7.149	-4.851	10.432	9.944	0	0.01
	3.095	13.393	5.788	-6.212	8.765	11.888	0	0.01
	3.714	12.723	6.747	-7.253	6.837	12.612	0	0.01
	4.333	11.795	4.554	-9.446	4.63	11.748	0	0.01
	4.952	8.937	2.175	-11.873	2.252	7.606	0	0.01
	5.571	4.257	1.382	-10.618	1.382	4.257	0	0
6	0	1.631	1.318	-0.264	20.939	0	-12.463	0
	0.619	4.654	11.165	-0.835	18.7	0	-4.188	0.01
	1.238	9.641	14.745	0	16.1	2.929	0	0.01
	1.857	13.996	11.846	-2.154	13.192	8.165	0	0.02
	2.476	16.238	9.628	-4.372	11.108	10.74	0	0.02
	3.095	17.743	8.267	-5.733	9.648	13.471	0	0.02
	3.714	17.733	6.838	-7.162	7.886	15.139	0	0.02
	4.333	17.407	4.626	-9.374	5.787	15.252	0	0.02
	4.952	14.828	2.023	-11.977	3.858	12.556	0	0.01
	5.571	9.158	0	-14.795	2.311	7.235	0	0.01
	6.19	0	0.985	-17.744	0.985	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	17.744	-0.985	-0.985	0	0	0
	0.619	-0.61	0	-0.985	-2.311	7.235	0	0
	1.238	-1.22	0	-0.985	-3.858	12.556	0	0
	1.857	-1.83	0	-0.985	-5.787	15.252	0	0
	2.476	-2.44	0	-0.985	-7.886	15.139	0	-0.01
	3.095	-3.05	0	-0.985	-9.648	13.471	0	-0.01
	3.714	-3.66	0	-0.985	-11.108	10.74	0	-0.01
	4.333	-4.269	0	-0.985	-13.192	8.165	0	-0.01
	4.952	-4.879	0	-0.985	-16.1	2.929	0	0
	5.571	-10.433	0	-9.769	-18.7	0	-4.188	0
2	0	-17.003	9.978	-16.1	-20.939	0	-12.463	0
	0.619	-10.961	9.386	0	-1.382	4.257	0	0
	1.238	-7.594	2.084	0	-2.252	7.606	0	-0.01
	1.857	-7.085	0.823	0	-4.63	11.748	0	-0.01
	2.476	-6.575	0.823	0	-6.837	12.612	0	-0.01
	3.095	-6.069	0.814	0	-8.765	11.888	0	-0.01
	3.714	-5.565	0.814	0	-10.432	9.944	0	-0.01
	4.333	-5.062	0.814	0	-12.318	7.686	0	-0.01
	4.952	-4.894	0	-1.318	-14.977	3.006	0	-0.01
	5.571	-9.84	0	-8.9	-17.522	0	-3.378	0
3	0	-15.895	14.213	-10.309	-19.83	0	-11.017	0
	0.619	-9.634	9.076	0	-1.403	0.96	0	0
	1.238	-4.783	1.313	0	-2.474	9.141	0	-0.01
	1.857	-4.671	0.037	0	-4.868	12.74	0	-0.01
	2.476	-4.652	0.029	0	-7.001	13.329	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

	3.095	-4.634	0.029	0	-8.82	12.316	0	-0.01
	3.714	-4.616	0.029	0	-10.406	9.832	0	-0.01
	4.333	-4.598	0.029	0	-12.643	7.861	0	-0.01
	4.952	-5.121	0	-1.403	-15.285	3.09	0	-0.01
	5.571	-9.884	0	-8.858	-17.786	0	-3.33	0
4	0	-15.942	14.285	-10.282	-20.033	0	-10.98	0
	0.619	-9.884	8.858	0	-1.313	0.904	0	0
	1.238	-5.121	1.403	0	-2.404	9.882	0	-0.01
	1.857	-4.598	0	-0.029	-4.828	12.546	0	-0.01
	2.476	-4.616	0	-0.029	-6.982	13.202	0	-0.01
	3.095	-4.634	0	-0.029	-8.819	12.234	0	-0.01
	3.714	-4.652	0	-0.029	-10.344	10.078	0	-0.01
	4.333	-4.671	0	-0.037	-12.565	7.78	0	-0.01
	4.952	-4.783	0	-1.313	-15.218	3.041	0	-0.01
	5.571	-9.634	0	-9.076	-17.736	0	-3.362	0
5	0	-15.895	10.309	-14.213	-20.004	0	-11.018	0
	0.619	-9.84	8.9	0	-2.111	4.629	0	0
	1.238	-4.894	1.318	0	-2.79	7.391	0	-0.01
	1.857	-5.062	0	-0.814	-5.102	12.38	0	-0.01
	2.476	-5.565	0	-0.814	-7.287	12.834	0	-0.01
	3.095	-6.069	0	-0.814	-9.132	11.67	0	-0.01
	3.714	-6.575	0	-0.823	-10.622	9.409	0	-0.01
	4.333	-7.085	0	-0.823	-12.707	7.325	0	-0.01
	4.952	-7.594	0	-2.084	-15.42	2.282	0	-0.01
	5.571	-10.961	0	-9.386	-17.99	0	-4.463	0
6	0	-17.003	16.1	-9.978	-20.297	0	-12.461	0
	0.619	-10.433	9.769	0	-0.835	4.654	0	0
	1.238	-4.879	0.985	0	-1.696	8.398	0	0
	1.857	-4.269	0.985	0	-2.698	11.692	0	-0.01
	2.476	-3.66	0.985	0	-4.372	16.238	0	-0.01
	3.095	-3.05	0.985	0	-5.733	17.743	0	-0.01
	3.714	-2.44	0.985	0	-7.162	17.733	0	-0.01
	4.333	-1.83	0.985	0	-9.374	17.407	0	0
	4.952	-1.22	0.985	0	-11.977	14.828	0	0
	5.571	-0.61	0.985	0	-14.795	9.158	0	0
	6.19	0	0.985	-17.744	-17.744	0	0	0

Support    Reac. Pos    Reac. Negative

1	0.985	-17.774
2	1.581	-27.279
3	2.642	-25.878
4	1.664	-25.841
5	2.642	-25.878
6	1.581	-27.279
7	0.985	-17.774



Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.496	-1.534	21.496	0	0	0
	0.619	11.087	17.91	0	17.91	11.087	0	0.01
	1.238	17.94	14.491	-2.509	14.491	17.94	0	0.02
	1.857	21.051	11.336	-5.664	11.336	21.051	0	0.02
	2.476	21.521	8.692	-8.308	8.692	21.521	0	0.02
	3.095	21.453	6.931	-10.069	6.931	21.453	0	0.02
	3.714	19.548	5.263	-11.737	5.263	19.548	0	0.02
	4.333	16.766	2.563	-14.437	2.826	12.246	0	0.02
	4.952	11.439	0	-17.958	1.8	8.913	0	0.01
	5.571	5.076	0.911	-11.089	0.911	5.076	0	0.01
2	0	2.547	0.411	-2.057	22.788	0	-6.304	0
	0.619	4.314	10.527	-1.473	19.691	3.498	0	0.01
	1.238	10.852	16.437	-0.893	16.437	10.852	0	0.01
	1.857	15.397	13.206	-3.794	14.458	8.29	0	0.01
	2.476	17.11	10.149	-6.851	12.277	12.895	0	0.02
	3.095	16.298	7.36	-9.64	9.901	16.147	0	0.02
	3.714	17.311	7.179	-9.821	7.179	17.311	0	0.02
	4.333	15.89	4.161	-12.839	4.161	15.89	0	0.02
	4.952	11.574	0.946	-16.054	2.971	7.404	0	0.01
	5.571	5.286	1.217	-10.783	2.531	1.744	0	0.01
3	0	3.31	2.531	-0.678	22.884	0	-6.762	0
	0.619	6.243	10.539	-1.461	19.824	2.949	0	0.01
	1.238	11.897	15.821	-1.179	16.582	10.343	0	0.01
	1.857	16.029	12.648	-4.352	14.218	9.017	0	0.02
	2.476	17.343	9.702	-7.298	12.177	13.138	0	0.02
	3.095	16.26	9.457	-7.543	9.895	16.165	0	0.02
	3.714	17.241	7.249	-9.751	7.249	17.241	0	0.02
	4.333	15.841	4.28	-12.72	4.28	15.841	0	0.02
	4.952	11.604	1.089	-15.911	2.425	8.972	0	0.01
	5.571	5.295	1.237	-10.763	2.043	1.407	0	0.01
4	0	2.672	0.547	-2.043	22.945	0	-6.865	0
	0.619	5.295	10.763	-1.237	19.905	2.861	0	0.01
	1.238	11.604	15.911	-1.089	16.678	10.3	0	0.01
	1.857	15.841	12.72	-4.28	14.225	9.007	0	0.02
	2.476	17.241	9.751	-7.249	12.177	13.163	0	0.02
	3.095	16.26	7.543	-9.457	9.919	16.21	0	0.02
	3.714	17.343	7.298	-9.702	7.298	17.343	0	0.02
	4.333	16.029	4.352	-12.648	4.352	16.029	0	0.02
	4.952	11.897	1.179	-15.821	2.579	9.524	0	0.01
	5.571	6.243	1.461	-10.539	2.117	1.449	0	0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

5	0	3.31	0.678	-2.531	22.7	0	-6.546	0
	0.619	5.286	10.783	-1.217	19.625	3.051	0	0.01
	1.238	11.574	16.054	-0.946	16.392	10.318	0	0.01
	1.857	15.89	12.839	-4.161	14.266	9.029	0	0.02
	2.476	17.311	9.821	-7.179	12.211	13.205	0	0.02
	3.095	16.298	9.64	-7.36	9.801	15.999	0	0.02
	3.714	17.11	6.851	-10.149	7.083	16.824	0	0.02
	4.333	15.397	3.794	-13.206	4.084	15.217	0	0.01
	4.952	10.852	0.893	-16.437	2.227	7.606	0	0.01
	5.571	4.314	1.473	-10.527	2.057	1.273	0	0.01
6	0	2.547	2.057	-0.411	24.397	0	-8.766	0
	0.619	5.076	11.089	-0.911	21.475	1.776	0	0.01
	1.238	11.439	17.958	0	18.21	10.19	0	0.01
	1.857	16.766	14.437	-2.563	14.859	9.275	0	0.02
	2.476	19.548	11.737	-5.263	13.15	14.301	0	0.02
	3.095	21.453	10.069	-6.931	11.088	18.299	0	0.02
	3.714	21.521	8.308	-8.692	8.666	20.634	0	0.02
	4.333	21.051	5.664	-11.336	6.486	19.525	0	0.02
	4.952	17.94	2.509	-14.491	4.612	15.336	0	0.02
	5.571	11.087	0	-17.91	2.691	8.857	0	0.01
	6.19	0	1.534	-21.496	1.534	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. She	Corr. She	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.496	-1.534	-1.534	0	0	0
	0.619	-0.95	0	-1.534	-2.691	8.857	0	0
	1.238	-1.899	0	-1.534	-4.612	15.336	0	0
	1.857	-2.849	0	-1.534	-6.486	19.525	0	-0.01
	2.476	-3.799	0	-1.534	-8.666	20.634	0	-0.01
	3.095	-4.748	0	-1.534	-11.088	18.299	0	-0.01
	3.714	-5.698	0	-1.534	-13.15	14.301	0	-0.01
	4.333	-6.647	0	-1.534	-14.859	9.275	0	-0.01
	4.952	-7.597	0	-1.534	-18.21	10.19	0	-0.01
	5.571	-10.118	0	-13.15	-21.475	1.776	0	0
2	0	-18.558	14.458	-14.113	-24.397	0	-8.766	0
	0.619	-10.788	2.531	0	-2.057	1.273	0	-0.01
	1.238	-9.221	2.531	0	-2.227	7.606	0	-0.01
	1.857	-8.436	1.27	0	-4.084	15.217	0	-0.01
	2.476	-7.65	1.27	0	-7.083	16.824	0	-0.01
	3.095	-6.865	1.259	0	-9.801	15.999	0	-0.01
	3.714	-6.707	0	-0.405	-12.211	13.205	0	-0.01
	4.333	-6.958	0	-0.405	-14.266	9.029	0	-0.01
	4.952	-7.64	0	-2.057	-16.392	10.318	0	-0.01
	5.571	-9.483	0	-12.556	-19.625	3.051	0	0
3	0	-17.463	13.243	-14.266	-22.7	0	-6.546	0
	0.619	-9.476	12.476	0	-2.117	1.449	0	0
	1.238	-7.446	2.043	0	-2.579	9.524	0	-0.01
	1.857	-6.904	0.755	0	-4.352	16.029	0	-0.01
	2.476	-6.436	0.755	0	-7.298	17.343	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

	3.095	-5.969	0.755	0	-9.919	16.21	0	-0.01
	3.714	-6.374	0	-0.698	-12.177	13.163	0	-0.01
	4.333	-6.806	0	-0.698	-14.225	9.007	0	-0.01
	4.952	-7.726	0	-2.117	-16.678	10.3	0	-0.01
	5.571	-9.45	0	-12.177	-19.905	2.861	0	0
4	0	-17.408	14.225	-14.225	-22.945	0	-6.865	0
	0.619	-9.45	12.177	0	-2.043	1.407	0	0
	1.238	-7.726	2.117	0	-2.425	8.972	0	-0.01
	1.857	-6.806	0.698	0	-4.28	15.841	0	-0.01
	2.476	-6.374	0.698	0	-7.249	17.241	0	-0.01
	3.095	-5.969	0	-0.755	-9.895	16.165	0	-0.01
	3.714	-6.436	0	-0.755	-12.177	13.138	0	-0.01
	4.333	-6.904	0	-0.755	-14.218	9.017	0	-0.01
	4.952	-7.446	0	-2.043	-16.582	10.343	0	-0.01
	5.571	-9.476	0	-12.476	-19.824	2.949	0	0
5	0	-17.463	14.266	-13.243	-22.884	0	-6.762	0
	0.619	-9.483	12.556	0	-2.531	1.744	0	0
	1.238	-7.64	2.057	0	-2.971	7.404	0	-0.01
	1.857	-6.958	0.405	0	-4.161	15.89	0	-0.01
	2.476	-6.707	0.405	0	-7.179	17.311	0	-0.01
	3.095	-6.865	0	-1.259	-9.901	16.147	0	-0.01
	3.714	-7.65	0	-1.27	-12.277	12.895	0	-0.01
	4.333	-8.436	0	-1.27	-14.458	8.29	0	-0.01
	4.952	-9.221	0	-2.531	-16.437	10.852	0	-0.01
	5.571	-10.788	0	-2.531	-19.691	3.498	0	-0.01
6	0	-18.558	14.113	-14.458	-22.788	0	-6.304	0
	0.619	-10.118	13.15	0	-0.911	5.076	0	0
	1.238	-7.597	1.534	0	-1.8	8.913	0	-0.01
	1.857	-6.647	1.534	0	-2.826	12.246	0	-0.01
	2.476	-5.698	1.534	0	-5.263	19.548	0	-0.01
	3.095	-4.748	1.534	0	-6.931	21.453	0	-0.01
	3.714	-3.799	1.534	0	-8.692	21.521	0	-0.01
	4.333	-2.849	1.534	0	-11.336	21.051	0	-0.01
	4.952	-1.899	1.534	0	-14.491	17.94	0	0
	5.571	-0.95	1.534	0	-17.91	11.087	0	0
	6.19	0	1.534	-21.496	-21.496	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.534	-21.533
2	2.468	-28.65
3	3.209	-27.531
4	2.59	-27.455
5	3.209	-27.531
6	2.468	-28.65
7	1.534	-21.533

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(m	Corr. Sheæ	Corr. Sheæ	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	19.975	-1.58	19.975	0	0	0
	0.619	10.814	17.469	-2.531	17.469	10.814	0	0.01
	1.238	18.534	14.971	-5.029	14.971	18.534	0	0.02
	1.857	23.281	12.537	-7.463	12.537	23.281	0	0.02
	2.476	25.3	10.218	-9.782	10.218	25.3	0	0.03
	3.095	25.09	8.107	-11.893	8.107	25.09	0	0.03
	3.714	22.727	6.119	-13.881	6.119	22.727	0	0.03
	4.333	18.603	4.293	-15.707	4.293	18.603	0	0.02
	4.952	13.206	2.667	-17.333	2.667	13.206	0	0.01
	5.571	7.114	1.277	-18.723	1.277	7.114	0	0.01
2	0	2.622	0.424	-2.118	19.986	0	-0.057	0
	0.619	7.002	17.848	-2.152	18.451	6.629	0	0.01
	1.238	12.677	16.578	-3.799	16.578	12.677	0	0.01
	1.857	17.447	14.466	-5.534	14.466	17.447	0	0.02
	2.476	20.479	12.222	-7.778	12.222	20.479	0	0.02
	3.095	21.687	10.012	-9.988	10.012	21.687	0	0.02
	3.714	20.807	7.764	-12.236	7.764	20.807	0	0.02
	4.333	17.904	5.569	-14.431	5.577	16.891	0	0.02
	4.952	13.267	3.519	-16.481	3.842	12.262	0	0.01
	5.571	7.41	1.704	-18.296	2.609	1.798	0	0.01
3	0	3.413	2.609	-0.699	19.688	1.397	0	0
	0.619	7.767	18.184	-1.816	18.184	7.767	0	0.01
	1.238	13.533	16.344	-3.656	16.344	13.533	0	0.01
	1.857	18.03	14.274	-5.726	14.443	16.939	0	0.02
	2.476	20.764	12.066	-7.934	12.367	20.134	0	0.02
	3.095	21.472	9.815	-10.185	10.15	21.445	0	0.02
	3.714	20.676	7.885	-12.115	7.885	20.676	0	0.02
	4.333	17.866	5.664	-14.336	5.664	17.866	0	0.02
	4.952	13.289	3.585	-16.415	3.694	12.254	0	0.01
	5.571	7.454	1.74	-18.26	2.188	1.507	0	0.01
4	0	2.861	2.188	-2.188	19.761	1.046	0	0
	0.619	7.454	18.26	-1.74	18.26	7.454	0	0.01
	1.238	13.289	16.415	-3.585	16.415	13.289	0	0.01
	1.857	17.866	14.336	-5.664	14.45	16.908	0	0.02
	2.476	20.676	12.115	-7.885	12.387	20.121	0	0.02
	3.095	21.472	10.185	-9.815	10.185	21.472	0	0.02
	3.714	20.764	7.934	-12.066	7.934	20.764	0	0.02
	4.333	18.03	5.726	-14.274	5.726	18.03	0	0.02
	4.952	13.533	3.656	-16.344	3.691	12.282	0	0.01
	5.571	7.767	1.816	-18.184	2.159	1.477	0	0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

5	0	3.413	0.699	-2.609	19.77	1.015	0	0
	0.619	7.41	18.296	-1.704	18.296	7.41	0	0.01
	1.238	13.267	16.481	-3.519	16.481	13.267	0	0.01
	1.857	17.904	14.431	-5.569	14.431	17.904	0	0.02
	2.476	20.807	12.236	-7.764	12.474	20.219	0	0.02
	3.095	21.687	9.988	-10.012	10.144	21.397	0	0.02
	3.714	20.479	7.778	-12.222	7.803	20.448	0	0.02
	4.333	17.447	5.534	-14.466	5.693	17.349	0	0.02
	4.952	12.677	3.799	-16.578	3.799	12.677	0	0.01
	5.571	7.002	2.152	-17.848	2.152	7.002	0	0.01
6	0	2.622	2.118	-0.424	19.991	0	-0.066	0
	0.619	7.114	18.723	-1.277	18.916	6.037	0	0.01
	1.238	13.206	17.333	-2.667	17.543	12.165	0	0.01
	1.857	18.603	15.707	-4.293	15.913	17.708	0	0.02
	2.476	22.727	13.881	-6.119	14.058	22.069	0	0.03
	3.095	25.09	11.893	-8.107	12.01	24.73	0	0.03
	3.714	25.3	9.782	-10.218	9.801	25.254	0	0.03
	4.333	23.281	7.463	-12.537	7.581	23.061	0	0.02
	4.952	18.534	5.029	-14.971	5.31	18.186	0	0.02
	5.571	10.814	2.531	-17.469	2.98	10.535	0	0.01
	6.19	0	1.58	-19.975	1.58	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.975	-1.58	-1.58	0	0	0
	0.619	-0.978	0	-1.58	-2.98	10.535	0	0
	1.238	-1.957	0	-1.58	-5.31	18.186	0	0
	1.857	-2.935	0	-1.58	-7.581	23.061	0	-0.01
	2.476	-3.913	0	-1.58	-9.801	25.254	0	-0.01
	3.095	-4.891	0	-1.58	-12.01	24.73	0	-0.01
	3.714	-5.87	0	-1.58	-14.058	22.069	0	-0.01
	4.333	-6.848	0	-1.58	-15.913	17.708	0	-0.01
	4.952	-7.826	0	-1.58	-17.543	12.165	0	-0.01
	5.571	-8.804	0	-1.58	-18.916	6.037	0	0
2	0	-12.738	2.609	-14.058	-19.991	0	-0.066	0
	0.619	-11.123	2.609	0	-2.152	7.002	0	-0.01
	1.238	-9.528	1.766	0	-3.799	12.677	0	-0.01
	1.857	-8.441	1.724	0	-5.693	17.349	0	-0.01
	2.476	-7.374	1.724	0	-7.803	20.448	0	-0.01
	3.095	-6.309	1.453	0	-10.144	21.397	0	-0.01
	3.714	-6.531	0	-0.853	-12.474	20.219	0	-0.01
	4.333	-7.095	0	-1.086	-14.431	17.904	0	-0.01
	4.952	-7.865	0	-2.118	-16.481	13.267	0	-0.01
	5.571	-9.175	0	-2.118	-18.296	7.41	0	0
3	0	-10.68	2.188	-12.829	-19.77	1.015	0	0
	0.619	-9.326	2.188	0	-2.159	1.477	0	0
	1.238	-7.972	2.188	0	-3.691	12.282	0	-0.01
	1.857	-7.109	1.282	0	-5.726	18.03	0	-0.01
	2.476	-6.348	1.093	0	-7.934	20.764	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

	3.095	-5.671	1.093	0	-10.185	21.472	0	-0.01
	3.714	-6.303	0	-1.053	-12.387	20.121	0	-0.01
	4.333	-7.019	0	-1.24	-14.45	16.908	0	-0.01
	4.952	-7.877	0	-2.159	-16.415	13.289	0	-0.01
	5.571	-9.213	0	-2.159	-18.26	7.454	0	0
4	0	-10.55	12.387	-12.387	-19.761	1.046	0	0
	0.619	-9.213	2.159	0	-2.188	1.507	0	0
	1.238	-7.877	2.159	0	-3.694	12.254	0	-0.01
	1.857	-7.019	1.24	0	-5.664	17.866	0	-0.01
	2.476	-6.303	1.053	0	-7.885	20.676	0	-0.01
	3.095	-5.671	0	-1.093	-10.15	21.445	0	-0.01
	3.714	-6.348	0	-1.093	-12.367	20.134	0	-0.01
	4.333	-7.109	0	-1.282	-14.443	16.939	0	-0.01
	4.952	-7.972	0	-2.188	-16.344	13.533	0	-0.01
	5.571	-9.326	0	-2.188	-18.184	7.767	0	0
5	0	-10.68	12.829	-2.188	-19.688	1.397	0	0
	0.619	-9.175	2.118	0	-2.609	1.798	0	0
	1.238	-7.865	2.118	0	-3.842	12.262	0	-0.01
	1.857	-7.095	1.086	0	-5.577	16.891	0	-0.01
	2.476	-6.531	0.853	0	-7.764	20.807	0	-0.01
	3.095	-6.309	0	-1.453	-10.012	21.687	0	-0.01
	3.714	-7.374	0	-1.724	-12.222	20.479	0	-0.01
	4.333	-8.441	0	-1.724	-14.466	17.447	0	-0.01
	4.952	-9.528	0	-1.766	-16.578	12.677	0	-0.01
	5.571	-11.123	0	-2.609	-18.451	6.629	0	-0.01
6	0	-12.738	14.058	-2.609	-19.986	0	-0.057	0
	0.619	-8.804	1.58	0	-1.277	7.114	0	0
	1.238	-7.826	1.58	0	-2.667	13.206	0	-0.01
	1.857	-6.848	1.58	0	-4.293	18.603	0	-0.01
	2.476	-5.87	1.58	0	-6.119	22.727	0	-0.01
	3.095	-4.891	1.58	0	-8.107	25.09	0	-0.01
	3.714	-3.913	1.58	0	-10.218	25.3	0	-0.01
	4.333	-2.935	1.58	0	-12.537	23.281	0	-0.01
	4.952	-1.957	1.58	0	-14.971	18.534	0	0
	5.571	-0.978	1.58	0	-17.469	10.814	0	0
	6.19	0	1.58	-19.975	-19.975	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.58	-20
2	2.541	-20.078
3	3.308	-18.96
4	2.773	-18.931
5	3.308	-18.96
6	2.541	-20.078
7	1.58	-20

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	32.593	-2.658	32.593	0	0	0
	0.619	17.726	28.636	-3.364	28.636	17.726	0	0.02
	1.238	30.474	24.615	-7.385	24.615	30.474	0	0.03
	1.857	38.329	20.64	-11.36	20.64	38.329	0	0.04
	2.476	41.547	16.78	-15.22	16.78	41.547	0	0.05
	3.095	40.557	13.104	-18.896	13.104	40.557	0	0.05
	3.714	35.961	9.683	-22.317	9.683	35.961	0	0.04
	4.333	28.521	6.582	-25.418	6.582	28.521	0	0.03
	4.952	19.464	3.931	-28.069	3.931	19.464	0	0.02
	5.571	9.659	1.734	-30.266	1.734	9.659	0	0.01
2	0	4.393	0.71	-3.548	32.832	0	-1.149	0
	0.619	10.606	29.522	-2.478	30.444	10.035	0	0.01
	1.238	20.283	27.417	-5.474	27.417	20.283	0	0.02
	1.857	28.4	23.928	-8.072	23.928	28.4	0	0.03
	2.476	33.485	20.136	-11.864	20.136	33.485	0	0.03
	3.095	35.032	16.198	-15.802	16.198	35.032	0	0.04
	3.714	32.934	12.277	-19.723	12.277	32.934	0	0.03
	4.333	27.456	8.525	-23.475	8.525	27.456	0	0.03
	4.952	19.552	5.179	-26.821	5.179	19.552	0	0.02
	5.571	10.058	2.312	-29.688	4.175	2.877	0	0.01
3	0	5.843	3.174	-2.49	32.838	0	-1.217	0
	0.619	10.125	29.635	-2.365	30.569	9.486	0	0.01
	1.238	19.611	26.711	-5.289	27.62	19.551	0	0.02
	1.857	27.775	24.144	-7.856	24.172	27.691	0	0.03
	2.476	33.305	19.511	-12.489	20.39	32.921	0	0.03
	3.095	35.227	15.443	-16.557	16.436	34.664	0	0.04
	3.714	33.311	11.415	-20.585	12.475	32.744	0	0.03
	4.333	27.817	7.591	-24.409	8.67	27.393	0	0.03
	4.952	19.484	4.156	-27.844	5.182	19.243	0	0.02
	5.571	9.33	1.252	-30.748	3.495	2.407	0	0.01
4	0	5.426	2.901	-2.358	33.025	0	-1.7	0
	0.619	9.33	30.748	-1.252	30.796	9.122	0	0.01
	1.238	19.484	27.844	-4.156	27.866	19.404	0	0.02
	1.857	27.817	24.409	-7.591	24.425	27.769	0	0.03
	2.476	33.311	20.585	-11.415	20.648	33.161	0	0.03
	3.095	35.227	16.557	-15.443	16.67	35.025	0	0.04
	3.714	33.305	12.489	-19.511	12.65	33.116	0	0.03
	4.333	27.775	7.856	-24.144	8.744	27.582	0	0.03
	4.952	19.611	5.289	-26.711	5.289	19.611	0	0.02
	5.571	10.125	2.365	-29.635	3.677	2.516	0	0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

5	0	5.843	2.49	-3.174	32.205	0	-1.215	0
	0.619	10.057	29.688	-2.312	29.86	9.311	0	0.01
	1.238	19.552	26.821	-5.179	26.9	19.257	0	0.02
	1.857	27.456	23.475	-8.525	23.533	27.275	0	0.03
	2.476	32.934	19.723	-12.277	19.958	32.351	0	0.03
	3.095	35.032	15.802	-16.198	16.231	34.235	0	0.04
	3.714	33.485	11.864	-20.136	12.485	32.717	0	0.03
	4.333	28.4	8.072	-23.928	8.855	27.915	0	0.03
	4.952	20.283	5.474	-27.417	5.474	20.283	0	0.02
	5.571	10.606	2.478	-29.522	3.548	2.196	0	0.01
6	0	4.393	3.548	-0.71	32.155	0	-1.16	0
	0.619	9.659	30.266	-1.734	30.398	8.927	0	0.01
	1.238	19.464	28.069	-3.931	28.132	19.154	0	0.02
	1.857	28.521	25.418	-6.582	25.461	28.333	0	0.03
	2.476	35.961	22.317	-9.683	22.493	35.311	0	0.04
	3.095	40.557	18.896	-13.104	19.215	39.568	0	0.05
	3.714	41.547	15.22	-16.78	15.681	40.406	0	0.05
	4.333	38.329	11.36	-20.64	11.941	37.25	0	0.04
	4.952	30.474	7.385	-24.615	8.046	29.655	0	0.03
	5.571	17.726	3.364	-28.636	4.049	17.302	0	0.02
	6.19	0	2.658	-32.593	2.658	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	32.593	-2.658	-2.658	0	0	0
	0.619	-1.645	0	-2.658	-4.049	17.302	0	0
	1.238	-3.29	0	-2.658	-8.046	29.655	0	-0.01
	1.857	-4.936	0	-2.658	-11.941	37.25	0	-0.01
	2.476	-6.581	0	-2.658	-15.681	40.406	0	-0.01
	3.095	-8.226	0	-2.658	-19.215	39.568	0	-0.02
	3.714	-9.871	0	-2.658	-22.493	35.311	0	-0.02
	4.333	-11.516	0	-2.658	-25.461	28.333	0	-0.02
	4.952	-13.162	0	-2.658	-28.132	19.154	0	-0.01
	5.571	-14.807	0	-2.658	-30.398	8.927	0	-0.01
2	0	-20.381	4.175	-22.493	-32.155	0	-1.16	0
	0.619	-17.797	4.175	0	-3.548	2.196	0	-0.01
	1.238	-15.248	3.151	0	-5.474	20.283	0	-0.01
	1.857	-13.39	2.837	0	-8.855	27.915	0	-0.02
	2.476	-11.823	2.227	0	-12.485	32.717	0	-0.02
	3.095	-10.845	1.054	0	-16.231	34.235	0	-0.02
	3.714	-10.736	0	-0.74	-19.958	32.351	0	-0.02
	4.333	-11.435	0	-1.505	-23.533	27.275	0	-0.02
	4.952	-13.22	0	-3.295	-26.9	19.257	0	-0.01
	5.571	-15.374	0	-3.548	-29.86	9.311	0	-0.01
3	0	-17.57	22.754	-3.548	-32.205	0	-1.215	0
	0.619	-14.902	3.495	0	-3.677	2.516	0	-0.01
	1.238	-12.738	3.495	0	-5.289	19.611	0	-0.01
	1.857	-11.07	2.601	0	-8.744	27.582	0	-0.02
	2.476	-9.798	1.646	0	-12.65	33.116	0	-0.02



## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

	3.095	-9.254	0.139	0	-16.67	35.025	0	-0.02
	3.714	-9.829	0	-1.572	-20.648	33.161	0	-0.02
	4.333	-11.283	0	-3.53	-24.425	27.769	0	-0.02
	4.952	-13.468	0	-3.53	-27.866	19.404	0	-0.01
	5.571	-15.693	0	-3.677	-30.796	9.122	0	-0.01
4	0	-17.969	23.012	-3.677	-33.025	0	-1.7	0
	0.619	-15.693	3.677	0	-3.495	2.407	0	-0.01
	1.238	-13.468	3.53	0	-5.182	19.243	0	-0.01
	1.857	-11.283	3.53	0	-8.67	27.393	0	-0.02
	2.476	-9.829	1.572	0	-12.475	32.744	0	-0.02
	3.095	-9.254	0	-0.139	-16.436	34.664	0	-0.02
	3.714	-9.798	0	-1.646	-20.39	32.921	0	-0.02
	4.333	-11.07	0	-2.601	-24.172	27.691	0	-0.02
	4.952	-12.738	0	-3.495	-27.62	19.551	0	-0.01
	5.571	-14.902	0	-3.495	-30.569	9.486	0	-0.01
5	0	-17.57	3.548	-22.754	-32.838	0	-1.217	0
	0.619	-15.374	3.548	0	-4.175	2.877	0	-0.01
	1.238	-13.22	3.295	0	-5.179	19.552	0	-0.01
	1.857	-11.435	1.505	0	-8.525	27.456	0	-0.02
	2.476	-10.736	0.74	0	-12.277	32.934	0	-0.02
	3.095	-10.845	0	-1.054	-16.198	35.032	0	-0.02
	3.714	-11.823	0	-2.227	-20.136	33.485	0	-0.02
	4.333	-13.39	0	-2.837	-23.928	28.4	0	-0.02
	4.952	-15.248	0	-3.151	-27.417	20.283	0	-0.01
	5.571	-17.797	0	-4.175	-30.444	10.035	0	-0.01
6	0	-20.381	22.493	-4.175	-32.832	0	-1.149	0
	0.619	-14.807	2.658	0	-1.734	9.659	0	-0.01
	1.238	-13.162	2.658	0	-3.931	19.464	0	-0.01
	1.857	-11.516	2.658	0	-6.582	28.521	0	-0.02
	2.476	-9.871	2.658	0	-9.683	35.961	0	-0.02
	3.095	-8.226	2.658	0	-13.104	40.557	0	-0.02
	3.714	-6.581	2.658	0	-16.78	41.547	0	-0.01
	4.333	-4.936	2.658	0	-20.64	38.329	0	-0.01
	4.952	-3.29	2.658	0	-24.615	30.474	0	-0.01
	5.571	-1.645	2.658	0	-28.636	17.726	0	0
	6.19	0	2.658	-32.593	-32.593	0	0	0

Support    Reac. Pos    Reac. Negative

1	2.658	-32.633
2	4.258	-33.112
3	5.664	-33.084
4	5.259	-33.552
5	5.664	-33.084
6	4.258	-33.112
7	2.658	-32.633

Id	HS20 Lane Load	
Type	Lane Load	
Factors:	Moment	1
	Shear	1
	Deflection	1

Maximums table:

Span	Location	Moment(m	Corr. She	Corr. She	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	27.738	-2.257	27.738	0	0	0
	0.619	10.706	17.097	-0.903	24.11	14.924	0	0.01
	1.238	18.383	14.453	-3.547	20.541	25.43	0	0.02
	1.857	23.139	11.866	-6.134	17.105	31.763	0	0.02
	2.476	25.152	9.366	-8.634	13.841	34.27	0	0.03
	3.095	24.674	6.982	-11.018	10.789	33.393	0	0.03
	3.714	22.027	4.742	-13.258	7.989	29.671	0	0.03
	4.333	17.604	2.676	-15.324	5.478	23.736	0	0.02
	4.952	11.878	1.037	-16.963	3.294	16.313	0	0.01
	5.571	5.872	0.68	-17.32	1.475	8.216	0	0.01
2	0	2.698	0.436	-2.179	28.413	0	-2.669	0
	0.619	6.306	16.967	-1.033	25.979	6.962	-1.655	0.01
	1.238	12.145	16.09	-1.91	23.198	15.756	-0.724	0.01
	1.857	17.086	13.869	-4.131	20.143	22.577	-0.104	0.02
	2.476	20.19	11.431	-6.569	16.93	26.844	0	0.02
	3.095	21.203	8.927	-9.073	13.668	28.255	0	0.02
	3.714	20.055	6.435	-11.565	10.467	26.782	0	0.02
	4.333	16.868	4.028	-13.972	7.436	22.667	0	0.02
	4.952	11.972	2.182	-15.818	4.68	16.416	0	0.01
	5.571	6.361	1.064	-16.936	3.818	2.959	0	0.01
3	0	3.889	2.761	-1.009	28.718	0	-1.966	0
	0.619	6.423	16.936	-1.064	26.018	6.778	-1.449	0.01
	1.238	12.051	15.774	-2.226	23.293	15.391	-0.543	0.01
	1.857	16.922	13.917	-4.083	20.267	22.188	0	0.02
	2.476	20.046	11.484	-6.516	17.057	26.523	0	0.02
	3.095	21.106	8.972	-9.028	13.78	28.039	0	0.02
	3.714	20.008	6.461	-11.539	10.55	26.669	0	0.02
	4.333	16.851	4.03	-13.97	7.482	22.626	0	0.02
	4.952	11.955	2.178	-15.822	4.685	16.4	0	0.01
	5.571	6.314	1.021	-16.979	3.197	2.511	0	0.01
4	0	3.279	2.309	-2.309	28.688	0	-2.202	0
	0.619	6.314	16.979	-1.021	26.067	6.647	-1.55	0.01
	1.238	11.955	15.822	-2.178	23.348	15.275	-0.619	0.01
	1.857	16.851	13.97	-4.03	20.326	22.102	-0.001	0.02
	2.476	20.008	11.539	-6.461	17.119	26.475	0	0.02
	3.095	21.106	9.028	-8.972	13.843	28.036	0	0.02
	3.714	20.046	6.516	-11.484	10.612	26.709	0	0.02
	4.333	16.922	4.083	-13.917	7.54	22.703	0	0.02
	4.952	12.051	2.226	-15.774	4.738	16.505	0	0.01
	5.571	6.423	1.064	-16.936	3.19	2.556	0	0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

5	0	3.889	1.009	-2.761	28.643	0	-1.967	0
	0.619	6.361	16.936	-1.064	26.018	6.697	-1.475	0.01
	1.238	11.972	15.818	-2.182	23.338	15.29	-0.596	0.01
	1.857	16.868	13.972	-4.028	20.355	22.132	-0.029	0.02
	2.476	20.055	11.565	-6.435	17.181	26.562	0	0.02
	3.095	21.203	9.073	-8.927	13.928	28.203	0	0.02
	3.714	20.19	6.569	-11.431	10.707	26.952	0	0.02
	4.333	17.086	4.131	-13.869	7.626	22.978	0	0.02
	4.952	12.145	1.91	-16.09	4.791	16.714	0	0.01
	5.571	6.306	1.033	-16.967	3.038	1.934	0	0.01
6	0	2.698	2.179	-0.436	28.723	0	-2.679	0
	0.619	5.872	17.32	-0.68	26.661	6.25	-1.598	0.01
	1.238	11.878	16.963	-1.037	24.514	15.204	-0.611	0.01
	1.857	17.604	15.324	-2.676	22.063	23.065	0	0.02
	2.476	22.027	13.258	-4.742	19.354	29.096	0	0.03
	3.095	24.674	11.018	-6.982	16.433	32.675	0	0.03
	3.714	25.152	8.634	-9.366	13.345	33.295	0	0.03
	4.333	23.139	6.134	-11.866	10.135	30.564	0	0.02
	4.952	18.383	3.547	-14.453	6.847	24.202	0	0.02
	5.571	10.706	0.903	-17.097	3.524	14.035	-0.023	0.01
	6.19	0	2.257	-27.738	2.257	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	27.738	-2.257	-2.257	0	0	0
	0.619	-1.07	0	-1.729	-3.524	14.035	-0.023	0
	1.238	-2.141	0	-1.729	-6.847	24.202	0	-0.01
	1.857	-3.211	0	-1.729	-10.135	30.564	0	-0.01
	2.476	-4.282	0	-1.729	-13.345	33.295	0	-0.01
	3.095	-5.352	0	-1.729	-16.433	32.675	0	-0.01
	3.714	-6.422	0	-1.729	-19.354	29.096	0	-0.01
	4.333	-7.493	0	-1.729	-22.063	23.065	0	-0.01
	4.952	-8.568	0	-1.953	-24.514	15.204	-0.611	-0.01
	5.571	-14.139	0	-11.947	-26.661	6.25	-1.598	0
2	0	-23.18	15.696	-16.522	-28.723	0	-2.679	0
	0.619	-14.537	10.46	0	-3.038	1.934	0	-0.01
	1.238	-9.783	0.785	0	-4.791	16.714	0	-0.01
	1.857	-9.47	0.506	0	-7.626	22.978	0	-0.01
	2.476	-9.157	0.506	0	-10.707	26.952	0	-0.01
	3.095	-8.844	0.506	0	-13.928	28.203	0	-0.01
	3.714	-8.531	0.506	0	-17.181	26.562	0	-0.01
	4.333	-8.218	0.506	0	-20.355	22.132	-0.029	-0.01
	4.952	-8.61	0	-2.381	-23.338	15.29	-0.596	-0.01
	5.571	-13.137	0	-12.264	-26.018	6.697	-1.475	0
3	0	-21.71	15.391	-15.401	-28.643	0	-1.967	0
	0.619	-13.136	12.238	0	-3.19	2.556	0	0
	1.238	-8.22	3.693	0	-4.738	16.505	0	-0.01
	1.857	-7.999	0.011	0	-7.54	22.703	0	-0.01
	2.476	-7.992	0.011	0	-10.612	26.709	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

	3.095	-7.986	0.011	0	-13.843	28.036	0	-0.01
	3.714	-7.979	0.011	0	-17.119	26.475	0	-0.01
	4.333	-7.972	0.011	0	-20.326	22.102	-0.001	-0.01
	4.952	-8.744	0	-2.545	-23.348	15.275	-0.619	-0.01
	5.571	-13.16	0	-12.264	-26.067	6.647	-1.55	0
4	0	-21.754	24.605	-15.417	-28.688	0	-2.202	0
	0.619	-13.16	12.264	0	-3.197	2.511	0	0
	1.238	-8.744	2.545	0	-4.685	16.4	0	-0.01
	1.857	-7.972	0	-0.011	-7.482	22.626	0	-0.01
	2.476	-7.979	0	-0.011	-10.55	26.669	0	-0.01
	3.095	-7.986	0	-0.011	-13.78	28.039	0	-0.01
	3.714	-7.992	0	-0.011	-17.057	26.523	0	-0.01
	4.333	-7.999	0	-0.011	-20.267	22.188	0	-0.01
	4.952	-8.22	0	-3.693	-23.293	15.391	-0.543	-0.01
	5.571	-13.136	0	-12.238	-26.018	6.778	-1.449	0
5	0	-21.71	15.401	-15.391	-28.718	0	-1.966	0
	0.619	-13.137	12.264	0	-3.818	2.959	0	0
	1.238	-8.61	2.381	0	-4.68	16.416	0	-0.01
	1.857	-8.218	0	-0.506	-7.436	22.667	0	-0.01
	2.476	-8.531	0	-0.506	-10.467	26.782	0	-0.01
	3.095	-8.844	0	-0.506	-13.668	28.255	0	-0.01
	3.714	-9.157	0	-0.506	-16.93	26.844	0	-0.01
	4.333	-9.47	0	-0.506	-20.143	22.577	-0.104	-0.01
	4.952	-9.783	0	-3.194	-23.198	15.756	-0.724	-0.01
	5.571	-14.537	0	-10.46	-25.979	6.962	-1.655	-0.01
6	0	-23.18	16.522	-15.696	-28.413	0	-2.669	0
	0.619	-14.139	11.947	0	-1.475	8.216	0	0
	1.238	-8.568	1.953	0	-3.294	16.313	0	-0.01
	1.857	-7.493	1.729	0	-5.478	23.736	0	-0.01
	2.476	-6.422	1.729	0	-7.989	29.671	0	-0.01
	3.095	-5.352	1.729	0	-10.789	33.393	0	-0.01
	3.714	-4.282	1.729	0	-13.841	34.27	0	-0.01
	4.333	-3.211	1.729	0	-17.105	31.763	0	-0.01
	4.952	-2.141	1.729	0	-20.541	25.43	0	-0.01
	5.571	-1.07	1.729	0	-24.11	14.924	0	0
	6.19	0	2.257	-27.738	-27.738	0	0	0

Support    Reac. Pos    Reac. Negative

1	2.257	-27.771
2	3.628	-30.932
3	5.093	-30.602
4	4.286	-30.723
5	5.093	-30.602
6	3.628	-30.932
7	2.257	-27.738

Id HS15  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	24.086	-1.914	24.086	0	0	0
	0.619	13.055	21.09	-2.91	21.09	13.055	0	0.01
	1.238	22.393	18.088	-5.912	18.088	22.393	0	0.02
	1.857	28.138	15.153	-8.847	15.153	28.138	0	0.03
	2.476	30.518	12.325	-11.675	12.325	30.518	0	0.03
	3.095	29.862	9.648	-14.352	9.648	29.862	0	0.03
	3.714	26.605	7.163	-16.837	7.163	26.605	0	0.03
	4.333	21.285	4.912	-19.088	4.912	21.285	0	0.02
	4.952	14.598	2.948	-21.052	2.948	14.598	0	0.02
	5.571	7.244	1.3	-22.7	1.3	7.244	0	0.01
2	0	3.175	0.513	-2.565	24.14	0	-0.263	0
	0.619	7.955	22.141	-1.859	22.311	7.849	0	0.01
	1.238	15.213	20.059	-4.106	20.059	15.213	0	0.01
	1.857	21.026	17.504	-6.496	17.504	21.026	0	0.02
	2.476	24.681	14.752	-9.248	14.752	24.681	0	0.02
	3.095	25.826	11.907	-12.093	11.907	25.826	0	0.03
	3.714	24.373	9.076	-14.924	9.076	24.373	0	0.02
	4.333	20.49	6.361	-17.639	6.361	20.49	0	0.02
	4.952	14.664	3.884	-20.116	3.884	14.664	0	0.01
	5.571	7.543	1.734	-22.266	3.19	2.413	0	0.01
3	0	4.388	3.19	-1.063	24.146	0	-0.284	0
	0.619	7.594	22.226	-1.774	22.401	7.474	0	0.01
	1.238	14.708	20.033	-3.967	20.203	14.697	0	0.01
	1.857	20.518	17.676	-6.324	17.676	20.518	0	0.02
	2.476	24.303	14.735	-9.265	14.93	24.266	0	0.02
	3.095	25.61	11.866	-12.134	12.073	25.543	0	0.03
	3.714	24.297	9.005	-14.995	9.216	24.219	0	0.02
	4.333	20.508	6.262	-17.738	6.467	20.438	0	0.02
	4.952	14.671	3.952	-20.048	3.952	14.671	0	0.01
	5.571	7.566	1.766	-22.234	2.622	1.806	0	0.01
4	0	3.428	2.622	-2.622	24.169	0	-0.314	0
	0.619	7.566	22.234	-1.766	22.441	7.424	0	0.01
	1.238	14.671	20.048	-3.952	20.257	14.657	0	0.01
	1.857	20.508	17.738	-6.262	17.738	20.508	0	0.02
	2.476	24.297	14.995	-9.005	14.995	24.297	0	0.02
	3.095	25.61	12.134	-11.866	12.134	25.61	0	0.03
	3.714	24.303	9.265	-14.735	9.265	24.303	0	0.02
	4.333	20.518	6.324	-17.676	6.495	20.497	0	0.02
	4.952	14.708	3.967	-20.033	3.967	14.708	0	0.01
	5.571	7.594	1.774	-22.226	2.625	1.796	0	0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

5	0	4.388	1.063	-3.19	24.027	0	-0.284	0
	0.619	7.543	22.266	-1.734	22.298	7.403	0	0.01
	1.238	14.664	20.116	-3.884	20.131	14.609	0	0.01
	1.857	20.49	17.639	-6.361	17.65	20.456	0	0.02
	2.476	24.373	14.924	-9.076	14.969	24.263	0	0.02
	3.095	25.826	12.093	-11.907	12.173	25.677	0	0.03
	3.714	24.681	9.248	-14.752	9.364	24.538	0	0.02
	4.333	21.026	6.496	-17.504	6.641	20.936	0	0.02
	4.952	15.213	4.106	-20.059	4.106	15.213	0	0.01
	5.571	7.955	1.859	-22.141	2.565	1.588	0	0.01
6	0	3.175	2.565	-0.513	24.02	0	-0.273	0
	0.619	7.244	22.7	-1.3	22.724	7.111	0	0.01
	1.238	14.598	21.052	-2.948	21.063	14.543	0	0.02
	1.857	21.285	19.088	-4.912	19.107	21.202	0	0.02
	2.476	26.605	16.837	-7.163	16.881	26.439	0	0.03
	3.095	29.862	14.352	-9.648	14.423	29.641	0	0.03
	3.714	30.518	11.675	-12.325	11.771	30.28	0	0.03
	4.333	28.138	8.847	-15.153	8.963	27.924	0	0.03
	4.952	22.393	5.912	-18.088	6.037	22.238	0	0.02
	5.571	13.055	2.91	-21.09	3.037	12.976	0	0.01
	6.19	0	1.914	-24.086	1.914	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. She	Corr. She	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	24.086	-1.914	-1.914	0	0	0
	0.619	-1.185	0	-1.914	-3.037	12.976	0	0
	1.238	-2.369	0	-1.914	-6.037	22.238	0	-0.01
	1.857	-3.554	0	-1.914	-8.963	27.924	0	-0.01
	2.476	-4.738	0	-1.914	-11.771	30.28	0	-0.01
	3.095	-5.923	0	-1.914	-14.423	29.641	0	-0.01
	3.714	-7.107	0	-1.914	-16.881	26.439	0	-0.01
	4.333	-8.292	0	-1.914	-19.107	21.202	0	-0.01
	4.952	-9.476	0	-1.914	-21.063	14.543	0	-0.01
	5.571	-10.661	0	-1.914	-22.724	7.111	0	-0.01
2	0	-15.359	3.19	-16.881	-24.02	0	-0.273	0
	0.619	-13.384	3.19	0	-2.565	1.588	0	-0.01
	1.238	-11.409	3.19	0	-4.106	15.213	0	-0.01
	1.857	-9.583	2.87	0	-6.641	20.936	0	-0.01
	2.476	-7.806	2.87	0	-9.364	24.538	0	-0.01
	3.095	-6.03	2.87	0	-12.173	25.677	0	-0.01
	3.714	-6.594	0	-2.256	-14.969	24.263	0	-0.01
	4.333	-7.991	0	-2.256	-17.65	20.456	0	-0.01
	4.952	-9.525	0	-2.565	-20.131	14.609	0	-0.01
	5.571	-11.113	0	-2.565	-22.298	7.403	0	0
3	0	-12.799	2.622	-14.969	-24.027	0	-0.284	0
	0.619	-11.176	2.622	0	-2.625	1.796	0	0
	1.238	-9.554	2.622	0	-3.967	14.708	0	-0.01
	1.857	-8.024	2.454	0	-6.495	20.497	0	-0.01
	2.476	-6.505	2.454	0	-9.265	24.303	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

	3.095	-5.005	2.295	0	-12.134	25.61	0	-0.01
	3.714	-6.429	0	-2.407	-14.995	24.297	0	-0.01
	4.333	-7.955	0	-2.625	-17.738	20.508	0	-0.01
	4.952	-9.58	0	-2.625	-20.257	14.657	0	-0.01
	5.571	-11.205	0	-2.625	-22.441	7.424	0	0
4	0	-12.83	14.995	-14.995	-24.169	0	-0.314	0
	0.619	-11.205	2.625	0	-2.622	1.806	0	0
	1.238	-9.58	2.625	0	-3.952	14.671	0	-0.01
	1.857	-7.955	2.625	0	-6.467	20.438	0	-0.01
	2.476	-6.429	2.407	0	-9.216	24.219	0	-0.01
	3.095	-5.005	0	-2.295	-12.073	25.543	0	-0.01
	3.714	-6.505	0	-2.454	-14.93	24.266	0	-0.01
	4.333	-8.024	0	-2.454	-17.676	20.518	0	-0.01
	4.952	-9.554	0	-2.622	-20.203	14.697	0	-0.01
	5.571	-11.176	0	-2.622	-22.401	7.474	0	0
5	0	-12.799	14.969	-2.622	-24.146	0	-0.284	0
	0.619	-11.113	2.565	0	-3.19	2.413	0	0
	1.238	-9.525	2.565	0	-3.884	14.664	0	-0.01
	1.857	-7.991	2.256	0	-6.361	20.49	0	-0.01
	2.476	-6.594	2.256	0	-9.076	24.373	0	-0.01
	3.095	-6.03	0	-2.87	-11.907	25.826	0	-0.01
	3.714	-7.806	0	-2.87	-14.752	24.681	0	-0.01
	4.333	-9.583	0	-2.87	-17.504	21.026	0	-0.01
	4.952	-11.409	0	-3.19	-20.059	15.213	0	-0.01
	5.571	-13.384	0	-3.19	-22.311	7.849	0	-0.01
6	0	-15.359	16.881	-3.19	-24.14	0	-0.263	0
	0.619	-10.661	1.914	0	-1.3	7.244	0	-0.01
	1.238	-9.476	1.914	0	-2.948	14.598	0	-0.01
	1.857	-8.292	1.914	0	-4.912	21.285	0	-0.01
	2.476	-7.107	1.914	0	-7.163	26.605	0	-0.01
	3.095	-5.923	1.914	0	-9.648	29.862	0	-0.01
	3.714	-4.738	1.914	0	-12.325	30.518	0	-0.01
	4.333	-3.554	1.914	0	-15.153	28.138	0	-0.01
	4.952	-2.369	1.914	0	-18.088	22.393	0	-0.01
	5.571	-1.185	1.914	0	-21.09	13.055	0	0
	6.19	0	1.914	-24.086	-24.086	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.914	-24.117
2	3.078	-24.32
3	4.253	-24.203
4	3.323	-24.233
5	4.253	-24.203
6	3.078	-24.32
7	1.914	-24.117

Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.265	-1.457	21.265	0	0	0
	0.608	10.72	17.632	0	17.632	10.72	0	0.01
	1.216	17.256	14.191	-2.809	14.191	17.256	0	0.01
	1.824	20.142	11.043	-5.957	11.043	20.142	0	0.02
	2.432	21.701	8.923	-8.077	8.923	21.701	0	0.02
	3.04	21.386	7.035	-9.965	7.035	21.386	0	0.02
	3.648	19.198	5.263	-11.737	5.263	19.198	0	0.02
	4.256	15.983	2.733	-14.267	2.733	15.983	0	0.02
	4.864	10.56	0	-17.849	1.54	7.488	0	0.01
	5.472	3.558	0.65	-11.35	0.65	3.558	0	0.01
2	0	2.374	0.39	-1.952	22.502	0	-5.932	0
	0.608	3.907	11.071	-0.929	19.329	3.611	0	0
	1.216	10.643	16.039	-1.071	16.553	2.671	0	0.01
	1.824	14.882	12.813	-4.187	14.793	8.284	0	0.01
	2.432	16.404	9.818	-7.182	12.633	12.934	0	0.02
	3.04	15.975	10.118	-6.882	10.118	15.975	0	0.02
	3.648	16.869	7.293	-9.707	7.293	16.869	0	0.02
	4.256	15.189	4.205	-12.795	4.205	15.189	0	0.01
	4.864	10.684	0.946	-16.054	2.468	0.17	0	0.01
	5.472	3.704	0.867	-11.133	2.468	1.67	0	0
3	0	3.17	2.468	-0.661	22.591	0	-6.358	0
	0.608	4.535	10.921	-1.079	19.451	3.101	0	0.01
	1.216	11.015	15.827	-1.173	16.254	3.74	0	0.01
	1.824	15.43	12.583	-4.417	14.59	8.887	0	0.01
	2.432	17.041	9.549	-7.451	12.527	13.185	0	0.02
	3.04	16.172	6.813	-10.187	10.101	16.005	0	0.02
	3.648	16.804	7.349	-9.651	7.349	16.804	0	0.02
	4.256	15.132	4.31	-12.69	4.31	15.132	0	0.01
	4.864	10.693	1.075	-15.925	2.065	7.524	0	0.01
	5.472	3.703	0.88	-11.12	1.997	1.352	0	0
4	0	2.566	1.997	-0.535	22.597	0	-6.389	0
	0.608	3.586	11.147	-0.853	19.46	3.064	0	0
	1.216	10.717	15.908	-1.092	16.233	3.817	0	0.01
	1.824	15.15	12.674	-4.326	14.576	8.93	0	0.01
	2.432	16.816	9.639	-7.361	12.519	13.204	0	0.02
	3.04	16.019	6.894	-10.106	10.1	16.007	0	0.02
	3.648	16.799	7.353	-9.647	7.353	16.799	0	0.02
	4.256	15.128	4.318	-12.682	4.318	15.128	0	0.01
	4.864	10.694	1.084	-15.916	2.067	7.524	0	0.01
	5.472	3.703	0.881	-11.119	2.007	1.345	0	0



## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5	0	2.62	0.589	-1.997	22.598	0	-6.392	0
	0.608	3.695	11.121	-0.879	19.461	3.061	0	0
	1.216	10.695	15.915	-1.085	16.232	3.822	0	0.01
	1.824	15.13	12.681	-4.319	14.575	8.933	0	0.01
	2.432	16.8	9.646	-7.354	12.519	13.205	0	0.02
	3.04	16.008	6.9	-10.1	10.1	16.008	0	0.02
	3.648	16.8	7.354	-9.646	7.354	16.8	0	0.02
	4.256	15.13	4.319	-12.681	4.319	15.13	0	0.01
	4.864	10.695	1.085	-15.915	2.066	7.519	0	0.01
	5.472	3.695	0.879	-11.121	2.003	1.395	0	0
6	0	2.62	1.997	-0.589	22.605	0	-6.4	0
	0.608	3.703	11.119	-0.881	19.468	3.056	0	0
	1.216	10.694	15.916	-1.084	16.234	3.822	0	0.01
	1.824	15.128	12.682	-4.318	14.578	8.936	0	0.01
	2.432	16.799	9.647	-7.353	12.524	13.211	0	0.02
	3.04	16.019	10.106	-6.894	10.106	16.019	0	0.02
	3.648	16.816	7.361	-9.639	7.361	16.816	0	0.02
	4.256	15.15	4.326	-12.674	4.326	15.15	0	0.01
	4.864	10.717	1.092	-15.908	2.047	7.448	0	0.01
	5.472	3.586	0.853	-11.147	1.991	1.347	0	0
7	0	2.566	0.535	-1.997	22.697	0	-6.507	0
	0.608	3.703	11.12	-0.88	19.555	3.006	0	0
	1.216	10.693	15.925	-1.075	16.261	3.831	0	0.01
	1.824	15.132	12.69	-4.31	14.626	8.972	0	0.01
	2.432	16.804	9.651	-7.349	12.59	13.297	0	0.02
	3.04	16.172	10.187	-6.813	10.187	16.172	0	0.02
	3.648	17.041	7.451	-9.549	7.451	17.041	0	0.02
	4.256	15.43	4.417	-12.583	4.417	15.43	0	0.01
	4.864	11.015	1.173	-15.827	2.316	8.413	0	0.01
	5.472	4.535	1.079	-10.921	1.988	1.336	0	0.01
8	0	3.17	0.661	-2.468	22.474	0	-6.232	0
	0.608	3.704	11.133	-0.867	19.415	3.092	0	0
	1.216	10.684	16.054	-0.946	16.206	10.13	0	0.01
	1.824	15.189	12.795	-4.205	14.385	8.509	0	0.01
	2.432	16.869	9.707	-7.293	12.323	12.697	0	0.02
	3.04	15.975	6.882	-10.118	9.921	15.496	0	0.02
	3.648	16.404	7.182	-9.818	7.201	16.381	0	0.02
	4.256	14.882	4.187	-12.813	4.228	14.858	0	0.01
	4.864	10.643	1.071	-16.039	2.053	7.471	0	0.01
	5.472	3.907	0.929	-11.071	1.952	1.187	0	0
9	0	2.374	1.952	-0.39	24.164	0	-8.403	0
	0.608	3.558	11.35	-0.65	21.233	1.862	0	0.01
	1.216	10.56	17.849	0	17.962	10.009	0	0.01
	1.824	15.983	14.267	-2.733	14.931	8.804	0	0.02
	2.432	19.198	11.737	-5.263	13.233	13.741	0	0.02
	3.04	21.386	9.965	-7.035	11.177	17.701	0	0.02
	3.648	21.701	8.077	-8.923	8.755	20.053	0	0.02
	4.256	20.142	5.957	-11.043	6.35	19.426	0	0.02
	4.864	17.256	2.809	-14.191	4.282	15.465	0	0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5.472	10.72	0	-17.632	2.158	9.024	0	0.01
6.08	0	1.457	-21.265	1.457	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.265	-1.457	-1.457	0	0	0
	0.608	-0.886	0	-1.457	-2.158	9.024	0	0
	1.216	-1.772	0	-1.457	-4.282	15.465	0	0
	1.824	-2.658	0	-1.457	-6.35	19.426	0	-0.01
	2.432	-3.544	0	-1.457	-8.755	20.053	0	-0.01
	3.04	-4.43	0	-1.457	-11.177	17.701	0	-0.01
	3.648	-5.316	0	-1.457	-13.233	13.741	0	-0.01
	4.256	-6.202	0	-1.457	-14.931	8.804	0	-0.01
	4.864	-7.088	0	-1.457	-17.962	10.009	0	-0.01
2	5.472	-10.396	0	-13.233	-21.233	1.862	0	0
	0	-18.699	14.793	-13.991	-24.164	0	-8.403	0
	0.608	-10.332	2.468	0	-1.952	1.187	0	0
	1.216	-8.832	2.466	0	-2.053	7.471	0	-0.01
	1.824	-7.676	1.901	0	-4.228	14.858	0	-0.01
	2.432	-6.632	1.015	0	-7.201	16.381	0	-0.01
	3.04	-6.018	0.951	0	-9.921	15.496	0	-0.01
	3.648	-5.891	0	-0.733	-12.323	12.697	0	-0.01
	4.256	-6.387	0	-0.897	-14.385	8.509	0	-0.01
3	4.864	-7.122	0	-1.952	-16.206	10.13	0	-0.01
	5.472	-9.78	0	-12.323	-19.415	3.092	0	0
	0	-17.816	14.085	-13.772	-22.474	0	-6.232	0
	0.608	-9.663	12.527	0	-1.988	1.336	0	0
	1.216	-7.148	1.997	0	-2.316	8.413	0	-0.01
	1.824	-6.296	1.299	0	-4.417	15.43	0	-0.01
	2.432	-5.536	1.186	0	-7.451	17.041	0	-0.01
	3.04	-4.91	0	-0.835	-10.187	16.172	0	-0.01
	3.648	-5.489	0	-1.126	-12.59	13.297	0	-0.01
4	4.256	-6.205	0	-1.238	-14.626	8.972	0	-0.01
	4.864	-7.124	0	-1.988	-16.261	3.831	0	-0.01
	5.472	-9.736	0	-12.258	-19.555	3.006	0	0
	0	-17.812	13.725	-14.127	-22.697	0	-6.507	0
	0.608	-9.775	12.253	0	-1.991	1.347	0	0
	1.216	-7.198	2.007	0	-2.047	7.448	0	-0.01
	1.824	-6.199	1.267	0	-4.326	15.15	0	-0.01
	2.432	-5.464	1.155	0	-7.361	16.816	0	-0.01
	3.04	-4.866	0	-0.86	-10.106	16.019	0	-0.01
5	3.648	-5.46	0	-1.151	-12.524	13.211	0	-0.01
	4.256	-6.193	0	-1.262	-14.578	8.936	0	-0.01
	4.864	-7.125	0	-1.991	-16.234	3.822	0	-0.01
	5.472	-9.733	0	-12.253	-19.468	3.056	0	0
	0	-17.756	13.722	-14.075	-22.605	0	-6.4	0
	0.608	-9.736	12.254	0	-2.003	1.395	0	0
	1.216	-7.131	2.003	0	-2.066	7.519	0	-0.01
	1.824	-6.192	1.264	0	-4.319	15.13	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

	2.432	-5.459	1.153	0	-7.354	16.8	0	-0.01
	3.04	-4.863	0.862	0	-10.1	16.008	0	-0.01
	3.648	-5.459	0	-1.153	-12.519	13.205	0	-0.01
	4.256	-6.192	0	-1.264	-14.575	8.933	0	-0.01
	4.864	-7.131	0	-2.003	-16.232	3.822	0	-0.01
	5.472	-9.736	0	-12.254	-19.461	3.061	0	0
6	0	-17.756	14.075	-13.722	-22.598	0	-6.392	0
	0.608	-9.733	12.253	0	-2.007	1.345	0	0
	1.216	-7.125	1.991	0	-2.067	7.524	0	-0.01
	1.824	-6.193	1.262	0	-4.318	15.128	0	-0.01
	2.432	-5.46	1.151	0	-7.353	16.799	0	-0.01
	3.04	-4.866	0.86	0	-10.1	16.007	0	-0.01
	3.648	-5.464	0	-1.155	-12.519	13.204	0	-0.01
	4.256	-6.199	0	-1.267	-14.576	8.93	0	-0.01
	4.864	-7.198	0	-2.007	-16.233	3.817	0	-0.01
	5.472	-9.775	0	-12.253	-19.46	3.064	0	0
7	0	-17.812	14.127	-13.725	-22.597	0	-6.389	0
	0.608	-9.736	12.258	0	-1.997	1.352	0	0
	1.216	-7.124	1.988	0	-2.065	7.524	0	-0.01
	1.824	-6.205	1.238	0	-4.31	15.132	0	-0.01
	2.432	-5.489	1.126	0	-7.349	16.804	0	-0.01
	3.04	-4.91	0.835	0	-10.101	16.005	0	-0.01
	3.648	-5.536	0	-1.186	-12.527	13.185	0	-0.01
	4.256	-6.296	0	-1.299	-14.59	8.887	0	-0.01
	4.864	-7.148	0	-1.997	-16.254	3.74	0	-0.01
	5.472	-9.663	0	-12.527	-19.451	3.101	0	0
8	0	-17.816	13.772	-14.085	-22.591	0	-6.358	0
	0.608	-9.78	12.323	0	-2.468	1.67	0	0
	1.216	-7.122	1.952	0	-2.468	0.17	0	-0.01
	1.824	-6.387	0.897	0	-4.205	15.189	0	-0.01
	2.432	-5.891	0.733	0	-7.293	16.869	0	-0.01
	3.04	-6.018	0	-0.951	-10.118	15.975	0	-0.01
	3.648	-6.632	0	-1.015	-12.633	12.934	0	-0.01
	4.256	-7.676	0	-1.901	-14.793	8.284	0	-0.01
	4.864	-8.832	0	-2.466	-16.553	2.671	0	-0.01
	5.472	-10.332	0	-2.468	-19.329	3.611	0	0
9	0	-18.699	13.991	-14.793	-22.502	0	-5.932	0
	0.608	-10.396	13.233	0	-0.65	3.558	0	0
	1.216	-7.088	1.457	0	-1.54	7.488	0	-0.01
	1.824	-6.202	1.457	0	-2.733	15.983	0	-0.01
	2.432	-5.316	1.457	0	-5.263	19.198	0	-0.01
	3.04	-4.43	1.457	0	-7.035	21.386	0	-0.01
	3.648	-3.544	1.457	0	-8.923	21.701	0	-0.01
	4.256	-2.658	1.457	0	-11.043	20.142	0	-0.01
	4.864	-1.772	1.457	0	-14.191	17.256	0	0
	5.472	-0.886	1.457	0	-17.632	10.72	0	0
	6.08	0	1.457	-21.265	-21.265	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.457	-21.303
2	2.343	-28.819
3	3.129	-27.856
4	2.532	-27.852
5	2.586	-27.797
6	2.586	-27.797
7	2.532	-27.852
8	3.129	-27.856
9	2.343	-28.819
10	1.457	-21.303

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shez	Corr. Shez	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	17.604	-0.991	17.604	0	0	0
	0.608	8.914	14.661	0	14.661	8.914	0	0.01
	1.216	14.416	11.855	-2.145	11.855	14.416	0	0.01
	1.824	16.906	9.269	-4.731	9.269	16.906	0	0.02
	2.432	17.513	7.201	-6.799	7.201	17.513	0	0.02
	3.04	17.506	5.758	-8.242	5.758	17.506	0	0.02
	3.648	16	4.386	-9.614	4.386	16	0	0.02
	4.256	13.652	2.366	-11.634	2.691	11.452	0	0.01
	4.864	9.452	0	-14.544	1.687	8.203	0	0.01
	5.472	4.514	0.825	-11.175	0.825	4.514	0	0.01
2	0	1.614	0.265	-1.327	20.094	0	-11.94	0
	0.608	4.144	10.68	-1.32	17.799	0	-4.225	0
	1.216	8.765	11.765	-2.299	15.255	2.248	0	0.01
	1.824	11.548	9.387	-4.613	12.581	7.065	0	0.01
	2.432	12.481	7.24	-6.76	10.604	9.472	0	0.01
	3.04	13.171	6.221	-5.779	9.132	11.585	0	0.01
	3.648	12.725	4.848	-7.152	7.318	12.636	0	0.01
	4.256	12.138	5.175	-8.825	5.175	12.138	0	0.01
	4.864	9.679	2.75	-11.25	2.75	9.679	0	0.01
	5.472	5.054	0.139	-13.861	2.032	1.375	0	0
3	0	2.611	2.032	-0.545	19.797	0	-10.515	0
	0.608	5.655	10.653	-1.347	17.535	0	-3.118	0
	1.216	9.97	11.429	-2.571	15.038	3.026	0	0.01
	1.824	12.514	9.062	-4.938	12.421	7.541	0	0.01
	2.432	13.137	6.963	-7.037	10.353	10.065	0	0.01
	3.04	13.407	5.459	-6.541	8.83	12.115	0	0.01
	3.648	12.989	7.01	-6.99	7.01	12.989	0	0.01
	4.256	12.292	4.889	-9.111	4.889	12.292	0	0.01
	4.864	9.662	2.504	-11.496	2.504	9.662	0	0.01
	5.472	4.922	0	-14.055	1.311	0.887	0	0
4	0	1.738	0.362	-1.353	19.776	0	-10.412	0
	0.608	4.941	14.063	0	17.516	0	-3.038	0
	1.216	9.683	11.509	-2.491	15.022	3.081	0	0.01
	1.824	12.319	9.128	-4.872	12.41	7.575	0	0.01
	2.432	13.025	7.01	-6.99	10.355	9.766	0	0.01
	3.04	13.009	6.313	-5.687	8.808	12.153	0	0.01
	3.648	13.015	6.988	-7.012	6.988	13.015	0	0.01
	4.256	12.303	4.869	-9.131	4.869	12.303	0	0.01
	4.864	9.661	2.486	-11.514	2.486	9.661	0	0.01
	5.472	4.913	0	-14.069	1.414	0.957	0	0

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5	0	1.816	1.414	-0.379	19.775	0	-10.405	0
	0.608	4.914	14.069	0	17.515	0	-3.033	0
	1.216	9.662	11.514	-2.486	15.022	3.085	0	0.01
	1.824	12.305	9.133	-4.867	12.409	7.577	0	0.01
	2.432	13.017	7.013	-6.987	10.334	10.111	0	0.01
	3.04	13.007	6.312	-6.312	8.807	12.156	0	0.01
	3.648	13.017	6.987	-7.013	6.987	13.017	0	0.01
	4.256	12.305	4.867	-9.133	4.867	12.305	0	0.01
	4.864	9.662	2.486	-11.514	2.486	9.662	0	0.01
	5.472	4.914	0	-14.069	1.35	0.914	0	0
6	0	1.816	0.379	-1.414	19.779	0	-10.41	0
	0.608	4.913	14.069	0	17.52	0	-3.036	0
	1.216	9.661	11.514	-2.486	15.028	3.085	0	0.01
	1.824	12.303	9.131	-4.869	12.416	7.581	0	0.01
	2.432	13.015	7.012	-6.988	10.335	10.112	0	0.01
	3.04	13.009	5.687	-6.313	8.809	12.159	0	0.01
	3.648	13.025	6.99	-7.01	6.99	13.025	0	0.01
	4.256	12.319	4.872	-9.128	4.872	12.319	0	0.01
	4.864	9.683	2.491	-11.509	2.491	9.683	0	0.01
	5.472	4.941	0	-14.063	1.353	0.915	0	0
7	0	1.738	1.353	-0.362	19.837	0	-10.485	0
	0.608	4.922	14.055	0	17.595	0	-3.087	0
	1.216	9.662	11.496	-2.504	15.114	3.079	0	0.01
	1.824	12.292	9.111	-4.889	12.506	7.63	0	0.01
	2.432	12.989	6.99	-7.01	10.345	10.123	0	0.01
	3.04	13.407	6.541	-5.459	8.837	12.209	0	0.01
	3.648	13.137	7.037	-6.963	7.037	13.137	0	0.01
	4.256	12.514	4.938	-9.062	4.938	12.514	0	0.01
	4.864	9.97	2.571	-11.429	2.571	9.97	0	0.01
	5.472	5.655	1.347	-10.653	1.351	0.908	0	0
8	0	2.611	0.545	-2.032	19.615	0	-10.514	0
	0.608	5.054	13.861	-0.139	17.333	0	-3.173	0
	1.216	9.679	11.25	-2.75	14.828	2.936	0	0.01
	1.824	12.138	8.825	-5.175	12.199	7.459	0	0.01
	2.432	12.725	7.152	-4.848	10.382	9.888	0	0.01
	3.04	13.171	5.779	-6.221	8.74	11.723	0	0.01
	3.648	12.481	6.76	-7.24	6.851	12.371	0	0.01
	4.256	11.548	4.613	-9.387	4.696	11.497	0	0.01
	4.864	8.765	2.299	-11.765	2.299	8.765	0	0.01
	5.472	4.144	1.32	-10.68	1.327	0.807	0	0
9	0	1.614	1.327	-0.265	20.725	0	-11.941	0
	0.608	4.514	11.175	-0.825	18.489	0	-3.956	0.01
	1.216	9.452	14.544	0	15.898	2.862	0	0.01
	1.824	13.652	11.634	-2.366	12.989	7.885	0	0.01
	2.432	16	9.614	-4.386	11.072	10.68	0	0.02
	3.04	17.506	8.242	-5.758	9.63	13.285	0	0.02
	3.648	17.513	6.799	-7.201	7.897	14.843	0	0.02
	4.256	16.906	4.731	-9.269	5.837	14.888	0	0.02
	4.864	14.416	2.145	-11.855	3.799	12.404	0	0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5.472	8.914	0	-14.661	2.253	7.142	0	0.01
6.08	0	0.991	-17.604	0.991	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	17.604	-0.991	-0.991	0	0	0
	0.608	-0.602	0	-0.991	-2.253	7.142	0	0
	1.216	-1.205	0	-0.991	-3.799	12.404	0	0
	1.824	-1.807	0	-0.991	-5.837	14.888	0	0
	2.432	-2.409	0	-0.991	-7.897	14.843	0	-0.01
	3.04	-3.012	0	-0.991	-9.63	13.285	0	-0.01
	3.648	-3.614	0	-0.991	-11.072	10.68	0	-0.01
	4.256	-4.216	0	-0.991	-12.989	7.885	0	-0.01
	4.864	-4.818	0	-0.991	-15.898	2.862	0	0
	5.472	-10.135	0	-9.63	-18.489	0	-3.956	0
2	0	-16.477	9.833	-15.826	-20.725	0	-11.941	0
	0.608	-10.623	9.132	0	-1.327	0.807	0	0
	1.216	-7.273	2.032	0	-2.299	8.765	0	-0.01
	1.824	-6.793	0.789	0	-4.696	11.497	0	-0.01
	2.432	-6.313	0.789	0	-6.851	12.371	0	-0.01
	3.04	-5.833	0.789	0	-8.74	11.723	0	-0.01
	3.648	-5.378	0.739	0	-10.382	9.888	0	-0.01
	4.256	-4.929	0.736	0	-12.199	7.459	0	-0.01
	4.864	-4.842	0	-1.327	-14.828	2.936	0	-0.01
	5.472	-9.533	0	-8.74	-17.333	0	-3.173	0
3	0	-15.386	13.945	-10.138	-19.615	0	-10.514	0
	0.608	-9.36	8.83	0	-1.351	0.908	0	0
	1.216	-4.692	1.311	0	-2.571	9.97	0	-0.01
	1.824	-4.583	0.047	0	-4.938	12.514	0	-0.01
	2.432	-4.554	0.047	0	-7.037	13.137	0	-0.01
	3.04	-4.526	0.047	0	-8.837	12.209	0	-0.01
	3.648	-4.497	0.047	0	-10.345	10.123	0	-0.01
	4.256	-4.477	0	-0.102	-12.506	7.63	0	-0.01
	4.864	-4.843	0	-1.351	-15.114	3.079	0	-0.01
	5.472	-9.489	0	-8.676	-17.595	0	-3.087	0
4	0	-15.437	10.108	-14.026	-19.837	0	-10.485	0
	0.608	-9.585	8.695	0	-1.353	0.915	0	0
	1.216	-5.06	1.414	0	-2.491	9.683	0	-0.01
	1.824	-4.523	0.027	0	-4.872	12.319	0	-0.01
	2.432	-4.507	0.027	0	-6.99	13.025	0	-0.01
	3.04	-4.491	0.027	0	-8.809	12.159	0	-0.01
	3.648	-4.497	0	-0.031	-10.335	10.112	0	-0.01
	4.256	-4.516	0	-0.031	-12.416	7.581	0	-0.01
	4.864	-4.843	0	-1.353	-15.028	3.085	0	-0.01
	5.472	-9.487	0	-8.671	-17.52	0	-3.036	0
5	0	-15.323	10.084	-13.937	-19.779	0	-10.41	0
	0.608	-9.493	8.673	0	-1.35	0.914	0	0
	1.216	-4.831	1.35	0	-2.486	9.662	0	-0.01
	1.824	-4.519	0.026	0	-4.867	12.305	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

	2.432	-4.503	0.026	0	-6.987	13.017	0	-0.01
	3.04	-4.487	0	-0.026	-8.807	12.156	0	-0.01
	3.648	-4.503	0	-0.026	-10.334	10.111	0	-0.01
	4.256	-4.519	0	-0.026	-12.409	7.577	0	-0.01
	4.864	-4.831	0	-1.35	-15.022	3.085	0	-0.01
	5.472	-9.493	0	-8.673	-17.515	0	-3.033	0
6	0	-15.323	13.937	-10.084	-19.775	0	-10.405	0
	0.608	-9.487	8.671	0	-1.414	0.957	0	0
	1.216	-4.843	1.353	0	-2.486	9.661	0	-0.01
	1.824	-4.516	0.031	0	-4.869	12.303	0	-0.01
	2.432	-4.497	0.031	0	-6.988	13.015	0	-0.01
	3.04	-4.491	0	-0.027	-8.808	12.153	0	-0.01
	3.648	-4.507	0	-0.027	-10.355	9.766	0	-0.01
	4.256	-4.523	0	-0.027	-12.41	7.575	0	-0.01
	4.864	-5.06	0	-1.414	-15.022	3.081	0	-0.01
	5.472	-9.585	0	-8.695	-17.516	0	-3.038	0
7	0	-15.437	14.026	-10.108	-19.776	0	-10.412	0
	0.608	-9.489	8.676	0	-1.311	0.887	0	0
	1.216	-4.843	1.351	0	-2.504	9.662	0	-0.01
	1.824	-4.477	0.102	0	-4.889	12.292	0	-0.01
	2.432	-4.497	0	-0.047	-7.01	12.989	0	-0.01
	3.04	-4.526	0	-0.047	-8.83	12.115	0	-0.01
	3.648	-4.554	0	-0.047	-10.353	10.065	0	-0.01
	4.256	-4.583	0	-0.047	-12.421	7.541	0	-0.01
	4.864	-4.692	0	-1.311	-15.038	3.026	0	-0.01
	5.472	-9.36	0	-8.83	-17.535	0	-3.118	0
8	0	-15.386	10.138	-13.945	-19.797	0	-10.515	0
	0.608	-9.533	8.74	0	-2.032	1.375	0	0
	1.216	-4.842	1.327	0	-2.75	9.679	0	-0.01
	1.824	-4.929	0	-0.736	-5.175	12.138	0	-0.01
	2.432	-5.378	0	-0.739	-7.318	12.636	0	-0.01
	3.04	-5.833	0	-0.789	-9.132	11.585	0	-0.01
	3.648	-6.313	0	-0.789	-10.604	9.472	0	-0.01
	4.256	-6.793	0	-0.789	-12.581	7.065	0	-0.01
	4.864	-7.273	0	-0.789	-15.255	2.248	0	-0.01
	5.472	-10.623	0	-9.132	-17.799	0	-4.225	0
9	0	-16.477	15.826	-9.833	-20.094	0	-11.94	0
	0.608	-10.135	9.63	0	-0.825	4.514	0	0
	1.216	-4.818	0.991	0	-1.687	8.203	0	0
	1.824	-4.216	0.991	0	-2.691	11.452	0	-0.01
	2.432	-3.614	0.991	0	-4.386	16	0	-0.01
	3.04	-3.012	0.991	0	-5.758	17.506	0	-0.01
	3.648	-2.409	0.991	0	-7.201	17.513	0	-0.01
	4.256	-1.807	0.991	0	-9.269	16.906	0	0
	4.864	-1.205	0.991	0	-11.855	14.416	0	0
	5.472	-0.602	0.991	0	-14.661	8.914	0	0
	6.08	0	0.991	-17.604	-17.604	0	0	0

Support    Reac. Pos    Reac. Negative



1	0.991	-17.635
2	1.593	-26.864
3	2.577	-25.455
4	1.715	-25.426
5	1.793	-25.352
6	1.793	-25.352
7	1.715	-25.426
8	2.577	-25.455
9	1.593	-26.864
10	0.991	-17.635

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.324	-1.498	21.324	0	0	0
	0.608	10.791	17.749	0	17.749	10.791	0	0.01
	1.216	17.444	14.345	-2.655	14.345	17.444	0	0.02
	1.824	20.451	11.212	-5.788	11.212	20.451	0	0.02
	2.432	21.234	8.731	-8.269	8.731	21.234	0	0.02
	3.04	21.149	6.957	-10.043	6.957	21.149	0	0.02
	3.648	19.251	5.277	-11.723	5.277	19.251	0	0.02
	4.256	16.348	2.819	-14.181	2.819	16.348	0	0.02
	4.864	11.218	0	-17.713	1.778	8.647	0	0.01
	5.472	4.856	0.887	-11.113	0.887	4.856	0	0.01
2	0	2.441	0.402	-2.008	22.582	0	-6.029	0
	0.608	4.17	10.637	-1.363	19.486	3.516	0	0.01
	1.216	10.643	16.245	-1.071	16.303	2.671	0	0.01
	1.824	15.02	13.04	-3.96	14.475	8.091	0	0.01
	2.432	16.647	10.018	-6.982	12.376	12.622	0	0.02
	3.04	15.835	7.265	-9.735	10.013	15.785	0	0.02
	3.648	16.917	7.312	-9.688	7.312	16.917	0	0.02
	4.256	15.539	4.32	-12.68	4.32	15.539	0	0.01
	4.864	11.345	1.127	-15.873	2.817	7.262	0	0.01
	5.472	5.057	1.185	-10.815	2.468	1.67	0	0.01
3	0	3.17	2.468	-0.661	22.672	0	-6.461	0
	0.608	6.068	10.554	-1.446	19.611	2.993	0	0.01
	1.216	11.677	15.64	-1.36	16.382	10.155	0	0.01
	1.824	15.696	12.49	-4.51	14.267	8.711	0	0.01
	2.432	16.974	9.573	-7.427	12.265	12.884	0	0.02
	3.04	15.877	6.975	-10.025	9.994	15.818	0	0.02
	3.648	16.852	7.369	-9.631	7.369	16.852	0	0.02
	4.256	15.481	4.427	-12.573	4.427	15.481	0	0.01
	4.864	11.354	1.259	-15.741	2.39	8.689	0	0.01
	5.472	5.072	1.206	-10.794	1.997	1.352	0	0.01
4	0	2.629	0.548	-2.047	22.678	0	-6.493	0
	0.608	5.054	10.797	-1.203	19.62	2.956	0	0.01
	1.216	11.378	15.724	-1.276	16.392	10.12	0	0.01
	1.824	15.492	12.559	-4.441	14.253	8.751	0	0.01
	2.432	16.856	9.623	-7.377	12.257	12.903	0	0.02
	3.04	15.825	7.005	-9.995	9.993	15.82	0	0.02
	3.648	16.847	7.373	-9.627	7.373	16.847	0	0.02
	4.256	15.476	4.435	-12.565	4.435	15.476	0	0.01
	4.864	11.355	1.269	-15.731	2.393	8.69	0	0.01
	5.472	5.073	1.208	-10.792	2.073	1.403	0	0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5	0	2.663	2.073	-0.555	22.679	0	-6.495	0
	0.608	5.072	10.792	-1.208	19.621	2.953	0	0.01
	1.216	11.356	15.73	-1.27	16.393	10.118	0	0.01
	1.824	15.477	12.564	-4.436	14.252	8.754	0	0.01
	2.432	16.847	9.626	-7.374	12.256	12.904	0	0.02
	3.04	15.821	7.007	-9.993	9.993	15.821	0	0.02
	3.648	16.847	7.374	-9.626	7.374	16.847	0	0.02
	4.256	15.477	4.436	-12.564	4.436	15.477	0	0.01
	4.864	11.356	1.27	-15.73	2.394	8.69	0	0.01
	5.472	5.072	1.208	-10.792	2.049	1.387	0	0.01
6	0	2.663	0.555	-2.073	22.683	0	-6.501	0
	0.608	5.073	10.792	-1.208	19.627	2.949	0	0.01
	1.216	11.355	15.731	-1.269	16.399	10.117	0	0.01
	1.824	15.476	12.565	-4.435	14.252	8.755	0	0.01
	2.432	16.847	9.627	-7.373	12.257	12.905	0	0.02
	3.04	15.825	9.995	-7.005	9.995	15.825	0	0.02
	3.648	16.856	7.377	-9.623	7.377	16.856	0	0.02
	4.256	15.492	4.441	-12.559	4.441	15.492	0	0.01
	4.864	11.378	1.276	-15.724	2.395	8.697	0	0.01
	5.472	5.054	1.203	-10.797	2.047	1.385	0	0.01
7	0	2.629	2.047	-0.548	22.745	0	-6.58	0
	0.608	5.072	10.794	-1.206	19.705	2.896	0	0.01
	1.216	11.354	15.741	-1.259	16.489	10.111	0	0.01
	1.824	15.481	12.573	-4.427	14.255	8.756	0	0.01
	2.432	16.852	9.631	-7.369	12.268	12.918	0	0.02
	3.04	15.877	10.025	-6.975	10.025	15.877	0	0.02
	3.648	16.974	7.427	-9.573	7.427	16.974	0	0.02
	4.256	15.696	4.51	-12.49	4.51	15.696	0	0.01
	4.864	11.677	1.36	-15.64	2.578	9.351	0	0.01
	5.472	6.068	1.446	-10.554	2.044	1.374	0	0.01
8	0	3.17	0.661	-2.468	22.474	0	-6.232	0
	0.608	5.057	10.815	-1.185	19.415	3.092	0	0.01
	1.216	11.345	15.873	-1.127	16.206	10.13	0	0.01
	1.824	15.539	12.68	-4.32	14.296	8.778	0	0.01
	2.432	16.917	9.688	-7.312	12.244	12.89	0	0.02
	3.04	15.835	9.735	-7.265	9.866	15.597	0	0.02
	3.648	16.647	6.982	-10.018	7.185	16.4	0	0.02
	4.256	15.02	3.96	-13.04	4.228	14.858	0	0.01
	4.864	10.643	1.071	-16.245	2.134	7.471	0	0.01
	5.472	4.17	1.363	-10.637	2.008	1.221	0	0.01
9	0	2.441	2.008	-0.402	24.164	0	-8.403	0
	0.608	4.856	11.113	-0.887	21.233	1.862	0	0.01
	1.216	11.218	17.713	0	17.962	10.009	0	0.01
	1.824	16.348	14.181	-2.819	14.865	9.085	0	0.02
	2.432	19.251	11.723	-5.277	13.174	13.957	0	0.02
	3.04	21.149	10.043	-6.957	11.136	17.827	0	0.02
	3.648	21.234	8.269	-8.731	8.743	20.082	0	0.02
	4.256	20.451	5.788	-11.212	6.433	19.274	0	0.02
	4.864	17.444	2.655	-14.345	4.553	15.135	0	0.02

## SECTION I

## CONSUS

## Section I Unit 8 Interior Strin

5.472	10.791	0	-17.749	2.632	8.735	0	0.01
6.08	0	1.498	-21.324	1.498	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.324	-1.498	-1.498	0	0	0
	0.608	-0.911	0	-1.498	-2.632	8.735	0	0
	1.216	-1.822	0	-1.498	-4.553	15.135	0	0
	1.824	-2.733	0	-1.498	-6.433	19.274	0	-0.01
	2.432	-3.644	0	-1.498	-8.743	20.082	0	-0.01
	3.04	-4.555	0	-1.498	-11.136	17.827	0	-0.01
	3.648	-5.467	0	-1.498	-13.174	13.957	0	-0.01
	4.256	-6.378	0	-1.498	-14.865	9.085	0	-0.01
	4.864	-7.289	0	-1.498	-17.962	10.009	0	-0.01
2	5.472	-10.073	0	-13.174	-21.233	1.862	0	0
	0	-18.312	14.475	-13.928	-24.164	0	-8.403	0
	0.608	-10.332	2.468	0	-2.008	1.221	0	-0.01
	1.216	-8.832	2.468	0	-2.134	7.471	0	-0.01
	1.824	-8.087	1.225	0	-4.228	14.858	0	-0.01
	2.432	-7.342	1.225	0	-7.185	16.4	0	-0.01
	3.04	-6.598	1.225	0	-9.866	15.597	0	-0.01
	3.648	-6.473	0	-0.357	-12.244	12.89	0	-0.01
	4.256	-6.69	0	-0.357	-14.296	8.778	0	-0.01
3	4.864	-7.324	0	-2.008	-16.206	10.13	0	-0.01
	5.472	-9.443	0	-12.244	-19.415	3.092	0	0
	0	-17.326	14.216	-13.203	-22.474	0	-6.232	0
	0.608	-9.487	12.265	0	-2.044	1.374	0	0
	1.216	-7.148	1.997	0	-2.578	9.351	0	-0.01
	1.824	-6.622	0.732	0	-4.51	15.696	0	-0.01
	2.432	-6.192	0.704	0	-7.427	16.974	0	-0.01
	3.04	-5.765	0.704	0	-10.025	15.877	0	-0.01
	3.648	-6.133	0	-0.645	-12.268	12.918	0	-0.01
4	4.256	-6.525	0	-0.645	-14.255	8.756	0	-0.01
	4.864	-7.326	0	-2.044	-16.489	10.111	0	-0.01
	5.472	-9.46	0	-12.268	-19.705	2.896	0	0
	0	-17.257	14.182	-13.167	-22.745	0	-6.58	0
	0.608	-9.454	12.257	0	-2.047	1.385	0	0
	1.216	-7.419	2.073	0	-2.395	8.697	0	-0.01
	1.824	-6.521	0.67	0	-4.441	15.492	0	-0.01
	2.432	-6.113	0.67	0	-7.377	16.856	0	-0.01
	3.04	-5.706	0.67	0	-9.995	15.825	0	-0.01
5	3.648	-6.109	0	-0.666	-12.257	12.905	0	-0.01
	4.256	-6.514	0	-0.666	-14.252	8.755	0	-0.01
	4.864	-7.327	0	-2.047	-16.399	10.117	0	-0.01
	5.472	-9.452	0	-12.257	-19.627	2.949	0	0
	0	-17.252	14.181	-13.163	-22.683	0	-6.501	0
	0.608	-9.451	12.256	0	-2.049	1.387	0	0
	1.216	-7.333	2.049	0	-2.394	8.69	0	-0.01
	1.824	-6.514	0.668	0	-4.436	15.477	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

	2.432	-6.108	0.668	0	-7.374	16.847	0	-0.01
	3.04	-5.702	0.668	0	-9.993	15.821	0	-0.01
	3.648	-6.108	0	-0.668	-12.256	12.904	0	-0.01
	4.256	-6.514	0	-0.668	-14.252	8.754	0	-0.01
	4.864	-7.333	0	-2.049	-16.393	10.118	0	-0.01
	5.472	-9.451	0	-12.256	-19.621	2.953	0	0
6	0	-17.252	13.163	-14.181	-22.679	0	-6.495	0
	0.608	-9.452	12.257	0	-2.073	1.403	0	0
	1.216	-7.327	2.047	0	-2.393	8.69	0	-0.01
	1.824	-6.514	0.666	0	-4.435	15.476	0	-0.01
	2.432	-6.109	0.666	0	-7.373	16.847	0	-0.01
	3.04	-5.706	0	-0.67	-9.993	15.82	0	-0.01
	3.648	-6.113	0	-0.67	-12.257	12.903	0	-0.01
	4.256	-6.521	0	-0.67	-14.253	8.751	0	-0.01
	4.864	-7.419	0	-2.073	-16.392	10.12	0	-0.01
	5.472	-9.454	0	-12.257	-19.62	2.956	0	0
7	0	-17.257	13.167	-14.182	-22.678	0	-6.493	0
	0.608	-9.46	12.268	0	-1.997	1.352	0	0
	1.216	-7.326	2.044	0	-2.39	8.689	0	-0.01
	1.824	-6.525	0.645	0	-4.427	15.481	0	-0.01
	2.432	-6.133	0.645	0	-7.369	16.852	0	-0.01
	3.04	-5.765	0	-0.704	-9.994	15.818	0	-0.01
	3.648	-6.192	0	-0.704	-12.265	12.884	0	-0.01
	4.256	-6.622	0	-0.732	-14.267	8.711	0	-0.01
	4.864	-7.148	0	-1.997	-16.382	10.155	0	-0.01
	5.472	-9.487	0	-12.265	-19.611	2.993	0	0
8	0	-17.326	13.203	-14.216	-22.672	0	-6.461	0
	0.608	-9.443	12.244	0	-2.468	1.67	0	0
	1.216	-7.324	2.008	0	-2.817	7.262	0	-0.01
	1.824	-6.69	0.357	0	-4.32	15.539	0	-0.01
	2.432	-6.473	0.357	0	-7.312	16.917	0	-0.01
	3.04	-6.598	0	-1.225	-10.013	15.785	0	-0.01
	3.648	-7.342	0	-1.225	-12.376	12.622	0	-0.01
	4.256	-8.087	0	-1.225	-14.475	8.091	0	-0.01
	4.864	-8.832	0	-2.468	-16.303	2.671	0	-0.01
	5.472	-10.332	0	-2.468	-19.486	3.516	0	-0.01
9	0	-18.312	13.928	-14.475	-22.581	0	-6.029	0
	0.608	-10.073	13.174	0	-0.887	4.856	0	0
	1.216	-7.289	1.498	0	-1.778	8.647	0	-0.01
	1.824	-6.378	1.498	0	-2.819	16.348	0	-0.01
	2.432	-5.467	1.498	0	-5.277	19.251	0	-0.01
	3.04	-4.555	1.498	0	-6.957	21.149	0	-0.01
	3.648	-3.644	1.498	0	-8.731	21.234	0	-0.01
	4.256	-2.733	1.498	0	-11.212	20.451	0	-0.01
	4.864	-1.822	1.498	0	-14.345	17.444	0	0
	5.472	-0.911	1.498	0	-17.749	10.791	0	0
	6.08	0	1.498	-21.324	-21.324	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.498	-21.361
2	2.409	-28.464
3	3.129	-27.419
4	2.595	-27.352
5	2.628	-27.346
6	2.628	-27.346
7	2.595	-27.352
8	3.129	-27.419
9	2.409	-28.464
10	1.498	-21.361

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	19.975	-1.589	19.975	0	0	0
	0.608	10.621	17.469	-2.531	17.469	10.621	0	0.01
	1.216	18.205	14.971	-5.029	14.971	18.205	0	0.02
	1.824	22.867	12.537	-7.463	12.537	22.867	0	0.02
	2.432	24.93	10.251	-9.749	10.251	24.93	0	0.03
	3.04	24.709	8.128	-11.872	8.128	24.709	0	0.03
	3.648	22.365	6.131	-13.869	6.131	22.365	0	0.03
	4.256	18.287	4.297	-15.703	4.297	18.287	0	0.02
	4.864	12.956	2.664	-17.336	2.664	12.956	0	0.01
	5.472	6.944	1.269	-18.731	1.269	6.944	0	0.01
2	0	2.589	0.426	-2.129	19.986	0	-0.056	0
	0.608	6.838	17.914	-2.086	18.451	6.511	0	0.01
	1.216	12.452	16.578	-3.733	16.578	12.452	0	0.01
	1.824	17.137	14.466	-5.534	14.466	17.137	0	0.02
	2.432	20.168	12.266	-7.734	12.266	20.168	0	0.02
	3.04	21.353	10.04	-9.96	10.04	21.353	0	0.02
	3.648	20.475	7.779	-12.221	7.779	20.475	0	0.02
	4.256	17.599	5.573	-14.427	5.573	17.599	0	0.02
	4.864	13.015	3.514	-16.486	3.752	12.038	0	0.01
	5.472	7.231	1.693	-18.307	2.609	1.766	0	0.01
3	0	3.352	2.609	-0.699	19.704	1.297	0	0
	0.608	7.592	18.193	-1.807	18.193	7.592	0	0.01
	1.216	13.29	16.344	-3.656	16.377	12.059	0	0.01
	1.824	17.737	14.264	-5.736	14.502	16.67	0	0.02
	2.432	20.444	12.045	-7.955	12.41	19.826	0	0.02
	3.04	21.149	9.781	-10.219	10.177	21.112	0	0.02
	3.648	20.339	7.897	-12.103	7.897	20.339	0	0.02
	4.256	17.55	5.665	-14.335	5.665	17.55	0	0.02
	4.864	13.019	3.575	-16.425	3.624	12.029	0	0.01
	5.472	7.252	1.724	-18.276	2.185	1.479	0	0.01
4	0	2.807	2.185	-0.585	19.776	0.954	0	0
	0.608	7.278	18.268	-1.732	18.268	7.278	0	0.01
	1.216	13.039	16.414	-3.586	16.414	13.039	0	0.01
	1.824	17.56	14.323	-5.677	14.512	16.641	0	0.02
	2.432	20.337	12.09	-7.91	12.421	19.802	0	0.02
	3.04	21.097	9.81	-10.19	10.187	21.095	0	0.02
	3.648	20.329	7.906	-12.094	7.906	20.329	0	0.02
	4.256	17.546	5.671	-14.329	5.671	17.546	0	0.02
	4.864	13.02	3.58	-16.42	3.615	12.029	0	0.01
	5.472	7.254	1.726	-18.274	2.175	1.472	0	0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5	0	2.794	2.175	-0.583	19.781	0.929	0	0
	0.608	7.255	18.273	-1.727	18.273	7.255	0	0.01
	1.216	13.021	16.419	-3.581	16.419	13.021	0	0.01
	1.824	17.547	14.328	-5.672	14.513	16.639	0	0.02
	2.432	20.329	12.093	-7.907	12.422	19.8	0	0.02
	3.04	21.094	9.812	-10.188	10.188	21.094	0	0.02
	3.648	20.329	7.907	-12.093	7.907	20.329	0	0.02
	4.256	17.547	5.672	-14.328	5.672	17.547	0	0.02
	4.864	13.021	3.581	-16.419	3.615	12.029	0	0.01
	5.472	7.255	1.727	-18.273	2.171	1.469	0	0.01
6	0	2.794	0.583	-2.175	19.781	0.927	0	0
	0.608	7.254	18.274	-1.726	18.274	7.254	0	0.01
	1.216	13.02	16.42	-3.58	16.42	13.02	0	0.01
	1.824	17.546	14.329	-5.671	14.513	16.639	0	0.02
	2.432	20.329	12.094	-7.906	12.423	19.801	0	0.02
	3.04	21.097	10.19	-9.81	10.19	21.097	0	0.02
	3.648	20.337	7.91	-12.09	7.91	20.337	0	0.02
	4.256	17.56	5.677	-14.323	5.677	17.56	0	0.02
	4.864	13.039	3.586	-16.414	3.615	12.031	0	0.01
	5.472	7.278	1.732	-18.268	2.171	1.468	0	0.01
7	0	2.807	0.585	-2.185	19.782	0.927	0	0
	0.608	7.252	18.276	-1.724	18.276	7.252	0	0.01
	1.216	13.019	16.425	-3.575	16.425	13.019	0	0.01
	1.824	17.55	14.335	-5.665	14.513	16.639	0	0.02
	2.432	20.339	12.103	-7.897	12.436	19.817	0	0.02
	3.04	21.149	10.219	-9.781	10.219	21.149	0	0.02
	3.648	20.444	7.955	-12.045	7.955	20.444	0	0.02
	4.256	17.737	5.736	-14.264	5.736	17.737	0	0.02
	4.864	13.29	3.656	-16.344	3.656	13.29	0	0.01
	5.472	7.592	1.807	-18.193	2.168	1.457	0	0.01
8	0	3.352	0.699	-2.609	19.786	0.922	0	0
	0.608	7.231	18.307	-1.693	18.307	7.231	0	0.01
	1.216	13.015	16.486	-3.514	16.486	13.015	0	0.01
	1.824	17.599	14.427	-5.573	14.521	16.643	0	0.02
	2.432	20.475	12.221	-7.779	12.474	19.86	0	0.02
	3.04	21.353	9.96	-10.04	10.144	21.017	0	0.02
	3.648	20.168	7.734	-12.266	7.803	20.084	0	0.02
	4.256	17.137	5.534	-14.466	5.634	17.076	0	0.02
	4.864	12.452	3.733	-16.578	3.733	12.452	0	0.01
	5.472	6.838	2.086	-17.914	2.129	1.294	0	0.01
9	0	2.589	2.129	-0.426	19.991	0	-0.065	0
	0.608	6.944	18.731	-1.269	18.916	5.93	0	0.01
	1.216	12.956	17.336	-2.664	17.543	11.949	0	0.01
	1.824	18.287	15.703	-4.297	15.913	17.394	0	0.02
	2.432	22.365	13.869	-6.131	14.058	21.677	0	0.03
	3.04	24.709	11.872	-8.128	12.01	24.291	0	0.03
	3.648	24.93	9.749	-10.251	9.801	24.805	0	0.03
	4.256	22.867	7.463	-12.537	7.538	22.731	0	0.02
	4.864	18.205	5.029	-14.971	5.261	17.922	0	0.02



## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5.472	10.621	2.531	-17.469	2.932	10.377	0	0.01
6.08	0	1.589	-19.975	1.589	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.975	-1.589	-1.589	0	0	0
	0.608	-0.966	0	-1.589	-2.932	10.377	0	0
	1.216	-1.932	0	-1.589	-5.261	17.922	0	0
	1.824	-2.899	0	-1.589	-7.538	22.731	0	-0.01
	2.432	-3.865	0	-1.589	-9.801	24.805	0	-0.01
	3.04	-4.831	0	-1.589	-12.01	24.291	0	-0.01
	3.648	-5.797	0	-1.589	-14.058	21.677	0	-0.01
	4.256	-6.763	0	-1.589	-15.913	17.394	0	-0.01
	4.864	-7.73	0	-1.589	-17.543	11.949	0	-0.01
2	5.472	-8.696	0	-1.589	-18.916	5.93	0	0
	0	-12.512	2.609	-14.058	-19.991	0	-0.065	0
	0.608	-10.925	2.609	0	-2.129	1.294	0	-0.01
	1.216	-9.34	1.761	0	-3.733	12.452	0	-0.01
	1.824	-8.326	1.666	0	-5.634	17.076	0	-0.01
	2.432	-7.313	1.666	0	-7.803	20.084	0	-0.01
	3.04	-6.318	1.522	0	-10.144	21.017	0	-0.01
	3.648	-6.499	0	-0.887	-12.474	19.86	0	-0.01
	4.256	-7.038	0	-0.887	-14.521	16.643	0	-0.01
3	4.864	-7.767	0	-2.129	-16.486	13.015	0	-0.01
	5.472	-9.061	0	-2.129	-18.307	7.231	0	0
	0	-10.477	2.185	-12.474	-19.786	0.922	0	0
	0.608	-9.148	2.185	0	-2.168	1.457	0	0
	1.216	-7.82	2.185	0	-3.656	13.29	0	-0.01
	1.824	-7.014	1.224	0	-5.736	17.737	0	-0.01
	2.432	-6.323	1.133	0	-7.955	20.444	0	-0.01
	3.04	-5.635	1.133	0	-10.219	21.149	0	-0.01
	3.648	-6.27	0	-1.087	-12.436	19.817	0	-0.01
4	4.256	-6.931	0	-1.087	-14.513	16.639	0	-0.01
	4.864	-7.769	0	-2.168	-16.425	13.019	0	-0.01
	5.472	-9.087	0	-2.168	-18.276	7.252	0	0
	0	-10.428	2.175	-12.436	-19.782	0.927	0	0
	0.608	-9.106	2.175	0	-2.171	1.468	0	0
	1.216	-7.784	2.175	0	-3.615	12.031	0	-0.01
	1.824	-6.929	1.105	0	-5.677	17.56	0	-0.01
	2.432	-6.257	1.105	0	-7.91	20.337	0	-0.01
	3.04	-5.586	1.105	0	-10.19	21.097	0	-0.01
5	3.648	-6.254	0	-1.101	-12.423	19.801	0	-0.01
	4.256	-6.923	0	-1.101	-14.513	16.639	0	-0.01
	4.864	-7.77	0	-2.171	-16.42	13.02	0	-0.01
	5.472	-9.089	0	-2.171	-18.274	7.254	0	0
	0	-10.411	2.171	-12.423	-19.781	0.927	0	0
	0.608	-9.091	2.171	0	-2.171	1.469	0	0
	1.216	-7.771	2.171	0	-3.615	12.029	0	-0.01
	1.824	-6.923	1.103	0	-5.672	17.547	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

	2.432	-6.253	1.103	0	-7.907	20.329	0	-0.01
	3.04	-5.582	1.103	0	-10.188	21.094	0	-0.01
	3.648	-6.253	0	-1.103	-12.422	19.8	0	-0.01
	4.256	-6.923	0	-1.103	-14.513	16.639	0	-0.01
	4.864	-7.771	0	-2.171	-16.419	13.021	0	-0.01
	5.472	-9.091	0	-2.171	-18.273	7.255	0	0
6	0	-10.411	12.423	-2.171	-19.781	0.929	0	0
	0.608	-9.089	2.171	0	-2.175	1.472	0	0
	1.216	-7.77	2.171	0	-3.615	12.029	0	-0.01
	1.824	-6.923	1.101	0	-5.671	17.546	0	-0.01
	2.432	-6.254	1.101	0	-7.906	20.329	0	-0.01
	3.04	-5.586	0	-1.105	-10.187	21.095	0	-0.01
	3.648	-6.257	0	-1.105	-12.421	19.802	0	-0.01
	4.256	-6.929	0	-1.105	-14.512	16.641	0	-0.01
	4.864	-7.784	0	-2.175	-16.414	13.039	0	-0.01
	5.472	-9.106	0	-2.175	-18.268	7.278	0	0
7	0	-10.428	12.436	-2.175	-19.776	0.954	0	0
	0.608	-9.087	2.168	0	-2.185	1.479	0	0
	1.216	-7.769	2.168	0	-3.624	12.029	0	-0.01
	1.824	-6.931	1.087	0	-5.665	17.55	0	-0.01
	2.432	-6.27	1.087	0	-7.897	20.339	0	-0.01
	3.04	-5.635	0	-1.133	-10.177	21.112	0	-0.01
	3.648	-6.323	0	-1.133	-12.41	19.826	0	-0.01
	4.256	-7.014	0	-1.224	-14.502	16.67	0	-0.01
	4.864	-7.82	0	-2.185	-16.377	12.059	0	-0.01
	5.472	-9.148	0	-2.185	-18.193	7.592	0	0
8	0	-10.477	12.474	-2.185	-19.704	1.297	0	0
	0.608	-9.061	2.129	0	-2.609	1.766	0	0
	1.216	-7.767	2.129	0	-3.752	12.038	0	-0.01
	1.824	-7.038	0.887	0	-5.573	17.599	0	-0.01
	2.432	-6.499	0.887	0	-7.779	20.475	0	-0.01
	3.04	-6.318	0	-1.522	-10.04	21.353	0	-0.01
	3.648	-7.313	0	-1.666	-12.266	20.168	0	-0.01
	4.256	-8.326	0	-1.666	-14.466	17.137	0	-0.01
	4.864	-9.34	0	-1.761	-16.578	12.452	0	-0.01
	5.472	-10.925	0	-2.609	-18.451	6.511	0	-0.01
9	0	-12.512	14.058	-2.609	-19.986	0	-0.056	0
	0.608	-8.696	1.589	0	-1.269	6.944	0	0
	1.216	-7.73	1.589	0	-2.664	12.956	0	-0.01
	1.824	-6.763	1.589	0	-4.297	18.287	0	-0.01
	2.432	-5.797	1.589	0	-6.131	22.365	0	-0.01
	3.04	-4.831	1.589	0	-8.128	24.709	0	-0.01
	3.648	-3.865	1.589	0	-10.251	24.93	0	-0.01
	4.256	-2.899	1.589	0	-12.537	22.867	0	-0.01
	4.864	-1.932	1.589	0	-14.971	18.205	0	0
	5.472	-0.966	1.589	0	-17.469	10.621	0	0
	6.08	0	1.589	-19.975	-19.975	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.589	-20
2	2.555	-20.078
3	3.308	-19.036
4	2.77	-19.046
5	2.757	-19.047
6	2.757	-19.047
7	2.77	-19.046
8	3.308	-19.036
9	2.555	-20.078
10	1.589	-20

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	32.623	-2.634	32.623	0	0	0
	0.608	17.409	28.633	-3.367	28.633	17.409	0	0.01
	1.216	29.898	24.587	-7.413	24.587	29.898	0	0.03
	1.824	37.563	20.594	-11.406	20.594	37.563	0	0.04
	2.432	40.67	16.723	-15.277	16.723	40.67	0	0.04
	3.04	39.655	13.045	-18.955	13.045	39.655	0	0.04
	3.648	35.116	9.626	-22.374	9.626	35.116	0	0.04
	4.256	27.83	6.539	-25.461	6.539	27.83	0	0.03
	4.864	19.118	3.931	-28.069	3.931	19.118	0	0.02
	5.472	9.487	1.734	-30.266	1.734	9.487	0	0.01
2	0	4.291	0.706	-3.529	32.868	0	-1.172	0
	0.608	10.418	29.522	-2.478	30.436	9.862	0	0.01
	1.216	19.923	27.374	-5.474	27.374	19.923	0	0.02
	1.824	27.854	23.861	-8.139	23.861	27.854	0	0.03
	2.432	32.793	20.056	-11.944	20.056	32.793	0	0.03
	3.04	34.262	16.117	-15.883	16.117	34.262	0	0.03
	3.648	32.162	12.201	-19.799	12.201	32.162	0	0.03
	4.256	26.79	8.467	-23.533	8.467	26.79	0	0.03
	4.864	19.204	5.179	-26.821	5.179	19.204	0	0.02
	5.472	9.879	2.312	-29.688	4.175	2.826	0	0.01
3	0	6.311	3.601	-2.626	32.885	0	-1.256	0
	0.608	9.945	29.635	-2.365	30.565	9.32	0	0.01
	1.216	19.262	26.71	-5.29	27.574	19.207	0	0.02
	1.824	27.157	24.096	-7.904	24.096	27.157	0	0.03
	2.432	32.415	19.601	-12.399	20.295	32.227	0	0.03
	3.04	34.377	15.52	-16.48	16.336	33.871	0	0.03
	3.648	32.569	11.475	-20.525	12.382	31.942	0	0.03
	4.256	27.241	7.631	-24.369	8.597	26.691	0	0.03
	4.864	19.135	4.178	-27.822	5.14	18.75	0	0.02
	5.472	9.149	1.234	-30.766	3.496	2.366	0	0.01
4	0	5.892	3.276	-2.539	32.943	0	-1.58	0
	0.608	9.281	30.575	-1.425	30.621	9.05	0	0.01
	1.216	19.155	27.589	-4.411	27.616	19.034	0	0.02
	1.824	27.108	24.113	-7.887	24.113	27.108	0	0.03
	2.432	32.288	20.27	-11.73	20.312	32.187	0	0.03
	3.04	34.028	15.718	-16.282	16.351	33.843	0	0.03
	3.648	32.3	11.709	-20.291	12.395	31.926	0	0.03
	4.256	27.112	7.87	-24.13	8.606	26.684	0	0.03
	4.864	19.151	4.4	-27.6	5.146	18.747	0	0.02
	5.472	9.275	1.42	-30.58	3.662	2.478	0	0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5	0	5.895	3.297	-2.52	32.935	0	-1.537	0
	0.608	9.275	30.58	-1.42	30.617	9.072	0	0.01
	1.216	19.151	27.594	-4.406	27.616	19.04	0	0.02
	1.824	27.106	24.117	-7.883	24.117	27.106	0	0.03
	2.432	32.282	20.274	-11.726	20.315	32.185	0	0.03
	3.04	34.003	16.267	-16.267	16.356	33.847	0	0.03
	3.648	32.282	11.726	-20.274	12.4	31.936	0	0.03
	4.256	27.106	7.883	-24.117	8.612	26.699	0	0.03
	4.864	19.151	4.406	-27.594	5.151	18.764	0	0.02
	5.472	9.275	1.42	-30.58	3.599	2.436	0	0.01
6	0	5.895	2.52	-3.297	32.944	0	-1.546	0
	0.608	9.275	30.58	-1.42	30.63	9.065	0	0.01
	1.216	19.151	27.6	-4.4	27.631	19.04	0	0.02
	1.824	27.112	24.13	-7.87	24.131	27.109	0	0.03
	2.432	32.3	20.291	-11.709	20.332	32.204	0	0.03
	3.04	34.028	16.282	-15.718	16.37	33.872	0	0.03
	3.648	32.288	11.73	-20.27	12.41	31.957	0	0.03
	4.256	27.108	7.887	-24.113	8.613	26.701	0	0.03
	4.864	19.155	4.411	-27.589	5.14	18.726	0	0.02
	5.472	9.281	1.425	-30.575	3.598	2.434	0	0.01
7	0	5.892	2.539	-3.276	33.084	0	-1.726	0
	0.608	9.149	30.766	-1.234	30.816	8.939	0	0.01
	1.216	19.135	27.822	-4.178	27.853	19.024	0	0.02
	1.824	27.241	24.369	-7.631	24.37	27.238	0	0.03
	2.432	32.569	20.525	-11.475	20.566	32.473	0	0.03
	3.04	34.377	16.48	-15.52	16.569	34.221	0	0.03
	3.648	32.415	12.399	-19.601	12.536	32.257	0	0.03
	4.256	27.157	7.904	-24.096	8.633	26.761	0	0.03
	4.864	19.262	5.29	-26.71	5.29	19.262	0	0.02
	5.472	9.945	2.365	-29.635	3.593	2.414	0	0.01
8	0	6.311	2.626	-3.601	32.218	0	-1.255	0
	0.608	9.879	29.688	-2.312	29.889	9.025	0	0.01
	1.216	19.204	26.821	-5.179	26.947	18.744	0	0.02
	1.824	26.79	23.533	-8.467	23.541	26.766	0	0.03
	2.432	32.162	19.799	-12.201	19.958	31.776	0	0.03
	3.04	34.262	15.883	-16.117	16.231	33.627	0	0.03
	3.648	32.793	11.944	-20.056	12.485	32.135	0	0.03
	4.256	27.854	8.139	-23.861	8.855	27.419	0	0.03
	4.864	19.923	5.474	-27.374	5.474	19.923	0	0.02
	5.472	10.418	2.478	-29.522	3.529	2.145	0	0.01
9	0	4.291	3.529	-0.706	32.163	0	-1.184	0
	0.608	9.487	30.266	-1.734	30.416	8.668	0	0.01
	1.216	19.118	28.069	-3.931	28.163	18.661	0	0.02
	1.824	27.83	25.461	-6.539	25.467	27.804	0	0.03
	2.432	35.116	22.374	-9.626	22.493	34.683	0	0.04
	3.04	39.655	18.955	-13.045	19.215	38.865	0	0.04
	3.648	40.67	15.277	-16.723	15.681	39.688	0	0.04
	4.256	37.563	11.406	-20.594	11.941	36.588	0	0.04
	4.864	29.898	7.413	-24.587	8.046	29.128	0	0.03

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5.472	17.409	3.367	-28.633	4.049	16.994	0	0.01
6.08	0	2.634	-32.623	2.634	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	32.623	-2.634	-2.634	0	0	0
	0.608	-1.601	0	-2.634	-4.049	16.994	0	0
	1.216	-3.203	0	-2.634	-8.046	29.128	0	-0.01
	1.824	-4.804	0	-2.634	-11.941	36.588	0	-0.01
	2.432	-6.405	0	-2.634	-15.681	39.688	0	-0.01
	3.04	-8.007	0	-2.634	-19.215	38.865	0	-0.02
	3.648	-9.608	0	-2.634	-22.493	34.683	0	-0.02
	4.256	-11.21	0	-2.634	-25.467	27.804	0	-0.01
	4.864	-12.811	0	-2.634	-28.163	18.661	0	-0.01
2	5.472	-14.412	0	-2.634	-30.416	8.668	0	-0.01
	0	-20.019	4.175	-22.493	-32.163	0	-1.184	0
	0.608	-17.48	4.175	0	-3.529	2.145	0	-0.01
	1.216	-14.957	3.563	0	-5.474	19.923	0	-0.01
	1.824	-12.904	2.777	0	-8.855	27.419	0	-0.02
	2.432	-11.221	2.751	0	-12.485	32.135	0	-0.02
	3.04	-10.11	1.554	0	-16.231	33.627	0	-0.02
	3.648	-10.096	0	-1.079	-19.958	31.776	0	-0.02
	4.256	-10.95	0	-2.335	-23.541	26.766	0	-0.02
3	4.864	-12.872	0	-3.529	-26.947	18.744	0	-0.01
	5.472	-15.018	0	-3.529	-29.889	9.025	0	-0.01
	0	-17.163	20.54	-3.529	-32.218	0	-1.255	0
	0.608	-14.637	3.496	0	-3.593	2.414	0	-0.01
	1.216	-12.512	3.496	0	-5.29	19.262	0	-0.01
	1.824	-10.72	2.872	0	-8.633	26.761	0	-0.01
	2.432	-9.269	1.954	0	-12.536	32.257	0	-0.02
	3.04	-8.548	0	-0.581	-16.569	34.221	0	-0.02
	3.648	-9.242	0	-1.886	-20.566	32.473	0	-0.02
4	4.256	-10.764	0	-3.435	-24.37	27.238	0	-0.01
	4.864	-12.877	0	-3.593	-27.853	19.024	0	-0.01
	5.472	-15.061	0	-3.593	-30.816	8.939	0	-0.01
	0	-17.559	3.662	-20.669	-33.084	0	-1.726	0
	0.608	-15.332	3.662	0	-3.598	2.434	0	-0.01
	1.216	-13.106	3.662	0	-5.14	18.726	0	-0.01
	1.824	-10.959	3.515	0	-8.613	26.701	0	-0.01
	2.432	-9.219	1.961	0	-12.41	31.957	0	-0.02
	3.04	-8.452	0.661	0	-16.37	33.872	0	-0.02
5	3.648	-9.181	0	-1.939	-20.332	32.204	0	-0.02
	4.256	-10.759	0	-3.447	-24.131	27.109	0	-0.01
	4.864	-12.878	0	-3.598	-27.631	19.04	0	-0.01
	5.472	-15.066	0	-3.598	-30.63	9.065	0	-0.01
	0	-17.257	3.599	-20.435	-32.944	0	-1.546	0
	0.608	-15.069	3.599	0	-3.599	2.436	0	-0.01
	1.216	-12.881	3.599	0	-5.151	18.764	0	-0.01
	1.824	-10.772	3.452	0	-8.612	26.699	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

	2.432	-9.18	1.944	0	-12.4	31.936	0	-0.02
	3.04	-8.431	0	-0.649	-16.356	33.847	0	-0.02
	3.648	-9.18	0	-1.944	-20.315	32.185	0	-0.02
	4.256	-10.772	0	-3.452	-24.117	27.106	0	-0.01
	4.864	-12.881	0	-3.599	-27.616	19.04	0	-0.01
	5.472	-15.069	0	-3.599	-30.617	9.072	0	-0.01
6	0	-17.257	20.435	-3.599	-32.935	0	-1.537	0
	0.608	-15.066	3.598	0	-3.662	2.478	0	-0.01
	1.216	-12.878	3.598	0	-5.146	18.747	0	-0.01
	1.824	-10.759	3.447	0	-8.607	26.684	0	-0.01
	2.432	-9.181	1.939	0	-12.395	31.926	0	-0.02
	3.04	-8.452	0	-0.661	-16.351	33.843	0	-0.02
	3.648	-9.219	0	-1.961	-20.312	32.187	0	-0.02
	4.256	-10.959	0	-3.515	-24.113	27.108	0	-0.01
	4.864	-13.106	0	-3.662	-27.616	19.034	0	-0.01
	5.472	-15.332	0	-3.662	-30.621	9.05	0	-0.01
7	0	-17.559	20.669	-3.662	-32.943	0	-1.58	0
	0.608	-15.061	3.593	0	-3.496	2.366	0	-0.01
	1.216	-12.877	3.593	0	-5.14	18.75	0	-0.01
	1.824	-10.764	3.435	0	-8.597	26.691	0	-0.01
	2.432	-9.242	1.886	0	-12.382	31.942	0	-0.02
	3.04	-8.548	0.581	0	-16.336	33.871	0	-0.02
	3.648	-9.269	0	-1.954	-20.295	32.227	0	-0.02
	4.256	-10.72	0	-2.872	-24.096	27.157	0	-0.01
	4.864	-12.512	0	-3.496	-27.574	19.207	0	-0.01
	5.472	-14.637	0	-3.496	-30.565	9.32	0	-0.01
8	0	-17.163	3.529	-20.54	-32.885	0	-1.256	0
	0.608	-15.018	3.529	0	-4.175	2.826	0	-0.01
	1.216	-12.872	3.529	0	-5.179	19.204	0	-0.01
	1.824	-10.95	2.335	0	-8.467	26.79	0	-0.02
	2.432	-10.096	1.079	0	-12.201	32.162	0	-0.02
	3.04	-10.11	0	-1.554	-16.117	34.262	0	-0.02
	3.648	-11.221	0	-2.751	-20.056	32.793	0	-0.02
	4.256	-12.904	0	-2.777	-23.861	27.854	0	-0.02
	4.864	-14.957	0	-3.563	-27.374	19.923	0	-0.01
	5.472	-17.48	0	-4.175	-30.436	9.862	0	-0.01
9	0	-20.019	22.493	-4.175	-32.868	0	-1.172	0
	0.608	-14.412	2.634	0	-1.734	9.487	0	-0.01
	1.216	-12.811	2.634	0	-3.931	19.118	0	-0.01
	1.824	-11.21	2.634	0	-6.539	27.83	0	-0.01
	2.432	-9.608	2.634	0	-9.626	35.116	0	-0.02
	3.04	-8.007	2.634	0	-13.045	39.655	0	-0.02
	3.648	-6.405	2.634	0	-16.723	40.67	0	-0.01
	4.256	-4.804	2.634	0	-20.594	37.563	0	-0.01
	4.864	-3.203	2.634	0	-24.587	29.898	0	-0.01
	5.472	-1.601	2.634	0	-28.633	17.409	0	0
	6.08	0	2.634	-32.623	-32.623	0	0	0

Support    Reac. Pos    Reac. Negative

1	2.634	-32.663
2	4.234	-33.096
3	6.228	-33.143
4	5.815	-33.609
5	5.817	-33.431
6	5.817	-33.431
7	5.815	-33.609
8	6.228	-33.143
9	4.234	-33.096
10	2.634	-32.663



Id	HS20 Lane Load	
Type	Lane Load	
Factors:	Moment	1
	Shear	1
	Deflection	1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	27.707	-2.253	27.707	0	0	0
	0.608	10.499	17.073	-0.927	24.086	14.644	0	0.01
	1.216	18.027	14.435	-3.565	20.522	24.955	0	0.02
	1.824	22.689	11.856	-6.144	17.09	31.173	0	0.02
	2.432	24.663	9.363	-8.637	13.83	33.636	0	0.03
	3.04	24.194	6.986	-11.014	10.782	32.777	0	0.03
	3.648	21.598	4.753	-13.247	7.984	29.126	0	0.03
	4.256	17.263	2.694	-15.306	5.475	23.301	0	0.02
	4.864	11.652	1.058	-16.942	3.292	16.014	0	0.01
	5.472	5.76	0.685	-17.315	1.473	8.063	0	0.01
2	0	2.644	0.435	-2.175	28.368	0	-2.575	0
	0.608	6.188	16.96	-1.04	25.943	6.868	-1.596	0.01
	1.216	11.916	16.069	-1.931	23.167	15.489	-0.698	0.01
	1.824	16.758	13.852	-4.148	20.118	22.177	-0.101	0.02
	2.432	19.799	11.421	-6.579	16.909	26.361	0	0.02
	3.04	20.789	8.925	-9.075	13.651	27.742	0	0.02
	3.648	19.664	6.439	-11.561	10.453	26.293	0	0.02
	4.256	16.538	4.039	-13.961	7.424	22.25	0	0.02
	4.864	11.738	2.194	-15.806	4.67	16.109	0	0.01
	5.472	6.231	1.068	-16.932	3.809	2.889	0	0.01
3	0	3.801	2.753	-0.998	28.672	0	-1.91	0
	0.608	6.293	16.935	-1.065	25.987	6.681	-1.4	0.01
	1.216	11.819	15.767	-2.233	23.268	15.126	-0.524	0.01
	1.824	16.595	13.907	-4.093	20.247	21.794	0	0.02
	2.432	19.659	11.48	-6.52	17.041	26.048	0	0.02
	3.04	20.701	8.976	-9.024	13.768	27.536	0	0.02
	3.648	19.627	6.472	-11.528	10.542	26.191	0	0.02
	4.256	16.534	4.048	-13.952	7.476	22.223	0	0.02
	4.864	11.738	2.196	-15.804	4.681	16.11	0	0.01
	5.472	6.206	1.03	-16.97	3.194	2.473	0	0.01
4	0	3.229	2.307	-0.879	28.629	0	-2.09	0
	0.608	6.202	16.956	-1.044	26.014	6.568	-1.485	0.01
	1.216	11.727	15.791	-2.209	23.299	15.015	-0.597	0.01
	1.824	16.513	13.935	-4.065	20.28	21.696	-0.008	0.02
	2.432	19.593	11.508	-6.492	17.075	25.969	0	0.02
	3.04	20.652	9.003	-8.997	13.801	27.48	0	0.02
	3.648	19.596	6.498	-11.502	10.572	26.157	0	0.02
	4.256	16.52	4.072	-13.928	7.503	22.208	0	0.02
	4.864	11.739	2.216	-15.784	4.705	16.112	0	0.01
	5.472	6.219	1.051	-16.949	3.174	2.459	0	0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5	0	3.217	2.299	-0.876	28.645	0	-2.043	0
	0.608	6.221	16.953	-1.047	26.011	6.585	-1.466	0.01
	1.216	11.743	15.786	-2.214	23.297	15.03	-0.579	0.01
	1.824	16.526	13.932	-4.068	20.277	21.709	0	0.02
	2.432	19.605	11.505	-6.495	17.072	25.98	0	0.02
	3.04	20.663	9	-9	13.798	27.489	0	0.02
	3.648	19.605	6.495	-11.505	10.57	26.165	0	0.02
	4.256	16.526	4.068	-13.932	7.5	22.215	0	0.02
	4.864	11.743	2.214	-15.786	4.702	16.117	0	0.01
	5.472	6.221	1.047	-16.953	3.168	2.46	0	0.01
6	0	3.217	0.876	-2.299	28.637	0	-2.042	0
	0.608	6.219	16.949	-1.051	26.008	6.584	-1.467	0.01
	1.216	11.739	15.784	-2.216	23.293	15.026	-0.583	0.01
	1.824	16.52	13.928	-4.072	20.274	21.703	0	0.02
	2.432	19.596	11.502	-6.498	17.069	25.972	0	0.02
	3.04	20.652	8.997	-9.003	13.795	27.48	0	0.02
	3.648	19.593	6.492	-11.508	10.567	26.154	0	0.02
	4.256	16.513	4.065	-13.935	7.497	22.202	0	0.02
	4.864	11.727	2.209	-15.791	4.699	16.101	0	0.01
	5.472	6.202	1.044	-16.956	3.163	2.438	0	0.01
7	0	3.229	0.879	-2.307	28.651	0	-2.087	0
	0.608	6.206	16.97	-1.03	26.028	6.571	-1.478	0.01
	1.216	11.738	15.804	-2.196	23.316	15.025	-0.583	0.01
	1.824	16.534	13.952	-4.048	20.3	21.718	0	0.02
	2.432	19.627	11.528	-6.472	17.097	26.006	0	0.02
	3.04	20.701	9.024	-8.976	13.825	27.534	0	0.02
	3.648	19.659	6.52	-11.48	10.597	26.228	0	0.02
	4.256	16.595	4.093	-13.907	7.527	22.292	0	0.02
	4.864	11.819	2.233	-15.767	4.727	16.201	0	0.01
	5.472	6.293	1.065	-16.935	3.176	2.494	0	0.01
8	0	3.801	0.998	-2.753	28.592	0	-1.908	0
	0.608	6.231	16.932	-1.068	25.985	6.6	-1.426	0.01
	1.216	11.738	15.806	-2.194	23.312	15.026	-0.578	0.01
	1.824	16.538	13.961	-4.039	20.334	21.736	-0.031	0.02
	2.432	19.664	11.561	-6.439	17.165	26.083	0	0.02
	3.04	20.789	9.075	-8.925	13.916	27.694	0	0.02
	3.648	19.799	6.579	-11.421	10.698	26.466	0	0.02
	4.256	16.758	4.148	-13.852	7.619	22.564	0	0.02
	4.864	11.916	1.931	-16.069	4.786	16.413	0	0.01
	5.472	6.188	1.04	-16.96	3.033	1.896	0	0.01
9	0	2.644	2.175	-0.435	28.675	0	-2.583	0
	0.608	5.76	17.315	-0.685	26.624	6.168	-1.54	0.01
	1.216	11.652	16.942	-1.058	24.484	14.946	-0.588	0.01
	1.824	17.263	15.306	-2.694	22.039	22.656	0	0.02
	2.432	21.598	13.247	-4.753	19.335	28.573	0	0.03
	3.04	24.194	11.014	-6.986	16.418	32.086	0	0.03
	3.648	24.663	8.637	-9.363	13.334	32.696	0	0.03
	4.256	22.689	6.144	-11.856	10.127	30.017	0	0.02
	4.864	18.027	3.565	-14.435	6.841	23.77	0	0.02

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5.472	10.499	0.927	-17.073	3.52	13.786	-0.022	0.01
6.08	0	2.253	-27.707	2.253	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	27.707	-2.253	-2.253	0	0	0
	0.608	-1.048	0	-1.724	-3.52	13.786	-0.022	0
	1.216	-2.098	0	-1.725	-6.841	23.77	0	0
	1.824	-3.146	0	-1.725	-10.127	30.017	0	-0.01
	2.432	-4.195	0	-1.725	-13.334	32.696	0	-0.01
	3.04	-5.244	0	-1.725	-16.418	32.086	0	-0.01
	3.648	-6.293	0	-1.725	-19.335	28.573	0	-0.01
	4.256	-7.342	0	-1.725	-22.039	22.656	0	-0.01
	4.864	-8.396	0	-1.945	-24.484	14.946	-0.588	-0.01
5.472	-13.857	0	-11.916	-26.624	6.168	-1.54	0	
2	0	-22.715	15.652	-16.478	-28.675	0	-2.583	0
	0.608	-14.247	10.434	0	-3.033	1.896	0	0
	1.216	-9.588	0.779	0	-4.786	16.413	0	-0.01
	1.824	-9.281	0.504	0	-7.619	22.564	0	-0.01
	2.432	-8.975	0.504	0	-10.698	26.466	0	-0.01
	3.04	-8.669	0.504	0	-13.916	27.694	0	-0.01
	3.648	-8.362	0.504	0	-17.165	26.083	0	-0.01
	4.256	-8.056	0.504	0	-20.334	21.736	-0.031	-0.01
	4.864	-8.434	0	-2.374	-23.312	15.026	-0.578	-0.01
5.472	-12.88	0	-12.243	-25.985	6.6	-1.426	0	
3	0	-21.281	15.353	-15.362	-28.592	0	-1.908	0
	0.608	-12.878	12.218	0	-3.176	2.494	0	0
	1.216	-8.057	3.684	0	-4.727	16.201	0	-0.01
	1.824	-7.836	0.018	0	-7.527	22.292	0	-0.01
	2.432	-7.826	0.018	0	-10.597	26.228	0	-0.01
	3.04	-7.815	0.018	0	-13.825	27.534	0	-0.01
	3.648	-7.804	0.018	0	-17.097	26.006	0	-0.01
	4.256	-7.794	0.018	0	-20.3	21.718	0	-0.01
	4.864	-8.443	0	-2.502	-23.316	15.025	-0.583	-0.01
5.472	-12.875	0	-12.235	-26.028	6.571	-1.478	0	
4	0	-21.292	15.356	-15.37	-28.651	0	-2.087	0
	0.608	-12.883	12.22	0	-3.163	2.438	0	0
	1.216	-8.569	2.521	0	-4.699	16.101	0	-0.01
	1.824	-7.803	0.006	0	-7.497	22.202	0	-0.01
	2.432	-7.8	0.006	0	-10.567	26.154	0	-0.01
	3.04	-7.796	0.006	0	-13.795	27.48	0	-0.01
	3.648	-7.792	0.006	0	-17.069	25.972	0	-0.01
	4.256	-7.789	0.006	0	-20.274	21.703	0	-0.01
	4.864	-8.443	0	-2.487	-23.293	15.026	-0.583	-0.01
5.472	-12.86	0	-12.212	-26.008	6.584	-1.467	0	
5	0	-21.264	15.351	-15.347	-28.637	0	-2.042	0
	0.608	-12.858	12.215	0	-3.168	2.46	0	0
	1.216	-8.446	2.486	0	-4.702	16.117	0	-0.01
	1.824	-7.781	0	0	-7.5	22.215	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

	2.432	-7.781	0	0	-10.57	26.165	0	-0.01
	3.04	-7.781	0	-3.874	-13.798	27.489	0	-0.01
	3.648	-7.781	0	0	-17.072	25.98	0	-0.01
	4.256	-7.781	0	0	-20.277	21.709	0	-0.01
	4.864	-8.446	0	-2.486	-23.297	15.03	-0.579	-0.01
	5.472	-12.858	0	-12.215	-26.011	6.585	-1.466	0
6	0	-21.264	15.347	-15.351	-28.645	0	-2.043	0
	0.608	-12.86	12.212	0	-3.174	2.459	0	0
	1.216	-8.443	2.487	0	-4.705	16.112	0	-0.01
	1.824	-7.789	0	-0.006	-7.503	22.208	0	-0.01
	2.432	-7.792	0	-0.006	-10.572	26.157	0	-0.01
	3.04	-7.796	0	-0.006	-13.801	27.48	0	-0.01
	3.648	-7.8	0	-0.006	-17.075	25.969	0	-0.01
	4.256	-7.803	0	-0.006	-20.28	21.696	-0.008	-0.01
	4.864	-8.569	0	-2.521	-23.299	15.015	-0.597	-0.01
	5.472	-12.883	0	-12.22	-26.014	6.568	-1.485	0
7	0	-21.292	15.37	-15.356	-28.629	0	-2.09	0
	0.608	-12.875	12.235	0	-3.194	2.473	0	0
	1.216	-8.443	2.502	0	-4.681	16.11	0	-0.01
	1.824	-7.794	0	-0.018	-7.476	22.223	0	-0.01
	2.432	-7.804	0	-0.018	-10.542	26.191	0	-0.01
	3.04	-7.815	0	-0.018	-13.768	27.536	0	-0.01
	3.648	-7.826	0	-0.018	-17.041	26.048	0	-0.01
	4.256	-7.836	0	-0.018	-20.247	21.794	0	-0.01
	4.864	-8.057	0	-3.684	-23.268	15.126	-0.524	-0.01
	5.472	-12.878	0	-12.218	-25.987	6.681	-1.4	0
8	0	-21.281	15.362	-15.353	-28.672	0	-1.91	0
	0.608	-12.88	12.243	0	-3.809	2.889	0	0
	1.216	-8.434	2.374	0	-4.67	16.109	0	-0.01
	1.824	-8.056	0	-0.504	-7.424	22.25	0	-0.01
	2.432	-8.362	0	-0.504	-10.453	26.293	0	-0.01
	3.04	-8.669	0	-0.504	-13.651	27.742	0	-0.01
	3.648	-8.975	0	-0.504	-16.909	26.361	0	-0.01
	4.256	-9.281	0	-0.504	-20.118	22.177	-0.101	-0.01
	4.864	-9.588	0	-3.188	-23.167	15.489	-0.698	-0.01
	5.472	-14.247	0	-10.434	-25.943	6.868	-1.596	0
9	0	-22.715	16.478	-15.652	-28.368	0	-2.575	0
	0.608	-13.857	11.916	0	-1.473	8.063	0	0
	1.216	-8.396	1.945	0	-3.292	16.014	0	-0.01
	1.824	-7.342	1.725	0	-5.475	23.301	0	-0.01
	2.432	-6.293	1.725	0	-7.984	29.126	0	-0.01
	3.04	-5.244	1.725	0	-10.782	32.777	0	-0.01
	3.648	-4.195	1.725	0	-13.83	33.636	0	-0.01
	4.256	-3.146	1.725	0	-17.09	31.173	0	-0.01
	4.864	-2.098	1.725	0	-20.522	24.955	0	0
	5.472	-1.048	1.724	0	-24.086	14.644	0	0
	6.08	0	2.253	-27.707	-27.707	0	0	0

Support    Reac. Pos    Reac. Negative

1	2.253	-27.74
2	3.623	-30.844
3	5.074	-30.525
4	4.294	-30.621
5	4.267	-30.6
6	4.267	-30.6
7	4.294	-30.621
8	5.074	-30.525
9	3.623	-30.844
10	2.253	-27.707

Id HS15  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	24.092	-1.912	24.092	0	0	0
	0.608	12.823	21.09	-2.91	21.09	12.823	0	0.01
	1.216	21.989	18.083	-5.917	18.083	21.989	0	0.02
	1.824	27.623	15.144	-8.856	15.144	27.623	0	0.03
	2.432	29.95	12.315	-11.685	12.315	29.95	0	0.03
	3.04	29.297	9.637	-14.363	9.637	29.297	0	0.03
	3.648	26.093	7.153	-16.847	7.153	26.093	0	0.03
	4.256	20.872	4.904	-19.096	4.904	20.872	0	0.02
	4.864	14.339	2.948	-21.052	2.948	14.339	0	0.02
	5.472	7.115	1.3	-22.7	1.3	7.115	0	0.01
2	0	3.115	0.512	-2.561	24.148	0	-0.267	0
	0.608	7.815	22.139	-1.861	22.311	7.71	0	0.01
	1.216	14.942	20.052	-4.114	20.052	14.942	0	0.01
	1.824	20.646	17.493	-6.507	17.493	20.646	0	0.02
	2.432	24.225	14.738	-9.262	14.738	24.225	0	0.02
	3.04	25.339	11.892	-12.108	11.892	25.339	0	0.02
	3.648	23.904	9.061	-14.939	9.061	23.904	0	0.02
	4.256	20.093	6.35	-17.65	6.35	20.093	0	0.02
	4.864	14.403	3.884	-20.116	3.884	14.403	0	0.01
	5.472	7.409	1.734	-22.266	3.182	2.318	0	0.01
3	0	4.253	3.182	-1.015	24.152	0	-0.287	0
	0.608	7.461	22.223	-1.777	22.399	7.343	0	0.01
	1.216	14.447	20.024	-3.976	20.193	14.436	0	0.01
	1.824	20.145	17.661	-6.339	17.661	20.145	0	0.02
	2.432	23.814	14.912	-9.088	14.912	23.814	0	0.02
	3.04	25.096	11.871	-12.129	12.054	25.055	0	0.02
	3.648	23.816	9.008	-14.992	9.198	23.747	0	0.02
	4.256	20.105	6.261	-17.739	6.454	20.037	0	0.02
	4.864	14.408	3.951	-20.049	3.951	14.408	0	0.01
	5.472	7.43	1.765	-22.235	2.667	1.962	0	0.01
4	0	3.584	2.667	-0.87	24.152	0	-0.288	0
	0.608	7.435	22.229	-1.771	22.405	7.317	0	0.01
	1.216	14.412	20.033	-3.967	20.204	14.4	0	0.01
	1.824	20.109	17.673	-6.327	17.673	20.109	0	0.02
	2.432	23.784	14.924	-9.076	14.924	23.784	0	0.02
	3.04	25.035	12.066	-11.934	12.066	25.035	0	0.02
	3.648	23.75	9.056	-14.944	9.208	23.736	0	0.02
	4.256	20.068	6.308	-17.692	6.462	20.033	0	0.02
	4.864	14.408	3.956	-20.044	3.956	14.408	0	0.01
	5.472	7.432	1.767	-22.233	2.672	1.967	0	0.01

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5	0	3.631	0.913	-2.67	24.153	0	-0.288	0
	0.608	7.432	22.232	-1.768	22.406	7.315	0	0.01
	1.216	14.408	20.043	-3.957	20.205	14.397	0	0.01
	1.824	20.106	17.675	-6.325	17.675	20.106	0	0.02
	2.432	23.782	14.925	-9.075	14.925	23.782	0	0.02
	3.04	25.034	12.067	-11.933	12.067	25.034	0	0.02
	3.648	23.782	9.075	-14.925	9.209	23.736	0	0.02
	4.256	20.106	6.325	-17.675	6.462	20.033	0	0.02
	4.864	14.408	3.957	-20.043	3.957	14.408	0	0.01
	5.472	7.432	1.768	-22.232	2.67	2.007	0	0.01
6	0	3.631	2.67	-0.913	24.157	0	-0.304	0
	0.608	7.432	22.233	-1.767	22.415	7.284	0	0.01
	1.216	14.408	20.044	-3.956	20.218	14.36	0	0.01
	1.824	20.068	17.692	-6.308	17.692	20.068	0	0.02
	2.432	23.75	14.944	-9.056	14.944	23.75	0	0.02
	3.04	25.035	11.934	-12.066	12.086	25.011	0	0.02
	3.648	23.784	9.076	-14.924	9.227	23.723	0	0.02
	4.256	20.109	6.327	-17.673	6.476	20.028	0	0.02
	4.864	14.412	3.967	-20.033	3.967	14.412	0	0.01
	5.472	7.435	1.771	-22.229	2.611	1.767	0	0.01
7	0	3.584	0.87	-2.667	24.182	0	-0.332	0
	0.608	7.43	22.235	-1.765	22.449	7.27	0	0.01
	1.216	14.408	20.049	-3.951	20.26	14.368	0	0.01
	1.824	20.105	17.739	-6.261	17.739	20.105	0	0.02
	2.432	23.816	14.992	-9.008	14.992	23.816	0	0.02
	3.04	25.096	12.129	-11.871	12.129	25.096	0	0.02
	3.648	23.814	9.088	-14.912	9.258	23.804	0	0.02
	4.256	20.145	6.339	-17.661	6.487	20.064	0	0.02
	4.864	14.447	3.976	-20.024	3.976	14.447	0	0.01
	5.472	7.461	1.777	-22.223	2.608	1.753	0	0.01
8	0	4.253	1.015	-3.182	24.029	0	-0.287	0
	0.608	7.409	22.266	-1.734	22.303	7.252	0	0.01
	1.216	14.403	20.116	-3.884	20.139	14.32	0	0.01
	1.824	20.093	17.65	-6.35	17.659	20.063	0	0.02
	2.432	23.904	14.939	-9.061	14.98	23.803	0	0.02
	3.04	25.339	12.108	-11.892	12.186	25.196	0	0.02
	3.648	24.225	9.262	-14.738	9.377	24.085	0	0.02
	4.256	20.646	6.507	-17.493	6.653	20.557	0	0.02
	4.864	14.942	4.114	-20.052	4.114	14.942	0	0.01
	5.472	7.815	1.861	-22.139	2.561	1.557	0	0.01
9	0	3.115	2.561	-0.512	24.022	0	-0.278	0
	0.608	7.115	22.7	-1.3	22.727	6.965	0	0.01
	1.216	14.339	21.052	-2.948	21.069	14.256	0	0.02
	1.824	20.872	19.096	-4.904	19.103	20.842	0	0.02
	2.432	26.093	16.847	-7.153	16.878	25.98	0	0.03
	3.04	29.297	14.363	-9.637	14.421	29.119	0	0.03
	3.648	29.95	11.685	-12.315	11.771	29.742	0	0.03
	4.256	27.623	8.856	-15.144	8.964	27.425	0	0.03
	4.864	21.989	5.917	-18.083	6.041	21.838	0	0.02

## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

5.472	12.823	2.91	-21.09	3.039	12.744	0	0.01
6.08	0	1.912	-24.092	1.912	0	0	0

## Minimums table:

Span	Location	Moment(m)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	24.092	-1.912	-1.912	0	0	0
	0.608	-1.162	0	-1.912	-3.039	12.744	0	0
	1.216	-2.325	0	-1.912	-6.041	21.838	0	-0.01
	1.824	-3.487	0	-1.912	-8.964	27.425	0	-0.01
	2.432	-4.65	0	-1.912	-11.771	29.742	0	-0.01
	3.04	-5.812	0	-1.912	-14.421	29.119	0	-0.01
	3.648	-6.974	0	-1.912	-16.878	25.98	0	-0.01
	4.256	-8.137	0	-1.912	-19.103	20.842	0	-0.01
	4.864	-9.299	0	-1.912	-21.069	14.256	0	-0.01
	5.472	-10.462	0	-1.912	-22.727	6.965	0	0
2	0	-15.096	3.182	-16.062	-24.022	0	-0.278	0
	0.608	-13.161	3.182	0	-2.561	1.557	0	-0.01
	1.216	-11.226	3.182	0	-4.114	14.942	0	-0.01
	1.824	-9.377	3.018	0	-6.653	20.557	0	-0.01
	2.432	-7.542	3.018	0	-9.377	24.085	0	-0.01
	3.04	-5.811	2.814	0	-12.186	25.196	0	-0.01
	3.648	-6.379	0	-2.326	-14.98	23.803	0	-0.01
	4.256	-7.795	0	-2.333	-17.659	20.063	0	-0.01
	4.864	-9.344	0	-2.561	-20.139	14.32	0	-0.01
	5.472	-10.901	0	-2.561	-22.303	7.252	0	0
3	0	-12.629	2.667	-14.98	-24.029	0	-0.287	0
	0.608	-11.008	2.667	0	-2.608	1.753	0	0
	1.216	-9.387	2.667	0	-3.976	14.447	0	-0.01
	1.824	-7.851	2.509	0	-6.487	20.064	0	-0.01
	2.432	-6.327	2.504	0	-9.258	23.804	0	-0.01
	3.04	-4.805	2.504	0	-12.129	25.096	0	-0.01
	3.648	-6.234	0	-2.45	-14.992	23.816	0	-0.01
	4.256	-7.762	0	-2.608	-17.739	20.105	0	-0.01
	4.864	-9.347	0	-2.608	-20.26	14.368	0	-0.01
	5.472	-10.933	0	-2.608	-22.449	7.27	0	0
4	0	-12.652	2.672	-15.067	-24.182	0	-0.332	0
	0.608	-11.028	2.672	0	-2.611	1.767	0	0
	1.216	-9.404	2.672	0	-3.967	14.412	0	-0.01
	1.824	-7.779	2.672	0	-6.476	20.028	0	-0.01
	2.432	-6.24	2.467	0	-9.227	23.723	0	-0.01
	3.04	-4.74	2.467	0	-12.086	25.011	0	-0.01
	3.648	-6.234	0	-2.463	-14.944	23.75	0	-0.01
	4.256	-7.76	0	-2.611	-17.692	20.068	0	-0.01
	4.864	-9.348	0	-2.611	-20.218	14.36	0	-0.01
	5.472	-10.935	0	-2.611	-22.415	7.284	0	0
5	0	-12.602	2.67	-15.019	-24.157	0	-0.304	0
	0.608	-10.978	2.67	0	-2.67	2.007	0	0
	1.216	-9.355	2.67	0	-3.957	14.408	0	-0.01
	1.824	-7.734	2.469	0	-6.462	20.033	0	-0.01



## SECTION I

## CONSYS

## Section I Unit 8 Interior Strin

	2.432	-6.234	2.464	0	-9.209	23.736	0	-0.01
	3.04	-4.735	2.464	0	-12.067	25.034	0	-0.01
	3.648	-6.234	0	-2.464	-14.925	23.782	0	-0.01
	4.256	-7.734	0	-2.469	-17.675	20.106	0	-0.01
	4.864	-9.355	0	-2.67	-20.205	14.397	0	-0.01
	5.472	-10.978	0	-2.67	-22.406	7.315	0	0
6	0	-12.602	15.019	-2.67	-24.153	0	-0.288	0
	0.608	-10.935	2.611	0	-2.672	1.967	0	0
	1.216	-9.348	2.611	0	-3.956	14.408	0	-0.01
	1.824	-7.76	2.611	0	-6.462	20.033	0	-0.01
	2.432	-6.234	2.463	0	-9.208	23.736	0	-0.01
	3.04	-4.74	0	-2.467	-12.066	25.035	0	-0.01
	3.648	-6.24	0	-2.467	-14.924	23.784	0	-0.01
	4.256	-7.779	0	-2.672	-17.673	20.109	0	-0.01
	4.864	-9.404	0	-2.672	-20.204	14.4	0	-0.01
	5.472	-11.028	0	-2.672	-22.405	7.317	0	0
7	0	-12.652	15.067	-2.672	-24.152	0	-0.288	0
	0.608	-10.933	2.608	0	-2.667	1.962	0	0
	1.216	-9.347	2.608	0	-3.951	14.408	0	-0.01
	1.824	-7.762	2.608	0	-6.454	20.037	0	-0.01
	2.432	-6.234	2.45	0	-9.198	23.747	0	-0.01
	3.04	-4.805	0	-2.504	-12.054	25.055	0	-0.01
	3.648	-6.327	0	-2.504	-14.912	23.814	0	-0.01
	4.256	-7.851	0	-2.509	-17.661	20.145	0	-0.01
	4.864	-9.387	0	-2.667	-20.193	14.436	0	-0.01
	5.472	-11.008	0	-2.667	-22.399	7.343	0	0
8	0	-12.629	14.98	-2.667	-24.152	0	-0.287	0
	0.608	-10.901	2.561	0	-3.182	2.318	0	0
	1.216	-9.344	2.561	0	-3.884	14.403	0	-0.01
	1.824	-7.795	2.333	0	-6.35	20.093	0	-0.01
	2.432	-6.379	2.326	0	-9.061	23.904	0	-0.01
	3.04	-5.811	0	-2.814	-11.892	25.339	0	-0.01
	3.648	-7.542	0	-3.018	-14.738	24.225	0	-0.01
	4.256	-9.377	0	-3.018	-17.493	20.646	0	-0.01
	4.864	-11.226	0	-3.182	-20.052	14.942	0	-0.01
	5.472	-13.161	0	-3.182	-22.311	7.71	0	-0.01
9	0	-15.096	16.062	-3.182	-24.148	0	-0.267	0
	0.608	-10.462	1.912	0	-1.3	7.115	0	0
	1.216	-9.299	1.912	0	-2.948	14.339	0	-0.01
	1.824	-8.137	1.912	0	-4.904	20.872	0	-0.01
	2.432	-6.974	1.912	0	-7.153	26.093	0	-0.01
	3.04	-5.812	1.912	0	-9.637	29.297	0	-0.01
	3.648	-4.65	1.912	0	-12.315	29.95	0	-0.01
	4.256	-3.487	1.912	0	-15.144	27.623	0	-0.01
	4.864	-2.325	1.912	0	-18.083	21.989	0	-0.01
	5.472	-1.162	1.912	0	-21.09	12.823	0	0
	6.08	0	1.912	-24.092	-24.092	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.912	-24.123
2	3.074	-24.259
3	4.197	-24.211
4	3.537	-24.256
5	3.583	-24.228
6	3.583	-24.228
7	3.537	-24.256
8	4.197	-24.211
9	3.074	-24.259
10	1.912	-24.123

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.227	-1.45	21.227	0	0	0
	0.606	10.664	17.597	0	17.597	10.664	0	0.01
	1.212	17.164	14.162	-2.838	14.162	17.164	0	0.01
	1.818	20.033	11.019	-5.981	11.019	20.033	0	0.02
	2.424	21.63	8.923	-8.077	8.923	21.63	0	0.02
	3.03	21.311	7.033	-9.967	7.033	21.311	0	0.02
	3.636	19.125	5.26	-11.74	5.26	19.125	0	0.02
	4.242	15.891	2.776	-14.224	2.776	15.891	0	0.02
	4.848	10.509	0	-17.806	1.535	7.441	0	0.01
	5.454	3.546	0.65	-11.35	0.65	3.546	0	0.01
2	0	2.354	0.388	-1.942	22.456	0	-5.872	0
	0.606	3.894	11.071	-0.929	19.286	3.618	0	0
	1.212	10.606	16	-1.103	16.557	2.668	0	0.01
	1.818	14.814	12.781	-4.219	14.799	8.25	0	0.01
	2.424	16.327	9.8	-7.2	12.641	12.873	0	0.01
	3.03	15.895	10.13	-6.87	10.13	15.895	0	0.02
	3.636	16.781	7.31	-9.69	7.31	16.781	0	0.02
	4.242	15.111	4.228	-12.772	4.228	15.111	0	0.01
	4.848	10.631	0.975	-16.025	2.456	0.169	0	0.01
	5.454	3.692	0.867	-11.133	2.456	1.657	0	0
3	0	3.145	2.456	-0.658	22.544	0	-6.293	0
	0.606	4.48	10.93	-1.07	19.407	3.112	0	0
	1.212	10.957	15.8	-1.2	16.258	3.738	0	0.01
	1.818	15.35	12.561	-4.439	14.594	8.856	0	0.01
	2.424	16.954	9.533	-7.467	12.533	13.128	0	0.02
	3.03	16.095	6.802	-10.198	10.111	15.928	0	0.02
	3.636	16.719	7.364	-9.636	7.364	16.719	0	0.02
	4.242	15.055	4.333	-12.667	4.333	15.055	0	0.01
	4.848	10.64	1.103	-15.897	2.059	7.477	0	0.01
	5.454	3.67	0.875	-11.125	1.99	1.336	0	0
4	0	2.547	1.989	-0.533	22.55	0	-6.324	0
	0.606	3.551	11.153	-0.847	19.416	3.076	0	0
	1.212	10.663	15.883	-1.117	16.236	3.814	0	0.01
	1.818	15.074	12.655	-4.345	14.579	8.9	0	0.01
	2.424	16.735	9.627	-7.373	12.525	13.146	0	0.02
	3.03	15.948	6.888	-10.112	10.109	15.93	0	0.01
	3.636	16.714	7.368	-9.632	7.368	16.714	0	0.02
	4.242	15.051	4.34	-12.66	4.34	15.051	0	0.01
	4.848	10.64	1.112	-15.888	2.061	7.477	0	0.01
	5.454	3.671	0.876	-11.124	1.998	1.342	0	0

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

5	0	2.59	0.572	-1.992	22.551	0	-6.326	0
	0.606	3.662	11.126	-0.874	19.416	3.073	0	0
	1.212	10.642	15.886	-1.114	16.234	3.82	0	0.01
	1.818	15.052	12.659	-4.341	14.578	8.903	0	0.01
	2.424	16.715	9.631	-7.369	12.525	13.148	0	0.02
	3.03	15.931	6.89	-10.11	10.109	15.93	0	0.01
	3.636	16.714	7.369	-9.631	7.369	16.714	0	0.02
	4.242	15.051	4.341	-12.659	4.341	15.051	0	0.01
	4.848	10.641	1.113	-15.887	2.061	7.477	0	0.01
	5.454	3.67	0.876	-11.124	1.979	1.321	0	0
6	0	2.521	0.517	-1.979	22.551	0	-6.327	0
	0.606	3.67	11.124	-0.876	19.417	3.072	0	0
	1.212	10.641	15.887	-1.113	16.234	3.82	0	0.01
	1.818	15.051	12.659	-4.341	14.579	8.903	0	0.01
	2.424	16.714	9.631	-7.369	12.525	13.148	0	0.02
	3.03	15.931	10.11	-6.89	10.11	15.931	0	0.01
	3.636	16.715	7.369	-9.631	7.369	16.715	0	0.02
	4.242	15.052	4.341	-12.659	4.341	15.052	0	0.01
	4.848	10.642	1.114	-15.886	2.06	7.471	0	0.01
	5.454	3.662	0.874	-11.126	1.992	1.383	0	0
7	0	2.59	1.992	-0.572	22.555	0	-6.32	0
	0.606	3.671	11.124	-0.876	19.421	3.079	0	0
	1.212	10.64	15.888	-1.112	16.234	3.83	0	0.01
	1.818	15.051	12.66	-4.34	14.579	8.914	0	0.01
	2.424	16.714	9.632	-7.368	12.527	13.161	0	0.02
	3.03	15.948	10.112	-6.888	10.112	15.948	0	0.01
	3.636	16.735	7.373	-9.627	7.373	16.735	0	0.02
	4.242	15.074	4.345	-12.655	4.345	15.074	0	0.01
	4.848	10.663	1.117	-15.883	2.04	7.399	0	0.01
	5.454	3.551	0.847	-11.153	1.98	1.335	0	0
8	0	2.547	0.533	-1.989	22.65	0	-6.445	0
	0.606	3.67	11.125	-0.875	19.509	3.017	0	0
	1.212	10.64	15.897	-1.103	16.266	3.823	0	0.01
	1.818	15.055	12.667	-4.333	14.632	8.939	0	0.01
	2.424	16.719	9.636	-7.364	12.597	13.24	0	0.02
	3.03	16.095	10.198	-6.802	10.198	16.095	0	0.02
	3.636	16.954	7.467	-9.533	7.467	16.954	0	0.02
	4.242	15.35	4.439	-12.561	4.439	15.35	0	0.01
	4.848	10.957	1.2	-15.8	2.307	8.354	0	0.01
	5.454	4.48	1.07	-10.93	1.978	1.325	0	0
9	0	3.145	0.658	-2.456	22.433	0	-6.175	0
	0.606	3.692	11.133	-0.867	19.377	3.099	0	0
	1.212	10.631	16.025	-0.975	16.172	10.096	0	0.01
	1.818	15.111	12.772	-4.228	14.386	8.477	0	0.01
	2.424	16.781	9.69	-7.31	12.33	12.638	0	0.02
	3.03	15.895	6.87	-10.13	9.935	15.419	0	0.02
	3.636	16.327	7.2	-9.8	7.223	16.3	0	0.01
	4.242	14.814	4.219	-12.781	4.254	14.793	0	0.01
	4.848	10.606	1.103	-16	2.053	7.447	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	5.454	3.894	0.929	-11.071	1.942	1.177	0	0
10	0	2.354	1.942	-0.388	24.121	0	-8.336	0
	0.606	3.546	11.35	-0.65	21.188	1.878	0	0.01
	1.212	10.509	17.806	0	17.916	9.977	0	0.01
	1.818	15.891	14.224	-2.776	14.932	8.771	0	0.02
	2.424	19.125	11.74	-5.26	13.239	13.677	0	0.02
	3.03	21.311	9.967	-7.033	11.188	17.611	0	0.02
	3.636	21.63	8.077	-8.923	8.771	19.946	0	0.02
	4.242	20.033	5.981	-11.019	6.35	19.362	0	0.02
	4.848	17.164	2.838	-14.162	4.282	15.415	0	0.01
	5.454	10.664	0	-17.597	2.158	8.994	0	0.01
	6.06	0	1.45	-21.227	1.45	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shee	Corr. Shee	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.227	-1.45	-1.45	0	0	0
	0.606	-0.879	0	-1.45	-2.158	8.994	0	0
	1.212	-1.757	0	-1.45	-4.282	15.415	0	0
	1.818	-2.636	0	-1.45	-6.35	19.362	0	-0.01
	2.424	-3.515	0	-1.45	-8.771	19.946	0	-0.01
	3.03	-4.393	0	-1.45	-11.188	17.611	0	-0.01
	3.636	-5.272	0	-1.45	-13.239	13.677	0	-0.01
	4.242	-6.15	0	-1.45	-14.932	8.771	0	-0.01
	4.848	-7.029	0	-1.45	-17.916	9.977	0	-0.01
	5.454	-10.391	0	-13.239	-21.188	1.878	0	0
2	0	-18.655	14.799	-13.957	-24.121	0	-8.336	0
	0.606	-10.249	2.456	0	-1.942	1.177	0	0
	1.212	-8.761	2.456	0	-2.053	7.447	0	-0.01
	1.818	-7.605	1.907	0	-4.254	14.793	0	-0.01
	2.424	-6.594	1.008	0	-7.223	16.3	0	-0.01
	3.03	-5.985	0.958	0	-9.935	15.419	0	-0.01
	3.636	-5.831	0	-0.683	-12.33	12.638	0	-0.01
	4.242	-6.33	0	-0.927	-14.386	8.477	0	-0.01
	4.848	-7.063	0	-1.942	-16.172	10.096	0	-0.01
	5.454	-9.778	0	-12.33	-19.377	3.099	0	0
3	0	-17.761	14.216	-13.6	-22.433	0	-6.175	0
	0.606	-9.657	12.533	0	-1.978	1.325	0	0
	1.212	-7.105	1.99	0	-2.307	8.354	0	-0.01
	1.818	-6.242	1.316	0	-4.439	15.35	0	-0.01
	2.424	-5.48	1.17	0	-7.467	16.954	0	-0.01
	3.03	-4.862	0	-0.748	-10.198	16.095	0	-0.01
	3.636	-5.437	0	-1.112	-12.597	13.24	0	-0.01
	4.242	-6.154	0	-1.256	-14.632	8.939	0	-0.01
	4.848	-7.065	0	-1.978	-16.266	3.823	0	-0.01
	5.454	-9.734	0	-12.265	-19.509	3.017	0	0
4	0	-17.776	13.876	-13.951	-22.65	0	-6.445	0
	0.606	-9.784	12.612	0	-1.98	1.335	0	0
	1.212	-7.136	1.998	0	-2.04	7.399	0	-0.01
	1.818	-6.146	1.284	0	-4.345	15.074	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	2.424	-5.41	1.14	0	-7.373	16.735	0	-0.01
	3.03	-4.811	0	-0.699	-10.112	15.948	0	-0.01
	3.636	-5.407	0	-1.136	-12.527	13.161	0	-0.01
	4.242	-6.139	0	-1.279	-14.579	8.914	0	-0.01
	4.848	-7.066	0	-1.98	-16.234	3.83	0	-0.01
	5.454	-9.731	0	-12.26	-19.42	3.079	0	0
5	0	-17.693	14.202	-13.547	-22.555	0	-6.32	0
	0.606	-9.729	12.596	0	-1.992	1.383	0	0
	1.212	-7.073	1.979	0	-2.06	7.471	0	-0.01
	1.818	-6.139	1.281	0	-4.341	15.052	0	-0.01
	2.424	-5.405	1.138	0	-7.369	16.715	0	-0.01
	3.03	-4.808	0	-0.701	-10.11	15.931	0	-0.01
	3.636	-5.405	0	-1.137	-12.525	13.148	0	-0.01
	4.242	-6.138	0	-1.281	-14.579	8.903	0	-0.01
	4.848	-7.069	0	-1.992	-16.234	3.82	0	-0.01
	5.454	-9.731	0	-12.26	-19.417	3.072	0	0
6	0	-17.693	14.202	-14.202	-22.551	0	-6.327	0
	0.606	-9.731	12.26	0	-1.979	1.321	0	0
	1.212	-7.069	1.992	0	-2.061	7.477	0	-0.01
	1.818	-6.138	1.281	0	-4.341	15.051	0	-0.01
	2.424	-5.405	1.137	0	-7.369	16.714	0	-0.01
	3.03	-4.808	0.701	0	-10.109	15.93	0	-0.01
	3.636	-5.405	0	-1.138	-12.525	13.148	0	-0.01
	4.242	-6.139	0	-1.281	-14.578	8.903	0	-0.01
	4.848	-7.073	0	-1.979	-16.234	3.82	0	-0.01
	5.454	-9.729	0	-12.596	-19.416	3.073	0	0
7	0	-17.693	13.547	-14.202	-22.551	0	-6.326	0
	0.606	-9.731	12.26	0	-1.998	1.342	0	0
	1.212	-7.066	1.98	0	-2.061	7.477	0	-0.01
	1.818	-6.139	1.279	0	-4.34	15.051	0	-0.01
	2.424	-5.407	1.136	0	-7.368	16.714	0	-0.01
	3.03	-4.811	0.699	0	-10.109	15.93	0	-0.01
	3.636	-5.41	0	-1.14	-12.525	13.146	0	-0.01
	4.242	-6.146	0	-1.284	-14.579	8.9	0	-0.01
	4.848	-7.136	0	-1.998	-16.236	3.814	0	-0.01
	5.454	-9.784	0	-12.612	-19.416	3.076	0	0
8	0	-17.776	13.951	-13.876	-22.55	0	-6.324	0
	0.606	-9.734	12.265	0	-1.99	1.336	0	0
	1.212	-7.065	1.978	0	-2.059	7.477	0	-0.01
	1.818	-6.154	1.256	0	-4.333	15.055	0	-0.01
	2.424	-5.437	1.112	0	-7.364	16.719	0	-0.01
	3.03	-4.862	0.748	0	-10.111	15.928	0	-0.01
	3.636	-5.48	0	-1.17	-12.533	13.128	0	-0.01
	4.242	-6.242	0	-1.316	-14.594	8.856	0	-0.01
	4.848	-7.105	0	-1.99	-16.258	3.738	0	-0.01
	5.454	-9.657	0	-12.533	-19.407	3.112	0	0
9	0	-17.761	13.6	-14.216	-22.544	0	-6.293	0
	0.606	-9.778	12.33	0	-2.456	1.657	0	0
	1.212	-7.063	1.942	0	-2.456	0.169	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	1.818	-6.33	0.927	0	-4.228	15.111	0	-0.01
	2.424	-5.831	0.683	0	-7.31	16.781	0	-0.01
	3.03	-5.985	0	-0.958	-10.13	15.895	0	-0.01
	3.636	-6.594	0	-1.008	-12.641	12.873	0	-0.01
	4.242	-7.605	0	-1.907	-14.799	8.25	0	-0.01
	4.848	-8.761	0	-2.453	-16.557	2.668	0	-0.01
	5.454	-10.249	0	-2.456	-19.286	3.618	0	0
10	0	-18.655	13.957	-14.799	-22.456	0	-5.872	0
	0.606	-10.391	13.239	0	-0.65	3.546	0	0
	1.212	-7.029	1.45	0	-1.535	7.441	0	-0.01
	1.818	-6.15	1.45	0	-2.776	15.891	0	-0.01
	2.424	-5.272	1.45	0	-5.26	19.125	0	-0.01
	3.03	-4.393	1.45	0	-7.033	21.311	0	-0.01
	3.636	-3.515	1.45	0	-8.923	21.63	0	-0.01
	4.242	-2.636	1.45	0	-11.019	20.033	0	-0.01
	4.848	-1.757	1.45	0	-14.162	17.164	0	0
	5.454	-0.879	1.45	0	-17.597	10.664	0	0
	6.06	0	1.45	-21.227	-21.227	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.45	-21.265
2	2.331	-28.79
3	3.114	-27.817
4	2.521	-27.827
5	2.564	-27.749
6	2.496	-27.749
7	2.564	-27.749
8	2.521	-27.827
9	3.114	-27.817
10	2.331	-28.79
11	1.45	-21.265

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	17.578	-0.991	17.578	0	0	0
	0.606	8.87	14.636	0	14.636	8.87	0	0.01
	1.212	14.341	11.833	-2.167	11.833	14.341	0	0.01
	1.818	16.816	9.249	-4.751	9.249	16.816	0	0.02
	2.424	17.472	7.208	-6.792	7.208	17.472	0	0.02
	3.03	17.461	5.763	-8.237	5.763	17.461	0	0.02
	3.636	15.955	4.388	-9.612	4.388	15.955	0	0.02
	4.242	13.589	2.405	-11.595	2.69	11.409	0	0.01
	4.848	9.417	0	-14.506	1.685	8.168	0	0.01
	5.454	4.488	0.823	-11.177	0.823	4.488	0	0.01
2	0	1.61	0.266	-1.328	20.056	0	-11.843	0
	0.606	4.124	10.691	-1.309	17.763	0	-4.181	0
	1.212	8.734	11.68	-2.32	15.224	2.243	0	0.01
	1.818	11.504	9.377	-4.623	12.557	7.019	0	0.01
	2.424	12.438	7.238	-6.762	10.6	9.484	0	0.01
	3.03	13.13	6.222	-5.778	9.131	11.57	0	0.01
	3.636	12.681	4.847	-7.153	7.322	12.6	0	0.01
	4.242	12.094	5.187	-8.813	5.187	12.094	0	0.01
	4.848	9.642	2.771	-11.229	2.771	9.642	0	0.01
	5.454	5.041	0.169	-13.831	2.022	1.364	0	0
3	0	2.59	2.022	-0.542	19.759	0	-10.422	0
	0.606	5.626	10.656	-1.344	17.498	0	-3.073	0
	1.212	9.934	11.41	-2.59	15.005	3.024	0	0.01
	1.818	12.472	9.051	-4.949	12.396	7.499	0	0.01
	2.424	13.102	6.957	-7.043	10.354	10.062	0	0.01
	3.03	13.362	5.46	-6.54	8.831	12.093	0	0.01
	3.636	12.952	7.015	-6.985	7.015	12.952	0	0.01
	4.242	12.248	4.9	-9.1	4.9	12.248	0	0.01
	4.848	9.625	2.522	-11.478	2.522	9.625	0	0.01
	5.454	4.908	0	-14.028	1.311	0.884	0	0
4	0	1.734	0.362	-1.354	19.738	0	-10.32	0
	0.606	4.927	14.036	0	17.479	0	-2.993	0
	1.212	9.646	11.491	-2.509	14.989	3.08	0	0.01
	1.818	12.275	9.117	-4.883	12.384	7.533	0	0.01
	2.424	12.988	7.005	-6.995	10.346	9.755	0	0.01
	3.03	12.969	6.314	-5.686	8.81	12.131	0	0.01
	3.636	12.977	6.993	-7.007	6.993	12.977	0	0.01
	4.242	12.259	4.879	-9.121	4.879	12.259	0	0.01
	4.848	9.623	2.505	-11.495	2.505	9.623	0	0.01
	5.454	4.899	0	-14.042	1.415	0.955	0	0



## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

5	0	1.812	1.415	-0.379	19.736	0	-10.313	0
	0.606	4.9	14.043	0	17.477	0	-2.988	0
	1.212	9.625	11.496	-2.504	14.988	3.084	0	0.01
	1.818	12.261	9.122	-4.878	12.383	7.536	0	0.01
	2.424	12.98	7.008	-6.992	10.335	10.106	0	0.01
	3.03	12.968	6.315	-5.685	8.808	12.133	0	0.01
	3.636	12.979	6.991	-7.009	6.991	12.979	0	0.01
	4.242	12.26	4.878	-9.122	4.878	12.26	0	0.01
	4.848	9.623	2.503	-11.497	2.503	9.623	0	0.01
	5.454	4.898	0	-14.043	1.351	0.911	0	0
6	0	1.73	1.351	-0.362	19.736	0	-10.313	0
	0.606	4.898	14.043	0	17.478	0	-2.988	0
	1.212	9.623	11.497	-2.503	14.989	3.084	0	0.01
	1.818	12.26	9.122	-4.878	12.384	7.536	0	0.01
	2.424	12.979	7.009	-6.991	10.335	10.107	0	0.01
	3.03	12.968	5.685	-6.315	8.808	12.134	0	0.01
	3.636	12.98	6.992	-7.008	6.992	12.98	0	0.01
	4.242	12.261	4.878	-9.122	4.878	12.261	0	0.01
	4.848	9.625	2.504	-11.496	2.504	9.625	0	0.01
	5.454	4.9	0	-14.043	1.354	0.914	0	0
7	0	1.812	0.379	-1.415	19.741	0	-10.318	0
	0.606	4.899	14.042	0	17.483	0	-2.991	0
	1.212	9.623	11.495	-2.505	14.995	3.084	0	0.01
	1.818	12.259	9.121	-4.879	12.39	7.54	0	0.01
	2.424	12.977	7.007	-6.993	10.336	10.108	0	0.01
	3.03	12.969	5.686	-6.314	8.81	12.138	0	0.01
	3.636	12.988	6.995	-7.005	6.995	12.988	0	0.01
	4.242	12.275	4.883	-9.117	4.883	12.275	0	0.01
	4.848	9.646	2.509	-11.491	2.509	9.646	0	0.01
	5.454	4.927	0	-14.036	1.354	0.913	0	0
8	0	1.734	1.354	-0.362	19.8	0	-10.395	0
	0.606	4.908	14.028	0	17.559	0	-3.042	0
	1.212	9.625	11.478	-2.522	15.082	3.078	0	0.01
	1.818	12.248	9.1	-4.9	12.48	7.588	0	0.01
	2.424	12.952	6.985	-7.015	10.347	10.12	0	0.01
	3.03	13.362	6.54	-5.46	8.84	12.189	0	0.01
	3.636	13.102	7.043	-6.957	7.043	13.102	0	0.01
	4.242	12.472	4.949	-9.051	4.949	12.472	0	0.01
	4.848	9.934	2.59	-11.41	2.59	9.934	0	0.01
	5.454	5.626	1.344	-10.656	1.353	0.906	0	0
9	0	2.59	0.542	-2.022	19.575	0	-10.422	0
	0.606	5.041	13.831	-0.169	17.298	0	-3.135	0
	1.212	9.642	11.229	-2.771	14.8	2.925	0	0.01
	1.818	12.094	8.813	-5.187	12.18	7.408	0	0.01
	2.424	12.681	7.153	-4.847	10.373	9.877	0	0.01
	3.03	13.13	5.778	-6.222	8.735	11.693	0	0.01
	3.636	12.438	6.762	-7.238	6.853	12.328	0	0.01
	4.242	11.504	4.623	-9.377	4.707	11.452	0	0.01
	4.848	8.734	2.32	-11.746	2.32	8.734	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	5.454	4.124	1.309	-10.691	1.328	0.805	0	0
10	0	1.61	1.328	-0.266	20.686	0	-11.844	0
	0.606	4.488	11.177	-0.823	18.45	0	-3.912	0.01
	1.212	9.417	14.506	0	15.861	2.852	0	0.01
	1.818	13.589	11.595	-2.405	12.954	7.824	0	0.01
	2.424	15.955	9.612	-4.388	11.066	10.669	0	0.02
	3.03	17.461	8.237	-5.763	9.626	13.252	0	0.02
	3.636	17.472	6.792	-7.208	7.898	14.791	0	0.02
	4.242	16.816	4.751	-9.249	5.846	14.824	0	0.02
	4.848	14.341	2.167	-11.833	3.788	12.377	0	0.01
	5.454	8.87	0	-14.636	2.242	7.125	0	0.01
	6.06	0	0.991	-17.578	0.991	0	0	0

## Minimums table:

Span	Location	Moment(m)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	17.578	-0.991	-0.991	0	0	0
	0.606	-0.601	0	-0.991	-2.242	7.125	0	0
	1.212	-1.202	0	-0.991	-3.788	12.377	0	0
	1.818	-1.803	0	-0.991	-5.846	14.824	0	0
	2.424	-2.403	0	-0.991	-7.898	14.791	0	-0.01
	3.03	-3.004	0	-0.991	-9.626	13.252	0	-0.01
	3.636	-3.605	0	-0.991	-11.066	10.669	0	-0.01
	4.242	-4.206	0	-0.991	-12.954	7.824	0	-0.01
	4.848	-4.807	0	-0.991	-15.861	2.852	0	0
	5.454	-10.082	0	-9.626	-18.45	0	-3.912	0
2	0	-16.392	9.91	-15.578	-20.686	0	-11.844	0
	0.606	-10.563	9.131	0	-1.328	0.805	0	0
	1.212	-7.215	2.022	0	-2.32	8.734	0	-0.01
	1.818	-6.739	0.784	0	-4.707	11.452	0	-0.01
	2.424	-6.264	0.784	0	-6.853	12.328	0	-0.01
	3.03	-5.791	0.735	0	-8.735	11.693	0	-0.01
	3.636	-5.346	0.735	0	-10.373	9.877	0	-0.01
	4.242	-4.904	0.718	0	-12.18	7.408	0	-0.01
	4.848	-4.83	0	-1.328	-14.8	2.925	0	-0.01
	5.454	-9.485	0	-9.246	-17.298	0	-3.135	0
3	0	-15.294	13.972	-10.062	-19.575	0	-10.422	0
	0.606	-9.314	8.831	0	-1.353	0.906	0	0
	1.212	-4.676	1.311	0	-2.59	9.934	0	-0.01
	1.818	-4.566	0.05	0	-4.949	12.472	0	-0.01
	2.424	-4.535	0.05	0	-7.043	13.102	0	-0.01
	3.03	-4.505	0.05	0	-8.84	12.189	0	-0.01
	3.636	-4.475	0.05	0	-10.347	10.12	0	-0.01
	4.242	-4.462	0	-0.115	-12.48	7.588	0	-0.01
	4.848	-4.831	0	-1.353	-15.082	3.078	0	-0.01
	5.454	-9.444	0	-9.186	-17.559	0	-3.042	0
4	0	-15.345	10.031	-14.053	-19.8	0	-10.395	0
	0.606	-9.545	9.206	0	-1.354	0.913	0	0
	1.212	-5.048	1.415	0	-2.509	9.646	0	-0.01
	1.818	-4.51	0.036	0	-4.883	12.275	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	2.424	-4.488	0.03	0	-6.995	12.988	0	-0.01
	3.03	-4.47	0.03	0	-8.81	12.138	0	-0.01
	3.636	-4.478	0	-0.034	-10.336	10.108	0	-0.01
	4.242	-4.502	0	-0.04	-12.39	7.54	0	-0.01
	4.848	-4.832	0	-1.354	-14.995	3.084	0	-0.01
	5.454	-9.441	0	-9.182	-17.483	0	-2.991	0
5	0	-15.23	10.007	-13.964	-19.741	0	-10.318	0
	0.606	-9.449	9.183	0	-1.354	0.914	0	0
	1.212	-4.819	1.351	0	-2.504	9.625	0	-0.01
	1.818	-4.506	0.035	0	-4.878	12.261	0	-0.01
	2.424	-4.485	0.029	0	-6.992	12.98	0	-0.01
	3.03	-4.468	0.029	0	-8.808	12.134	0	-0.01
	3.636	-4.484	0	-0.029	-10.335	10.107	0	-0.01
	4.242	-4.505	0	-0.035	-12.384	7.536	0	-0.01
	4.848	-4.831	0	-1.354	-14.989	3.084	0	-0.01
	5.454	-9.442	0	-9.182	-17.478	0	-2.988	0
6	0	-15.222	13.957	-13.957	-19.736	0	-10.313	0
	0.606	-9.442	9.182	0	-1.351	0.911	0	0
	1.212	-4.831	1.354	0	-2.503	9.623	0	-0.01
	1.818	-4.505	0.035	0	-4.878	12.26	0	-0.01
	2.424	-4.484	0.029	0	-6.991	12.979	0	-0.01
	3.03	-4.468	0	-0.029	-8.808	12.133	0	-0.01
	3.636	-4.485	0	-0.029	-10.335	10.106	0	-0.01
	4.242	-4.506	0	-0.035	-12.383	7.536	0	-0.01
	4.848	-4.819	0	-1.351	-14.988	3.084	0	-0.01
	5.454	-9.449	0	-9.183	-17.477	0	-2.988	0
7	0	-15.23	13.964	-10.007	-19.736	0	-10.313	0
	0.606	-9.441	9.182	0	-1.415	0.955	0	0
	1.212	-4.832	1.354	0	-2.505	9.623	0	-0.01
	1.818	-4.502	0.04	0	-4.879	12.259	0	-0.01
	2.424	-4.478	0.034	0	-6.993	12.977	0	-0.01
	3.03	-4.47	0	-0.03	-8.81	12.131	0	-0.01
	3.636	-4.488	0	-0.03	-10.346	9.755	0	-0.01
	4.242	-4.51	0	-0.036	-12.384	7.533	0	-0.01
	4.848	-5.048	0	-1.415	-14.989	3.08	0	-0.01
	5.454	-9.545	0	-9.206	-17.479	0	-2.993	0
8	0	-15.345	14.053	-10.031	-19.738	0	-10.32	0
	0.606	-9.444	9.186	0	-1.311	0.884	0	0
	1.212	-4.831	1.353	0	-2.522	9.625	0	-0.01
	1.818	-4.462	0.115	0	-4.9	12.248	0	-0.01
	2.424	-4.475	0	-0.05	-7.015	12.952	0	-0.01
	3.03	-4.505	0	-0.05	-8.831	12.093	0	-0.01
	3.636	-4.535	0	-0.05	-10.354	10.062	0	-0.01
	4.242	-4.566	0	-0.05	-12.396	7.499	0	-0.01
	4.848	-4.676	0	-1.311	-15.005	3.024	0	-0.01
	5.454	-9.314	0	-8.831	-17.498	0	-3.073	0
9	0	-15.294	10.062	-13.972	-19.759	0	-10.422	0
	0.606	-9.485	9.246	0	-2.022	1.364	0	0
	1.212	-4.83	1.328	0	-2.771	9.642	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	1.818	-4.904	0	-0.718	-5.187	12.094	0	-0.01
	2.424	-5.346	0	-0.735	-7.322	12.6	0	-0.01
	3.03	-5.791	0	-0.735	-9.131	11.57	0	-0.01
	3.636	-6.264	0	-0.784	-10.6	9.484	0	-0.01
	4.242	-6.739	0	-0.784	-12.557	7.019	0	-0.01
	4.848	-7.215	0	-0.784	-15.224	2.243	0	-0.01
	5.454	-10.563	0	-9.131	-17.763	0	-4.181	0
10	0	-16.392	15.578	-9.911	-20.056	0	-11.843	0
	0.606	-10.082	9.626	0	-0.823	4.488	0	0
	1.212	-4.807	0.991	0	-1.685	8.168	0	0
	1.818	-4.206	0.991	0	-2.69	11.409	0	-0.01
	2.424	-3.605	0.991	0	-4.388	15.955	0	-0.01
	3.03	-3.004	0.991	0	-5.763	17.461	0	-0.01
	3.636	-2.403	0.991	0	-7.208	17.472	0	-0.01
	4.242	-1.803	0.991	0	-9.249	16.816	0	0
	4.848	-1.202	0.991	0	-11.833	14.341	0	0
	5.454	-0.601	0.991	0	-14.636	8.87	0	0
	6.06	0	0.991	-17.578	-17.578	0	0	0

Support    Reac. Pos    Reac. Negative

1	0.991	-17.609
2	1.594	-26.789
3	2.564	-25.377
4	1.717	-25.35
5	1.794	-25.274
6	1.713	-25.269
7	1.794	-25.274
8	1.717	-25.35
9	2.564	-25.377
10	1.594	-26.789
11	0.991	-17.609

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.292	-1.492	21.292	0	0	0
	0.606	10.737	17.718	0	17.718	10.737	0	0.01
	1.212	17.354	14.318	-2.682	14.318	17.354	0	0.02
	1.818	20.342	11.189	-5.811	11.189	20.342	0	0.02
	2.424	21.181	8.738	-8.262	8.738	21.181	0	0.02
	3.03	21.093	6.961	-10.039	6.961	21.093	0	0.02
	3.636	19.196	5.279	-11.721	5.279	19.196	0	0.02
	4.242	16.271	2.866	-14.134	2.866	16.271	0	0.02
	4.848	11.177	0	-17.668	1.774	8.599	0	0.01
	5.454	4.816	0.883	-11.117	0.883	4.816	0	0.01
2	0	2.422	0.4	-1.999	22.543	0	-5.977	0
	0.606	4.144	10.657	-1.343	19.448	3.519	0	0
	1.212	10.606	16.21	-0.79	16.301	2.668	0	0.01
	1.818	14.952	13.01	-3.99	14.478	8.055	0	0.01
	2.424	16.564	9.994	-7.006	12.393	12.572	0	0.02
	3.03	15.752	7.248	-9.752	10.033	15.719	0	0.02
	3.636	16.845	7.336	-9.664	7.336	16.845	0	0.02
	4.242	15.474	4.348	-12.652	4.348	15.474	0	0.01
	4.848	11.303	1.16	-15.84	2.788	7.236	0	0.01
	5.454	5.016	1.179	-10.821	2.456	1.657	0	0.01
3	0	3.145	2.456	-0.658	22.632	0	-6.406	0
	0.606	6.035	10.558	-1.442	19.572	3.001	0	0.01
	1.212	11.637	15.608	-1.392	16.346	10.121	0	0.01
	1.818	15.635	12.462	-4.538	14.268	8.679	0	0.01
	2.424	16.906	9.55	-7.45	12.28	12.838	0	0.02
	3.03	15.817	6.956	-10.044	10.012	15.755	0	0.02
	3.636	16.782	7.391	-9.609	7.391	16.782	0	0.02
	4.242	15.417	4.455	-12.545	4.455	15.417	0	0.01
	4.848	11.312	1.291	-15.709	2.385	8.641	0	0.01
	5.454	5.03	1.2	-10.8	1.989	1.342	0	0.01
4	0	2.609	0.545	-2.038	22.639	0	-6.437	0
	0.606	5.01	10.803	-1.197	19.581	2.964	0	0.01
	1.212	11.336	15.692	-1.308	16.355	10.086	0	0.01
	1.818	15.429	12.532	-4.468	14.259	8.706	0	0.01
	2.424	16.786	9.601	-7.399	12.272	12.857	0	0.02
	3.03	15.762	6.987	-10.013	10.011	15.758	0	0.02
	3.636	16.777	7.395	-9.605	7.395	16.777	0	0.02
	4.242	15.413	4.462	-12.538	4.462	15.413	0	0.01
	4.848	11.312	1.301	-15.699	2.388	8.641	0	0.01
	5.454	5.031	1.202	-10.798	2.064	1.392	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

5	0	2.643	2.064	-0.553	22.639	0	-6.439	0
	0.606	5.03	10.798	-1.202	19.582	2.961	0	0.01
	1.212	11.314	15.698	-1.302	16.356	10.084	0	0.01
	1.818	15.414	12.537	-4.463	14.257	8.711	0	0.01
	2.424	16.778	9.604	-7.396	12.271	12.858	0	0.02
	3.03	15.759	6.989	-10.011	10.011	15.758	0	0.02
	3.636	16.777	7.395	-9.605	7.395	16.777	0	0.02
	4.242	15.413	4.463	-12.537	4.463	15.413	0	0.01
	4.848	11.313	1.301	-15.699	2.388	8.641	0	0.01
	5.454	5.031	1.202	-10.798	2.04	1.376	0	0.01
6	0	2.612	0.547	-2.04	22.64	0	-6.44	0
	0.606	5.031	10.798	-1.202	19.582	2.961	0	0.01
	1.212	11.313	15.699	-1.301	16.357	10.084	0	0.01
	1.818	15.413	12.537	-4.463	14.257	8.711	0	0.01
	2.424	16.777	9.605	-7.395	12.271	12.859	0	0.02
	3.03	15.759	10.011	-6.989	10.011	15.759	0	0.02
	3.636	16.778	7.396	-9.604	7.396	16.778	0	0.02
	4.242	15.414	4.463	-12.537	4.463	15.414	0	0.01
	4.848	11.314	1.302	-15.698	2.388	8.642	0	0.01
	5.454	5.03	1.202	-10.798	2.038	1.375	0	0.01
7	0	2.643	0.553	-2.064	22.644	0	-6.446	0
	0.606	5.031	10.798	-1.202	19.588	2.957	0	0.01
	1.212	11.312	15.699	-1.301	16.363	10.083	0	0.01
	1.818	15.413	12.538	-4.462	14.257	8.711	0	0.01
	2.424	16.777	9.605	-7.395	12.272	12.86	0	0.02
	3.03	15.762	10.013	-6.987	10.013	15.762	0	0.02
	3.636	16.786	7.399	-9.601	7.399	16.786	0	0.02
	4.242	15.429	4.468	-12.532	4.468	15.429	0	0.01
	4.848	11.336	1.308	-15.692	2.389	8.647	0	0.01
	5.454	5.01	1.197	-10.803	2.038	1.374	0	0.01
8	0	2.609	2.038	-0.545	22.707	0	-6.526	0
	0.606	5.03	10.8	-1.2	19.667	2.904	0	0.01
	1.212	11.312	15.709	-1.291	16.453	10.077	0	0.01
	1.818	15.417	12.545	-4.455	14.26	8.713	0	0.01
	2.424	16.782	9.609	-7.391	12.284	12.873	0	0.02
	3.03	15.817	10.044	-6.956	10.044	15.817	0	0.02
	3.636	16.906	7.45	-9.55	7.45	16.906	0	0.02
	4.242	15.635	4.538	-12.462	4.538	15.635	0	0.01
	4.848	11.637	1.392	-15.608	2.577	9.317	0	0.01
	5.454	6.035	1.442	-10.558	2.035	1.363	0	0.01
9	0	3.145	0.658	-2.456	22.433	0	-6.175	0
	0.606	5.016	10.821	-1.179	19.377	3.099	0	0.01
	1.212	11.303	15.84	-1.16	16.172	10.096	0	0.01
	1.818	15.474	12.652	-4.348	14.301	8.735	0	0.01
	2.424	16.845	9.664	-7.336	12.25	12.834	0	0.02
	3.03	15.752	9.752	-7.248	9.877	15.525	0	0.02
	3.636	16.564	7.006	-9.994	7.203	16.324	0	0.02
	4.242	14.952	3.99	-13.01	4.254	14.793	0	0.01
	4.848	10.606	1.103	-16.21	2.118	7.447	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	5.454	4.144	1.343	-10.657	1.999	1.211	0	0
10	0	2.422	1.999	-0.4	24.121	0	-8.336	0
	0.606	4.816	11.117	-0.883	21.188	1.878	0	0.01
	1.212	11.177	17.668	0	17.916	9.977	0	0.01
	1.818	16.271	14.134	-2.866	14.869	9.04	0	0.02
	2.424	19.196	11.721	-5.279	13.178	13.895	0	0.02
	3.03	21.093	10.039	-6.961	11.145	17.742	0	0.02
	3.636	21.181	8.262	-8.738	8.756	19.983	0	0.02
	4.242	20.342	5.811	-11.189	6.424	19.227	0	0.02
	4.848	17.354	2.682	-14.318	4.542	15.099	0	0.02
	5.454	10.737	0	-17.718	2.622	8.713	0	0.01
	6.06	0	1.492	-21.292	1.492	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shee	Corr. Shee	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.292	-1.492	-1.492	0	0	0
	0.606	-0.904	0	-1.492	-2.622	8.713	0	0
	1.212	-1.808	0	-1.492	-4.542	15.099	0	0
	1.818	-2.712	0	-1.492	-6.424	19.227	0	-0.01
	2.424	-3.616	0	-1.492	-8.756	19.983	0	-0.01
	3.03	-4.52	0	-1.492	-11.145	17.742	0	-0.01
	3.636	-5.424	0	-1.492	-13.178	13.895	0	-0.01
	4.242	-6.328	0	-1.492	-14.869	9.04	0	-0.01
	4.848	-7.232	0	-1.492	-17.916	9.977	0	-0.01
	5.454	-10.063	0	-13.178	-21.188	1.878	0	0
2	0	-18.266	14.478	-13.893	-24.121	0	-8.336	0
	0.606	-10.249	2.456	0	-1.999	1.211	0	-0.01
	1.212	-8.761	2.456	0	-2.118	7.447	0	-0.01
	1.818	-8.023	1.218	0	-4.254	14.793	0	-0.01
	2.424	-7.285	1.218	0	-7.203	16.324	0	-0.01
	3.03	-6.547	1.218	0	-9.877	15.525	0	-0.01
	3.636	-6.432	0	-0.345	-12.25	12.834	0	-0.01
	4.242	-6.642	0	-0.351	-14.301	8.735	0	-0.01
	4.848	-7.267	0	-1.999	-16.172	10.096	0	-0.01
	5.454	-9.436	0	-12.25	-19.377	3.099	0	0
3	0	-17.309	14.071	-13.318	-22.433	0	-6.175	0
	0.606	-9.487	12.28	0	-2.035	1.363	0	0
	1.212	-7.094	1.989	0	-2.577	9.317	0	-0.01
	1.818	-6.576	0.699	0	-4.538	15.635	0	-0.01
	2.424	-6.153	0.699	0	-7.45	16.906	0	-0.01
	3.03	-5.729	0.699	0	-10.044	15.817	0	-0.01
	3.636	-6.094	0	-0.64	-12.284	12.873	0	-0.01
	4.242	-6.482	0	-0.64	-14.26	8.713	0	-0.01
	4.848	-7.27	0	-2.035	-16.453	10.077	0	-0.01
	5.454	-9.46	0	-12.284	-19.667	2.904	0	0
4	0	-17.241	14.036	-13.283	-22.707	0	-6.526	0
	0.606	-9.454	12.272	0	-2.038	1.374	0	0
	1.212	-7.363	2.064	0	-2.389	8.647	0	-0.01
	1.818	-6.478	0.666	0	-4.468	15.429	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	2.424	-6.074	0.666	0	-7.399	16.786	0	-0.01
	3.03	-5.671	0.666	0	-10.013	15.762	0	-0.01
	3.636	-6.07	0	-0.662	-12.272	12.86	0	-0.01
	4.242	-6.471	0	-0.662	-14.257	8.711	0	-0.01
	4.848	-7.27	0	-2.038	-16.363	10.083	0	-0.01
	5.454	-9.452	0	-12.272	-19.588	2.957	0	0
5	0	-17.237	14.035	-13.279	-22.644	0	-6.446	0
	0.606	-9.451	12.271	0	-2.038	1.375	0	0
	1.212	-7.277	2.04	0	-2.388	8.642	0	-0.01
	1.818	-6.471	0.663	0	-4.463	15.414	0	-0.01
	2.424	-6.069	0.663	0	-7.396	16.778	0	-0.01
	3.03	-5.667	0.663	0	-10.011	15.759	0	-0.01
	3.636	-6.068	0	-0.663	-12.271	12.859	0	-0.01
	4.242	-6.47	0	-0.663	-14.257	8.711	0	-0.01
	4.848	-7.27	0	-2.038	-16.357	10.084	0	-0.01
	5.454	-9.451	0	-12.271	-19.582	2.961	0	0
6	0	-17.236	14.035	-13.279	-22.64	0	-6.44	0
	0.606	-9.451	12.271	0	-2.04	1.376	0	0
	1.212	-7.27	2.038	0	-2.388	8.641	0	-0.01
	1.818	-6.47	0.663	0	-4.463	15.413	0	-0.01
	2.424	-6.068	0.663	0	-7.395	16.777	0	-0.01
	3.03	-5.667	0	-0.663	-10.011	15.758	0	-0.01
	3.636	-6.069	0	-0.663	-12.271	12.858	0	-0.01
	4.242	-6.471	0	-0.663	-14.257	8.711	0	-0.01
	4.848	-7.277	0	-2.04	-16.356	10.084	0	-0.01
	5.454	-9.451	0	-12.271	-19.582	2.961	0	0
7	0	-17.237	13.279	-14.035	-22.639	0	-6.439	0
	0.606	-9.452	12.272	0	-2.064	1.392	0	0
	1.212	-7.27	2.038	0	-2.388	8.641	0	-0.01
	1.818	-6.471	0.662	0	-4.462	15.413	0	-0.01
	2.424	-6.07	0.662	0	-7.395	16.777	0	-0.01
	3.03	-5.671	0	-0.666	-10.011	15.758	0	-0.01
	3.636	-6.074	0	-0.666	-12.272	12.857	0	-0.01
	4.242	-6.478	0	-0.666	-14.259	8.706	0	-0.01
	4.848	-7.363	0	-2.064	-16.355	10.086	0	-0.01
	5.454	-9.454	0	-12.272	-19.581	2.964	0	0
8	0	-17.241	13.283	-14.036	-22.639	0	-6.437	0
	0.606	-9.46	12.284	0	-1.989	1.342	0	0
	1.212	-7.27	2.035	0	-2.385	8.641	0	-0.01
	1.818	-6.482	0.64	0	-4.455	15.417	0	-0.01
	2.424	-6.094	0.64	0	-7.391	16.782	0	-0.01
	3.03	-5.729	0	-0.699	-10.012	15.755	0	-0.01
	3.636	-6.153	0	-0.699	-12.28	12.838	0	-0.01
	4.242	-6.576	0	-0.699	-14.268	8.679	0	-0.01
	4.848	-7.094	0	-1.989	-16.346	10.121	0	-0.01
	5.454	-9.487	0	-12.28	-19.572	3.001	0	0
9	0	-17.309	13.318	-14.071	-22.632	0	-6.406	0
	0.606	-9.436	12.25	0	-2.456	1.657	0	0
	1.212	-7.267	1.999	0	-2.788	7.236	0	-0.01



## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	1.818	-6.642	0.351	0	-4.348	15.474	0	-0.01
	2.424	-6.432	0.345	0	-7.336	16.845	0	-0.01
	3.03	-6.547	0	-1.218	-10.033	15.719	0	-0.01
	3.636	-7.285	0	-1.218	-12.393	12.572	0	-0.01
	4.242	-8.023	0	-1.218	-14.478	8.055	0	-0.01
	4.848	-8.761	0	-1.218	-16.301	2.668	0	-0.01
	5.454	-10.249	0	-2.456	-19.448	3.519	0	-0.01
10	0	-18.266	13.893	-14.478	-22.543	0	-5.977	0
	0.606	-10.063	13.178	0	-0.883	4.816	0	0
	1.212	-7.232	1.492	0	-1.774	8.599	0	-0.01
	1.818	-6.328	1.492	0	-2.866	16.271	0	-0.01
	2.424	-5.424	1.492	0	-5.279	19.196	0	-0.01
	3.03	-4.52	1.492	0	-6.961	21.093	0	-0.01
	3.636	-3.616	1.492	0	-8.738	21.181	0	-0.01
	4.242	-2.712	1.492	0	-11.189	20.342	0	-0.01
	4.848	-1.808	1.492	0	-14.318	17.354	0	0
	5.454	-0.904	1.492	0	-17.718	10.737	0	0
	6.06	0	1.492	-21.292	-21.292	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.492	-21.329
2	2.398	-28.429
3	3.114	-27.389
4	2.583	-27.331
5	2.617	-27.324
6	2.586	-27.324
7	2.617	-27.324
8	2.583	-27.331
9	3.114	-27.389
10	2.398	-28.429
11	1.492	-21.329

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Sheæ	Corr. Sheæ	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	19.975	-1.591	19.975	0	0	0
	0.606	10.587	17.469	-2.531	17.469	10.587	0	0.01
	1.212	18.145	14.971	-5.029	14.971	18.145	0	0.02
	1.818	22.792	12.537	-7.463	12.537	22.792	0	0.02
	2.424	24.862	10.256	-9.744	10.256	24.862	0	0.03
	3.03	24.639	8.132	-11.868	8.132	24.639	0	0.03
	3.636	22.299	6.133	-13.867	6.133	22.299	0	0.02
	4.242	18.229	4.297	-15.703	4.297	18.229	0	0.02
	4.848	12.91	2.663	-17.337	2.663	12.91	0	0.01
	5.454	6.913	1.267	-18.733	1.267	6.913	0	0.01
2	0	2.583	0.426	-2.131	19.986	0	-0.056	0
	0.606	6.808	17.926	-2.074	18.451	6.49	0	0.01
	1.212	12.411	16.578	-3.721	16.578	12.411	0	0.01
	1.818	17.081	14.466	-5.534	14.466	17.081	0	0.02
	2.424	20.111	12.273	-7.727	12.273	20.111	0	0.02
	3.03	21.292	10.045	-9.955	10.045	21.292	0	0.02
	3.636	20.413	7.781	-12.219	7.781	20.413	0	0.02
	4.242	17.543	5.574	-14.426	5.574	17.543	0	0.02
	4.848	12.969	3.513	-16.487	3.735	11.997	0	0.01
	5.454	7.198	1.691	-18.309	2.609	1.76	0	0.01
3	0	3.341	2.609	-0.699	19.707	1.278	0	0
	0.606	7.559	18.195	-1.805	18.195	7.559	0	0.01
	1.212	13.245	16.345	-3.655	16.389	12.019	0	0.01
	1.818	17.683	14.262	-5.738	14.513	16.621	0	0.02
	2.424	20.384	12.041	-7.959	12.418	19.77	0	0.02
	3.03	21.089	9.775	-10.225	10.182	21.051	0	0.02
	3.636	20.278	7.9	-12.1	7.9	20.278	0	0.02
	4.242	17.494	5.665	-14.335	5.665	17.494	0	0.02
	4.848	12.973	3.574	-16.426	3.612	11.989	0	0.01
	5.454	7.219	1.722	-18.278	2.185	1.474	0	0.01
4	0	2.798	2.185	-0.585	19.779	0.936	0	0
	0.606	7.245	18.27	-1.73	18.27	7.245	0	0.01
	1.212	12.993	16.415	-3.585	16.415	12.993	0	0.01
	1.818	17.504	14.323	-5.677	14.523	16.592	0	0.02
	2.424	20.276	12.088	-7.912	12.429	19.746	0	0.02
	3.03	21.037	9.805	-10.195	10.192	21.034	0	0.02
	3.636	20.268	7.908	-12.092	7.908	20.268	0	0.02
	4.242	17.49	5.672	-14.328	5.672	17.49	0	0.02
	4.848	12.973	3.579	-16.421	3.603	11.988	0	0.01
	5.454	7.22	1.724	-18.276	2.177	1.469	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

5	0	2.788	2.177	-0.583	19.784	0.912	0	0
	0.606	7.222	18.276	-1.724	18.276	7.222	0	0.01
	1.212	12.974	16.42	-3.58	16.42	12.974	0	0.01
	1.818	17.491	14.327	-5.673	14.523	16.59	0	0.02
	2.424	20.268	12.091	-7.909	12.429	19.744	0	0.02
	3.03	21.033	9.807	-10.193	10.193	21.033	0	0.02
	3.636	20.268	7.909	-12.091	7.909	20.268	0	0.02
	4.242	17.49	5.673	-14.327	5.673	17.49	0	0.02
	4.848	12.973	3.579	-16.421	3.602	11.988	0	0.01
	5.454	7.221	1.724	-18.276	2.173	1.466	0	0.01
6	0	2.783	2.173	-2.173	19.784	0.91	0	0
	0.606	7.221	18.276	-1.724	18.276	7.221	0	0.01
	1.212	12.973	16.421	-3.579	16.421	12.973	0	0.01
	1.818	17.49	14.327	-5.673	14.524	16.59	0	0.02
	2.424	20.268	12.091	-7.909	12.429	19.744	0	0.02
	3.03	21.033	10.193	-9.807	10.193	21.033	0	0.02
	3.636	20.268	7.909	-12.091	7.909	20.268	0	0.02
	4.242	17.491	5.673	-14.327	5.673	17.491	0	0.02
	4.848	12.974	3.58	-16.42	3.602	11.988	0	0.01
	5.454	7.222	1.724	-18.276	2.173	1.466	0	0.01
7	0	2.788	0.583	-2.177	19.784	0.91	0	0
	0.606	7.22	18.276	-1.724	18.276	7.22	0	0.01
	1.212	12.973	16.421	-3.579	16.421	12.973	0	0.01
	1.818	17.49	14.328	-5.672	14.524	16.59	0	0.02
	2.424	20.268	12.092	-7.908	12.43	19.745	0	0.02
	3.03	21.037	10.195	-9.805	10.195	21.037	0	0.02
	3.636	20.276	7.912	-12.088	7.912	20.276	0	0.02
	4.242	17.504	5.677	-14.323	5.677	17.504	0	0.02
	4.848	12.993	3.585	-16.415	3.603	11.99	0	0.01
	5.454	7.245	1.73	-18.27	2.173	1.465	0	0.01
8	0	2.798	0.585	-2.185	19.785	0.909	0	0
	0.606	7.219	18.278	-1.722	18.278	7.219	0	0.01
	1.212	12.973	16.426	-3.574	16.426	12.973	0	0.01
	1.818	17.494	14.335	-5.665	14.525	16.59	0	0.02
	2.424	20.278	12.1	-7.9	12.445	19.761	0	0.02
	3.03	21.089	10.225	-9.775	10.225	21.089	0	0.02
	3.636	20.384	7.959	-12.041	7.959	20.384	0	0.02
	4.242	17.683	5.738	-14.262	5.738	17.683	0	0.02
	4.848	13.245	3.655	-16.345	3.655	13.245	0	0.01
	5.454	7.559	1.805	-18.195	2.17	1.453	0	0.01
9	0	3.341	0.699	-2.609	19.788	0.905	0	0
	0.606	7.198	18.309	-1.691	18.309	7.198	0	0.01
	1.212	12.969	16.487	-3.513	16.487	12.969	0	0.01
	1.818	17.543	14.426	-5.574	14.539	16.598	0	0.02
	2.424	20.413	12.219	-7.781	12.474	19.795	0	0.02
	3.03	21.292	9.955	-10.045	10.144	20.948	0	0.02
	3.636	20.111	7.727	-12.273	7.803	20.018	0	0.02
	4.242	17.081	5.534	-14.466	5.624	17.026	0	0.02
	4.848	12.411	3.721	-16.578	3.721	12.411	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	5.454	6.808	2.074	-17.926	2.131	1.291	0	0.01
10	0	2.583	2.131	-0.426	19.991	0	-0.065	0
	0.606	6.913	18.733	-1.267	18.916	5.91	0	0.01
	1.212	12.91	17.337	-2.663	17.543	11.91	0	0.01
	1.818	18.229	15.703	-4.297	15.913	17.336	0	0.02
	2.424	22.299	13.867	-6.133	14.058	21.606	0	0.02
	3.03	24.639	11.868	-8.132	12.01	24.211	0	0.03
	3.636	24.862	9.744	-10.256	9.801	24.723	0	0.03
	4.242	22.792	7.463	-12.537	7.53	22.671	0	0.02
	4.848	18.145	5.029	-14.971	5.252	17.874	0	0.02
	5.454	10.587	2.531	-17.469	2.923	10.349	0	0.01
	6.06	0	1.591	-19.975	1.591	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shee	Corr. Shee	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.975	-1.591	-1.591	0	0	0
	0.606	-0.964	0	-1.591	-2.923	10.349	0	0
	1.212	-1.928	0	-1.591	-5.252	17.874	0	0
	1.818	-2.892	0	-1.591	-7.53	22.671	0	-0.01
	2.424	-3.856	0	-1.591	-9.801	24.723	0	-0.01
	3.03	-4.82	0	-1.591	-12.01	24.211	0	-0.01
	3.636	-5.784	0	-1.591	-14.058	21.606	0	-0.01
	4.242	-6.748	0	-1.591	-15.913	17.336	0	-0.01
	4.848	-7.712	0	-1.591	-17.543	11.91	0	-0.01
	5.454	-8.676	0	-1.591	-18.916	5.91	0	0
2	0	-12.471	2.609	-14.058	-19.991	0	-0.065	0
	0.606	-10.889	2.609	0	-2.131	1.291	0	-0.01
	1.212	-9.308	2.609	0	-3.721	12.411	0	-0.01
	1.818	-8.304	1.657	0	-5.624	17.026	0	-0.01
	2.424	-7.3	1.657	0	-7.803	20.018	0	-0.01
	3.03	-6.315	1.532	0	-10.144	20.948	0	-0.01
	3.636	-6.488	0	-0.891	-12.474	19.795	0	-0.01
	4.242	-7.028	0	-0.891	-14.539	16.598	0	-0.01
	4.848	-7.749	0	-2.131	-16.487	12.969	0	-0.01
	5.454	-9.04	0	-2.131	-18.309	7.198	0	0
3	0	-10.442	2.185	-12.474	-19.788	0.905	0	0
	0.606	-9.118	2.185	0	-2.17	1.453	0	0
	1.212	-7.794	2.185	0	-3.655	13.245	0	-0.01
	1.818	-7.003	1.137	0	-5.738	17.683	0	-0.01
	2.424	-6.314	1.137	0	-7.959	20.384	0	-0.01
	3.03	-5.624	1.137	0	-10.225	21.089	0	-0.01
	3.636	-6.259	0	-1.091	-12.445	19.761	0	-0.01
	4.242	-6.921	0	-1.091	-14.525	16.59	0	-0.01
	4.848	-7.751	0	-2.17	-16.426	12.973	0	-0.01
	5.454	-9.066	0	-2.17	-18.278	7.219	0	0
4	0	-10.405	2.177	-12.445	-19.785	0.909	0	0
	0.606	-9.086	2.177	0	-2.173	1.465	0	0
	1.212	-7.766	2.177	0	-3.603	11.99	0	-0.01
	1.818	-6.919	1.109	0	-5.677	17.504	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	2.424	-6.247	1.109	0	-7.912	20.276	0	-0.01
	3.03	-5.575	1.109	0	-10.195	21.037	0	-0.01
	3.636	-6.243	0	-1.106	-12.43	19.745	0	-0.01
	4.242	-6.913	0	-1.106	-14.524	16.59	0	-0.01
	4.848	-7.752	0	-2.173	-16.421	12.973	0	-0.01
	5.454	-9.068	0	-2.173	-18.276	7.22	0	0
5	0	-10.386	2.173	-12.43	-19.784	0.91	0	0
	0.606	-9.07	2.173	0	-2.173	1.466	0	0
	1.212	-7.753	2.173	0	-3.602	11.988	0	-0.01
	1.818	-6.913	1.107	0	-5.673	17.491	0	-0.01
	2.424	-6.242	1.107	0	-7.909	20.268	0	-0.01
	3.03	-5.571	1.107	0	-10.193	21.033	0	-0.01
	3.636	-6.242	0	-1.107	-12.429	19.744	0	-0.01
	4.242	-6.912	0	-1.107	-14.524	16.59	0	-0.01
	4.848	-7.752	0	-2.173	-16.421	12.973	0	-0.01
	5.454	-9.068	0	-2.173	-18.276	7.221	0	0
6	0	-10.385	12.429	-12.429	-19.784	0.91	0	0
	0.606	-9.068	2.173	0	-2.173	1.466	0	0
	1.212	-7.752	2.173	0	-3.602	11.988	0	-0.01
	1.818	-6.912	1.107	0	-5.673	17.49	0	-0.01
	2.424	-6.242	1.107	0	-7.909	20.268	0	-0.01
	3.03	-5.571	0	-1.107	-10.193	21.033	0	-0.01
	3.636	-6.242	0	-1.107	-12.429	19.744	0	-0.01
	4.242	-6.913	0	-1.107	-14.523	16.59	0	-0.01
	4.848	-7.753	0	-2.173	-16.42	12.974	0	-0.01
	5.454	-9.07	0	-2.173	-18.276	7.222	0	0
7	0	-10.386	12.43	-2.173	-19.784	0.912	0	0
	0.606	-9.068	2.173	0	-2.177	1.469	0	0
	1.212	-7.752	2.173	0	-3.603	11.988	0	-0.01
	1.818	-6.913	1.106	0	-5.672	17.49	0	-0.01
	2.424	-6.243	1.106	0	-7.908	20.268	0	-0.01
	3.03	-5.575	0	-1.109	-10.192	21.034	0	-0.01
	3.636	-6.247	0	-1.109	-12.429	19.746	0	-0.01
	4.242	-6.919	0	-1.109	-14.523	16.592	0	-0.01
	4.848	-7.766	0	-2.177	-16.415	12.993	0	-0.01
	5.454	-9.086	0	-2.177	-18.27	7.245	0	0
8	0	-10.405	12.445	-2.177	-19.779	0.936	0	0
	0.606	-9.066	2.17	0	-2.185	1.474	0	0
	1.212	-7.751	2.17	0	-3.612	11.989	0	-0.01
	1.818	-6.921	1.091	0	-5.665	17.494	0	-0.01
	2.424	-6.259	1.091	0	-7.9	20.278	0	-0.01
	3.03	-5.624	0	-1.137	-10.182	21.051	0	-0.01
	3.636	-6.314	0	-1.137	-12.418	19.77	0	-0.01
	4.242	-7.003	0	-1.137	-14.513	16.621	0	-0.01
	4.848	-7.794	0	-2.185	-16.389	12.019	0	-0.01
	5.454	-9.118	0	-2.185	-18.195	7.559	0	0
9	0	-10.442	12.474	-2.185	-19.707	1.278	0	0
	0.606	-9.04	2.131	0	-2.609	1.76	0	0
	1.212	-7.749	2.131	0	-3.735	11.997	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	1.818	-7.028	0.891	0	-5.574	17.543	0	-0.01
	2.424	-6.488	0.891	0	-7.781	20.413	0	-0.01
	3.03	-6.315	0	-1.532	-10.045	21.292	0	-0.01
	3.636	-7.3	0	-1.657	-12.273	20.111	0	-0.01
	4.242	-8.304	0	-1.657	-14.466	17.081	0	-0.01
	4.848	-9.308	0	-2.609	-16.578	12.411	0	-0.01
	5.454	-10.889	0	-2.609	-18.451	6.49	0	-0.01
10	0	-12.471	14.058	-2.609	-19.986	0	-0.056	0
	0.606	-8.676	1.591	0	-1.267	6.913	0	0
	1.212	-7.712	1.591	0	-2.663	12.91	0	-0.01
	1.818	-6.748	1.591	0	-4.297	18.229	0	-0.01
	2.424	-5.784	1.591	0	-6.133	22.299	0	-0.01
	3.03	-4.82	1.591	0	-8.132	24.639	0	-0.01
	3.636	-3.856	1.591	0	-10.256	24.862	0	-0.01
	4.242	-2.892	1.591	0	-12.537	22.792	0	-0.01
	4.848	-1.928	1.591	0	-14.971	18.145	0	0
	5.454	-0.964	1.591	0	-17.469	10.587	0	0
	6.06	0	1.591	-19.975	-19.975	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.591	-20
2	2.557	-20.078
3	3.308	-19.061
4	2.77	-19.07
5	2.76	-19.071
6	2.755	-19.071
7	2.76	-19.071
8	2.77	-19.07
9	3.308	-19.061
10	2.557	-20.078
11	1.591	-19.975

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	32.627	-2.639	32.627	0	0	0
	0.606	17.351	28.632	-3.368	28.632	17.351	0	0.01
	1.212	29.792	24.581	-7.419	24.581	29.792	0	0.03
	1.818	37.423	20.585	-11.415	20.585	37.423	0	0.04
	2.424	40.51	16.712	-15.288	16.712	40.51	0	0.04
	3.03	39.492	13.034	-18.966	13.034	39.492	0	0.04
	3.636	34.964	9.616	-22.384	9.616	34.964	0	0.04
	4.242	27.738	6.539	-25.461	6.539	27.738	0	0.03
	4.848	19.055	3.931	-28.069	3.931	19.055	0	0.02
	5.454	9.456	1.734	-30.266	1.734	9.456	0	0.01
2	0	4.285	0.707	-3.535	32.873	0	-1.174	0
	0.606	10.383	29.522	-2.478	30.433	9.831	0	0.01
	1.212	19.857	27.366	-5.474	27.366	19.857	0	0.02
	1.818	27.755	23.849	-8.151	23.849	27.755	0	0.03
	2.424	32.668	20.042	-11.958	20.042	32.668	0	0.03
	3.03	34.123	16.103	-15.897	16.103	34.123	0	0.03
	3.636	32.024	12.187	-19.813	12.187	32.024	0	0.03
	4.242	26.702	8.467	-23.533	8.467	26.702	0	0.03
	4.848	19.141	5.179	-26.821	5.179	19.141	0	0.02
	5.454	9.846	2.312	-29.688	4.175	2.816	0	0.01
3	0	6.418	3.628	-2.727	32.891	0	-1.259	0
	0.606	9.913	29.635	-2.365	30.563	9.291	0	0.01
	1.212	19.199	26.71	-5.29	27.566	19.144	0	0.02
	1.818	27.061	24.083	-7.917	24.083	27.061	0	0.03
	2.424	32.258	20.216	-11.784	20.28	32.104	0	0.03
	3.03	34.223	15.535	-16.465	16.32	33.733	0	0.03
	3.636	32.435	11.487	-20.513	12.368	31.804	0	0.03
	4.242	27.145	7.642	-24.358	8.586	26.572	0	0.03
	4.848	19.073	4.184	-27.816	5.133	18.663	0	0.02
	5.454	9.118	1.233	-30.767	3.496	2.358	0	0.01
4	0	6.041	2.709	-3.273	32.95	0	-1.585	0
	0.606	9.252	30.572	-1.428	30.621	9.016	0	0.01
	1.212	19.093	27.58	-4.42	27.611	18.964	0	0.02
	1.818	27.012	24.1	-7.9	24.102	26.999	0	0.03
	2.424	32.156	20.259	-11.741	20.297	32.064	0	0.03
	3.03	33.882	15.73	-16.27	16.336	33.705	0	0.03
	3.636	32.169	11.72	-20.28	12.381	31.789	0	0.03
	4.242	27.016	7.882	-24.118	8.596	26.566	0	0.03
	4.848	19.088	4.407	-27.593	5.139	18.663	0	0.02
	5.454	9.246	1.422	-30.578	3.665	2.473	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

5	0	6.045	3.286	-2.7	32.94	0	-1.54	0
	0.606	9.249	30.573	-1.427	30.615	9.04	0	0.01
	1.212	19.089	27.581	-4.419	27.609	18.972	0	0.02
	1.818	27.008	24.102	-7.898	24.103	26.996	0	0.03
	2.424	32.149	20.262	-11.738	20.299	32.061	0	0.03
	3.03	33.858	15.744	-16.256	16.337	33.703	0	0.03
	3.636	32.15	11.736	-20.264	12.382	31.786	0	0.03
	4.242	27.009	7.895	-24.105	8.596	26.564	0	0.03
	4.848	19.089	4.414	-27.586	5.139	18.66	0	0.02
	5.454	9.246	1.422	-30.578	3.602	2.43	0	0.01
6	0	6.025	3.27	-2.695	32.94	0	-1.538	0
	0.606	9.246	30.578	-1.422	30.616	9.041	0	0.01
	1.212	19.089	27.586	-4.414	27.61	18.972	0	0.02
	1.818	27.009	24.105	-7.895	24.105	27.009	0	0.03
	2.424	32.15	20.264	-11.736	20.301	32.063	0	0.03
	3.03	33.858	16.256	-15.744	16.341	33.709	0	0.03
	3.636	32.149	11.738	-20.262	12.387	31.798	0	0.03
	4.242	27.008	7.898	-24.102	8.601	26.579	0	0.03
	4.848	19.089	4.419	-27.581	5.143	18.676	0	0.02
	5.454	9.249	1.427	-30.573	3.605	2.432	0	0.01
7	0	6.045	2.7	-3.286	32.951	0	-1.551	0
	0.606	9.246	30.578	-1.422	30.629	9.032	0	0.01
	1.212	19.088	27.593	-4.407	27.626	18.971	0	0.02
	1.818	27.016	24.118	-7.882	24.121	27.006	0	0.03
	2.424	32.169	20.28	-11.72	20.317	32.082	0	0.03
	3.03	33.882	16.27	-15.73	16.355	33.734	0	0.03
	3.636	32.156	11.741	-20.259	12.395	31.818	0	0.03
	4.242	27.012	7.9	-24.1	8.602	26.579	0	0.03
	4.848	19.093	4.42	-27.58	5.132	18.635	0	0.02
	5.454	9.252	1.428	-30.572	3.604	2.43	0	0.01
8	0	6.041	3.273	-2.709	33.094	0	-1.735	0
	0.606	9.118	30.767	-1.233	30.818	8.905	0	0.01
	1.212	19.073	27.816	-4.184	27.849	18.956	0	0.02
	1.818	27.145	24.358	-7.642	24.361	27.134	0	0.03
	2.424	32.435	20.513	-11.487	20.55	32.347	0	0.03
	3.03	34.223	16.465	-15.535	16.549	34.074	0	0.03
	3.636	32.258	11.784	-20.216	12.515	32.1	0	0.03
	4.242	27.061	7.917	-24.083	8.633	26.673	0	0.03
	4.848	19.199	5.29	-26.71	5.29	19.199	0	0.02
	5.454	9.913	2.365	-29.635	3.6	2.411	0	0.01
9	0	6.418	2.727	-3.628	32.219	0	-1.258	0
	0.606	9.846	29.688	-2.312	29.893	8.978	0	0.01
	1.212	19.141	26.821	-5.179	26.954	18.657	0	0.02
	1.818	26.702	23.533	-8.467	23.552	26.646	0	0.03
	2.424	32.024	19.813	-12.187	19.958	31.671	0	0.03
	3.03	34.123	15.897	-16.103	16.231	33.516	0	0.03
	3.636	32.668	11.958	-20.042	12.485	32.03	0	0.03
	4.242	27.755	8.151	-23.849	8.855	27.329	0	0.03
	4.848	19.857	5.474	-27.366	5.474	19.857	0	0.02



## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	5.454	10.383	2.478	-29.522	3.535	2.142	0	0.01
10	0	4.285	3.535	-0.707	32.164	0	-1.187	0
	0.606	9.456	30.266	-1.734	30.419	8.623	0	0.01
	1.212	19.055	28.069	-3.931	28.169	18.574	0	0.02
	1.818	27.738	25.461	-6.539	25.475	27.679	0	0.03
	2.424	34.964	22.384	-9.616	22.493	34.569	0	0.04
	3.03	39.492	18.966	-13.034	19.215	38.737	0	0.04
	3.636	40.51	15.288	-16.712	15.681	39.557	0	0.04
	4.242	37.423	11.415	-20.585	11.941	36.468	0	0.04
	4.848	29.792	7.419	-24.581	8.046	29.032	0	0.03
	5.454	17.351	3.368	-28.632	4.049	16.938	0	0.01
	6.06	0	2.639	-32.627	2.639	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shee	Corr. Shee	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	32.627	-2.639	-2.639	0	0	0
	0.606	-1.599	0	-2.639	-4.049	16.938	0	0
	1.212	-3.198	0	-2.639	-8.046	29.032	0	-0.01
	1.818	-4.798	0	-2.639	-11.941	36.468	0	-0.01
	2.424	-6.397	0	-2.639	-15.681	39.557	0	-0.01
	3.03	-7.996	0	-2.639	-19.215	38.737	0	-0.01
	3.636	-9.595	0	-2.639	-22.493	34.569	0	-0.02
	4.242	-11.194	0	-2.639	-25.475	27.679	0	-0.01
	4.848	-12.793	0	-2.639	-28.169	18.574	0	-0.01
	5.454	-14.393	0	-2.639	-30.419	8.623	0	-0.01
2	0	-19.953	4.175	-22.493	-32.164	0	-1.187	0
	0.606	-17.423	4.175	0	-3.535	2.142	0	-0.01
	1.212	-14.928	3.517	0	-5.474	19.857	0	-0.01
	1.818	-12.828	2.832	0	-8.855	27.329	0	-0.02
	2.424	-11.135	2.629	0	-12.485	32.03	0	-0.02
	3.03	-10.012	1.411	0	-16.231	33.516	0	-0.02
	3.636	-9.988	0	-1.049	-19.958	31.671	0	-0.02
	4.242	-10.887	0	-2.326	-23.552	26.646	0	-0.02
	4.848	-12.855	0	-3.535	-26.954	18.657	0	-0.01
	5.454	-14.997	0	-3.535	-29.893	8.978	0	-0.01
3	0	-17.14	21.115	-3.535	-32.219	0	-1.258	0
	0.606	-14.589	3.496	0	-3.6	2.411	0	-0.01
	1.212	-12.471	3.496	0	-5.29	19.199	0	-0.01
	1.818	-10.666	2.866	0	-8.633	26.673	0	-0.01
	2.424	-9.174	2.01	0	-12.515	32.1	0	-0.02
	3.03	-8.444	0.514	0	-16.549	34.074	0	-0.02
	3.636	-9.143	0	-2.028	-20.55	32.347	0	-0.02
	4.242	-10.725	0	-3.465	-24.361	27.134	0	-0.01
	4.848	-12.859	0	-3.6	-27.849	18.956	0	-0.01
	5.454	-15.041	0	-3.6	-30.818	8.905	0	-0.01
4	0	-17.518	3.665	-20.951	-33.094	0	-1.735	0
	0.606	-15.297	3.665	0	-3.604	2.43	0	-0.01
	1.212	-13.075	3.665	0	-5.132	18.635	0	-0.01
	1.818	-10.919	3.544	0	-8.602	26.579	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	2.424	-9.123	2.1	0	-12.395	31.818	0	-0.02
	3.03	-8.34	0.613	0	-16.355	33.734	0	-0.02
	3.636	-9.086	0	-2.079	-20.317	32.082	0	-0.02
	4.242	-10.72	0	-3.476	-24.121	27.006	0	-0.01
	4.848	-12.86	0	-3.604	-27.626	18.971	0	-0.01
	5.454	-15.044	0	-3.604	-30.629	9.032	0	-0.01
5	0	-17.228	21.134	-3.604	-32.951	0	-1.551	0
	0.606	-15.034	3.602	0	-3.605	2.432	0	-0.01
	1.212	-12.851	3.602	0	-5.143	18.676	0	-0.01
	1.818	-10.733	3.481	0	-8.601	26.579	0	-0.01
	2.424	-9.084	2.084	0	-12.387	31.798	0	-0.02
	3.03	-8.323	0	-0.445	-16.341	33.709	0	-0.02
	3.636	-9.082	0	-2.082	-20.301	32.063	0	-0.02
	4.242	-10.72	0	-3.477	-24.105	27.009	0	-0.01
	4.848	-12.861	0	-3.605	-27.61	18.972	0	-0.01
	5.454	-15.046	0	-3.605	-30.616	9.041	0	-0.01
6	0	-17.23	21.135	-3.605	-32.94	0	-1.538	0
	0.606	-15.046	3.605	0	-3.602	2.43	0	-0.01
	1.212	-12.861	3.605	0	-5.139	18.66	0	-0.01
	1.818	-10.72	3.477	0	-8.596	26.564	0	-0.01
	2.424	-9.082	2.082	0	-12.382	31.786	0	-0.02
	3.03	-8.323	0.445	0	-16.337	33.703	0	-0.02
	3.636	-9.084	0	-2.084	-20.299	32.061	0	-0.02
	4.242	-10.733	0	-3.481	-24.103	26.996	0	-0.01
	4.848	-12.851	0	-3.602	-27.609	18.972	0	-0.01
	5.454	-15.034	0	-3.602	-30.615	9.04	0	-0.01
7	0	-17.228	3.604	-21.134	-32.94	0	-1.54	0
	0.606	-15.044	3.604	0	-3.665	2.473	0	-0.01
	1.212	-12.86	3.604	0	-5.139	18.663	0	-0.01
	1.818	-10.72	3.476	0	-8.596	26.566	0	-0.01
	2.424	-9.086	2.079	0	-12.381	31.789	0	-0.02
	3.03	-8.34	0	-0.613	-16.336	33.705	0	-0.02
	3.636	-9.123	0	-2.1	-20.297	32.064	0	-0.02
	4.242	-10.919	0	-3.544	-24.102	26.999	0	-0.01
	4.848	-13.075	0	-3.665	-27.611	18.964	0	-0.01
	5.454	-15.297	0	-3.665	-30.621	9.016	0	-0.01
8	0	-17.518	20.951	-3.665	-32.95	0	-1.585	0
	0.606	-15.041	3.6	0	-3.496	2.358	0	-0.01
	1.212	-12.859	3.6	0	-5.133	18.663	0	-0.01
	1.818	-10.725	3.465	0	-8.586	26.572	0	-0.01
	2.424	-9.143	2.028	0	-12.368	31.804	0	-0.02
	3.03	-8.444	0	-0.514	-16.32	33.733	0	-0.02
	3.636	-9.174	0	-2.01	-20.28	32.104	0	-0.02
	4.242	-10.666	0	-2.866	-24.083	27.061	0	-0.01
	4.848	-12.471	0	-3.496	-27.566	19.144	0	-0.01
	5.454	-14.589	0	-3.496	-30.563	9.291	0	-0.01
9	0	-17.14	3.535	-21.115	-32.891	0	-1.259	0
	0.606	-14.997	3.535	0	-4.175	2.816	0	-0.01
	1.212	-12.855	3.535	0	-5.179	19.141	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	1.818	-10.887	2.326	0	-8.467	26.702	0	-0.02
	2.424	-9.988	1.049	0	-12.187	32.024	0	-0.02
	3.03	-10.012	0	-1.411	-16.103	34.123	0	-0.02
	3.636	-11.135	0	-2.629	-20.042	32.668	0	-0.02
	4.242	-12.828	0	-2.832	-23.849	27.755	0	-0.02
	4.848	-14.928	0	-3.517	-27.366	19.857	0	-0.01
	5.454	-17.423	0	-4.175	-30.433	9.831	0	-0.01
10	0	-19.953	22.493	-4.175	-32.873	0	-1.174	0
	0.606	-14.393	2.639	0	-1.734	9.456	0	-0.01
	1.212	-12.793	2.639	0	-3.931	19.055	0	-0.01
	1.818	-11.194	2.639	0	-6.539	27.738	0	-0.01
	2.424	-9.595	2.639	0	-9.616	34.964	0	-0.02
	3.03	-7.996	2.639	0	-13.034	39.492	0	-0.01
	3.636	-6.397	2.639	0	-16.712	40.51	0	-0.01
	4.242	-4.798	2.639	0	-20.585	37.423	0	-0.01
	4.848	-3.198	2.639	0	-24.581	29.792	0	-0.01
	5.454	-1.599	2.639	0	-28.632	17.351	0	0
	6.06	0	2.639	-32.627	-32.627	0	0	0

Support    Reac. Pos    Reac. Negative

1	2.639	-32.667
2	4.243	-33.17
3	6.355	-33.15
4	5.981	-33.626
5	5.986	-33.44
6	5.965	-33.427
7	5.986	-33.44
8	5.981	-33.626
9	6.355	-33.15
10	4.243	-33.17
11	2.639	-32.667

Id	HS20 Lane Load	
Type	Lane Load	
Factors:	Moment	1
	Shear	1
	Deflection	1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	27.701	-2.253	27.701	0	0	0
	0.606	10.461	17.068	-0.932	24.081	14.593	0	0.01
	1.212	17.962	14.432	-3.568	20.519	24.869	0	0.02
	1.818	22.608	11.854	-6.146	17.088	31.066	0	0.02
	2.424	24.574	9.362	-8.638	13.829	33.52	0	0.03
	3.03	24.106	6.986	-11.014	10.781	32.666	0	0.03
	3.636	21.52	4.755	-13.245	7.983	29.027	0	0.02
	4.242	17.201	2.698	-15.302	5.474	23.223	0	0.02
	4.848	11.61	1.062	-16.938	3.292	15.96	0	0.01
	5.454	5.74	0.686	-17.314	1.473	8.035	0	0.01
2	0	2.635	0.435	-2.174	28.36	0	-2.558	0
	0.606	6.167	16.959	-1.041	25.936	6.851	-1.586	0.01
	1.212	11.875	16.065	-1.935	23.162	15.44	-0.694	0.01
	1.818	16.698	13.849	-4.151	20.114	22.105	-0.1	0.02
	2.424	19.728	11.419	-6.581	16.905	26.273	0	0.02
	3.03	20.715	8.925	-9.075	13.648	27.65	0	0.02
	3.636	19.593	6.44	-11.56	10.451	26.205	0	0.02
	4.242	16.479	4.042	-13.958	7.423	22.176	0	0.02
	4.848	11.696	2.196	-15.804	4.669	16.054	0	0.01
	5.454	6.208	1.068	-16.932	3.808	2.878	0	0.01
3	0	3.785	2.751	-0.997	28.663	0	-1.898	0
	0.606	6.271	16.934	-1.066	25.981	6.663	-1.391	0.01
	1.212	11.777	15.764	-2.236	23.263	15.078	-0.521	0.01
	1.818	16.535	13.904	-4.096	20.243	21.723	0	0.02
	2.424	19.588	11.479	-6.521	17.038	25.961	0	0.02
	3.03	20.626	8.976	-9.024	13.766	27.444	0	0.02
	3.636	19.556	6.473	-11.527	10.54	26.104	0	0.02
	4.242	16.474	4.05	-13.95	7.474	22.148	0	0.02
	4.848	11.696	2.198	-15.802	4.679	16.055	0	0.01
	5.454	6.183	1.031	-16.969	3.193	2.463	0	0.01
4	0	3.215	2.306	-0.877	28.62	0	-2.076	0
	0.606	6.179	16.956	-1.044	26.008	6.551	-1.475	0.01
	1.212	11.686	15.788	-2.212	23.294	14.968	-0.593	0.01
	1.818	16.454	13.932	-4.068	20.276	21.625	-0.008	0.02
	2.424	19.522	11.507	-6.493	17.071	25.883	0	0.02
	3.03	20.578	9.003	-8.997	13.798	27.388	0	0.02
	3.636	19.526	6.499	-11.501	10.57	26.069	0	0.02
	4.242	16.462	4.074	-13.926	7.502	22.133	0	0.02
	4.848	11.698	2.219	-15.781	4.704	16.057	0	0.01
	5.454	6.198	1.052	-16.948	3.173	2.449	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

5	0	3.205	2.298	-0.876	28.635	0	-2.029	0
	0.606	6.2	16.951	-1.049	26.004	6.569	-1.455	0.01
	1.212	11.702	15.784	-2.216	23.29	14.983	-0.575	0.01
	1.818	16.467	13.928	-4.072	20.272	21.637	0	0.02
	2.424	19.532	11.503	-6.497	17.067	25.892	0	0.02
	3.03	20.586	8.999	-9.001	13.794	27.395	0	0.02
	3.636	19.531	6.495	-11.505	10.566	26.074	0	0.02
	4.242	16.463	4.07	-13.93	7.497	22.136	0	0.02
	4.848	11.697	2.215	-15.785	4.699	16.057	0	0.01
	5.454	6.193	1.047	-16.953	3.165	2.444	0	0.01
6	0	3.195	2.291	-2.291	28.632	0	-2.042	0
	0.606	6.193	16.953	-1.047	26.006	6.564	-1.461	0.01
	1.212	11.697	15.785	-2.215	23.293	14.978	-0.579	0.01
	1.818	16.463	13.93	-4.07	20.274	21.634	0	0.02
	2.424	19.531	11.505	-6.495	17.07	25.891	0	0.02
	3.03	20.586	9.001	-8.999	13.797	27.395	0	0.02
	3.636	19.532	6.497	-11.503	10.569	26.076	0	0.02
	4.242	16.467	4.072	-13.928	7.5	22.14	0	0.02
	4.848	11.702	2.216	-15.784	4.702	16.062	0	0.01
	5.454	6.2	1.049	-16.951	3.167	2.451	0	0.01
7	0	3.205	0.876	-2.298	28.629	0	-2.026	0
	0.606	6.198	16.948	-1.052	26.001	6.568	-1.456	0.01
	1.212	11.698	15.781	-2.219	23.288	14.98	-0.578	0.01
	1.818	16.462	13.926	-4.074	20.27	21.633	0	0.02
	2.424	19.526	11.501	-6.499	17.066	25.887	0	0.02
	3.03	20.578	8.997	-9.003	13.792	27.389	0	0.02
	3.636	19.522	6.493	-11.507	10.564	26.067	0	0.02
	4.242	16.454	4.068	-13.932	7.495	22.127	0	0.02
	4.848	11.686	2.212	-15.788	4.697	16.047	0	0.01
	5.454	6.179	1.044	-16.956	3.162	2.428	0	0.01
8	0	3.215	0.877	-2.306	28.642	0	-2.074	0
	0.606	6.183	16.969	-1.031	26.022	6.554	-1.468	0.01
	1.212	11.696	15.802	-2.198	23.311	14.978	-0.579	0.01
	1.818	16.474	13.95	-4.05	20.296	21.647	0	0.02
	2.424	19.556	11.527	-6.473	17.094	25.919	0	0.02
	3.03	20.626	9.024	-8.976	13.822	27.441	0	0.02
	3.636	19.588	6.521	-11.479	10.595	26.14	0	0.02
	4.242	16.535	4.096	-13.904	7.526	22.217	0	0.02
	4.848	11.777	2.236	-15.764	4.725	16.146	0	0.01
	5.454	6.271	1.066	-16.934	3.175	2.484	0	0.01
9	0	3.785	0.997	-2.751	28.583	0	-1.896	0
	0.606	6.208	16.932	-1.068	25.979	6.583	-1.417	0.01
	1.212	11.696	15.804	-2.196	23.307	14.978	-0.574	0.01
	1.818	16.479	13.958	-4.042	20.33	21.665	-0.031	0.02
	2.424	19.593	11.56	-6.44	17.162	25.997	0	0.02
	3.03	20.715	9.075	-8.925	13.914	27.601	0	0.02
	3.636	19.728	6.581	-11.419	10.696	26.378	0	0.02
	4.242	16.698	4.151	-13.849	7.618	22.489	0	0.02
	4.848	11.875	1.935	-16.065	4.784	16.358	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	5.454	6.167	1.041	-16.959	3.032	1.889	0	0.01
10	0	2.635	2.174	-0.435	28.666	0	-2.566	0
	0.606	5.74	17.314	-0.686	26.617	6.153	-1.53	0.01
	1.212	11.61	16.938	-1.062	24.478	14.898	-0.584	0.01
	1.818	17.201	15.302	-2.698	22.034	22.581	0	0.02
	2.424	21.52	13.245	-4.755	19.331	28.478	0	0.02
	3.03	24.106	11.014	-6.986	16.416	31.979	0	0.03
	3.636	24.574	8.638	-9.362	13.332	32.587	0	0.03
	4.242	22.608	6.146	-11.854	10.126	29.917	0	0.02
	4.848	17.962	3.568	-14.432	6.84	23.692	0	0.02
	5.454	10.461	0.932	-17.068	3.519	13.741	-0.021	0.01
	6.06	0	2.253	-27.701	2.253	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shee	Corr. Shee	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	27.701	-2.253	-2.253	0	0	0
	0.606	-1.044	0	-1.723	-3.519	13.741	-0.021	0
	1.212	-2.09	0	-1.724	-6.84	23.692	0	0
	1.818	-3.135	0	-1.724	-10.126	29.917	0	-0.01
	2.424	-4.18	0	-1.724	-13.332	32.587	0	-0.01
	3.03	-5.225	0	-1.724	-16.416	31.979	0	-0.01
	3.636	-6.27	0	-1.724	-19.331	28.478	0	-0.01
	4.242	-7.315	0	-1.724	-22.034	22.581	0	-0.01
	4.848	-8.365	0	-1.944	-24.478	14.898	-0.584	-0.01
	5.454	-13.806	0	-11.91	-26.617	6.153	-1.53	0
2	0	-22.631	15.645	-16.47	-28.666	0	-2.566	0
	0.606	-14.195	10.43	0	-3.032	1.889	0	0
	1.212	-9.553	0.778	0	-4.784	16.358	0	-0.01
	1.818	-9.247	0.504	0	-7.618	22.489	0	-0.01
	2.424	-8.942	0.504	0	-10.696	26.378	0	-0.01
	3.03	-8.637	0.504	0	-13.914	27.601	0	-0.01
	3.636	-8.331	0.504	0	-17.162	25.997	0	-0.01
	4.242	-8.026	0.504	0	-20.33	21.665	-0.031	-0.01
	4.848	-8.403	0	-2.372	-23.307	14.978	-0.574	-0.01
	5.454	-12.832	0	-12.239	-25.979	6.583	-1.417	0
3	0	-21.203	15.346	-15.354	-28.583	0	-1.896	0
	0.606	-12.83	12.214	0	-3.175	2.484	0	0
	1.212	-8.027	3.683	0	-4.725	16.146	0	-0.01
	1.818	-7.807	0.018	0	-7.526	22.217	0	-0.01
	2.424	-7.797	0.018	0	-10.595	26.14	0	-0.01
	3.03	-7.786	0.018	0	-13.822	27.441	0	-0.01
	3.636	-7.775	0.018	0	-17.094	25.919	0	-0.01
	4.242	-7.765	0.018	0	-20.296	21.647	0	-0.01
	4.848	-8.411	0	-2.5	-23.311	14.978	-0.579	-0.01
	5.454	-12.827	0	-12.231	-26.022	6.554	-1.468	0
4	0	-21.213	15.348	-15.363	-28.642	0	-2.074	0
	0.606	-12.836	12.215	0	-3.162	2.428	0	0
	1.212	-8.538	2.519	0	-4.697	16.047	0	-0.01
	1.818	-7.774	0.007	0	-7.495	22.127	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	2.424	-7.77	0.006	0	-10.564	26.067	0	-0.01
	3.03	-7.766	0.006	0	-13.792	27.389	0	-0.01
	3.636	-7.763	0.006	0	-17.066	25.887	0	-0.01
	4.242	-7.759	0.006	0	-20.27	21.633	0	-0.01
	4.848	-8.41	0	-2.485	-23.288	14.98	-0.578	-0.01
	5.454	-12.811	0	-12.207	-26.001	6.568	-1.456	0
5	0	-21.184	15.342	-15.34	-28.629	0	-2.026	0
	0.606	-12.81	12.209	0	-3.167	2.451	0	0
	1.212	-8.415	2.485	0	-4.702	16.062	0	-0.01
	1.818	-7.753	0	-0.001	-7.5	22.14	0	-0.01
	2.424	-7.754	0	-0.001	-10.569	26.076	0	-0.01
	3.03	-7.755	0	-0.001	-13.797	27.395	0	-0.01
	3.636	-7.755	0	-0.001	-17.07	25.891	0	-0.01
	4.242	-7.756	0	-0.001	-20.274	21.634	0	-0.01
	4.848	-8.412	0	-2.484	-23.293	14.978	-0.579	-0.01
	5.454	-12.816	0	-12.212	-26.006	6.564	-1.461	0
6	0	-21.192	24.524	-15.345	-28.632	0	-2.042	0
	0.606	-12.816	12.212	0	-3.165	2.444	0	0
	1.212	-8.412	2.484	0	-4.699	16.057	0	-0.01
	1.818	-7.756	0.001	0	-7.497	22.136	0	-0.01
	2.424	-7.755	0.001	0	-10.566	26.074	0	-0.01
	3.03	-7.755	0.001	0	-13.794	27.395	0	-0.01
	3.636	-7.754	0.001	0	-17.067	25.892	0	-0.01
	4.242	-7.753	0.001	0	-20.272	21.637	0	-0.01
	4.848	-8.415	0	-2.485	-23.29	14.983	-0.575	-0.01
	5.454	-12.81	0	-12.209	-26.004	6.569	-1.455	0
7	0	-21.184	15.34	-15.342	-28.635	0	-2.029	0
	0.606	-12.811	12.207	0	-3.173	2.449	0	0
	1.212	-8.41	2.485	0	-4.704	16.057	0	-0.01
	1.818	-7.759	0	-0.006	-7.502	22.133	0	-0.01
	2.424	-7.763	0	-0.006	-10.57	26.069	0	-0.01
	3.03	-7.766	0	-0.006	-13.798	27.388	0	-0.01
	3.636	-7.77	0	-0.006	-17.071	25.883	0	-0.01
	4.242	-7.774	0	-0.007	-20.276	21.625	-0.008	-0.01
	4.848	-8.538	0	-2.519	-23.294	14.968	-0.593	-0.01
	5.454	-12.836	0	-12.215	-26.008	6.551	-1.475	0
8	0	-21.213	15.363	-15.348	-28.62	0	-2.076	0
	0.606	-12.827	12.231	0	-3.193	2.463	0	0
	1.212	-8.411	2.5	0	-4.679	16.055	0	-0.01
	1.818	-7.765	0	-0.018	-7.474	22.148	0	-0.01
	2.424	-7.775	0	-0.018	-10.54	26.104	0	-0.01
	3.03	-7.786	0	-0.018	-13.766	27.444	0	-0.01
	3.636	-7.797	0	-0.018	-17.038	25.961	0	-0.01
	4.242	-7.807	0	-0.018	-20.243	21.723	0	-0.01
	4.848	-8.027	0	-3.683	-23.263	15.078	-0.521	-0.01
	5.454	-12.83	0	-12.214	-25.981	6.663	-1.391	0
9	0	-21.203	15.354	-15.346	-28.663	0	-1.898	0
	0.606	-12.832	12.239	0	-3.808	2.878	0	0
	1.212	-8.403	2.372	0	-4.669	16.054	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	1.818	-8.026	0	-0.504	-7.423	22.176	0	-0.01
	2.424	-8.331	0	-0.504	-10.451	26.205	0	-0.01
	3.03	-8.637	0	-0.504	-13.648	27.65	0	-0.01
	3.636	-8.942	0	-0.504	-16.905	26.273	0	-0.01
	4.242	-9.247	0	-0.504	-20.114	22.105	-0.1	-0.01
	4.848	-9.553	0	-3.187	-23.162	15.44	-0.694	-0.01
	5.454	-14.195	0	-10.43	-25.936	6.851	-1.586	0
10	0	-22.631	16.47	-15.645	-28.36	0	-2.558	0
	0.606	-13.806	11.91	0	-1.473	8.035	0	0
	1.212	-8.365	1.944	0	-3.292	15.96	0	-0.01
	1.818	-7.315	1.724	0	-5.474	23.223	0	-0.01
	2.424	-6.27	1.724	0	-7.983	29.027	0	-0.01
	3.03	-5.225	1.724	0	-10.781	32.666	0	-0.01
	3.636	-4.18	1.724	0	-13.829	33.52	0	-0.01
	4.242	-3.135	1.724	0	-17.088	31.066	0	-0.01
	4.848	-2.09	1.724	0	-20.519	24.869	0	0
	5.454	-1.044	1.723	0	-24.081	14.593	0	0
	6.06	0	2.253	-27.701	-27.701	0	0	0

Support    Reac. Pos    Reac. Negative

1	2.253	-27.734
2	3.622	-30.829
3	5.071	-30.51
4	4.292	-30.606
5	4.266	-30.583
6	4.255	-30.591
7	4.266	-30.583
8	4.292	-30.606
9	5.071	-30.51
10	3.622	-30.829
11	2.253	-27.701



Id HS15  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	24.093	-1.914	24.093	0	0	0
	0.606	12.78	21.09	-2.91	21.09	12.78	0	0.01
	1.212	21.916	18.082	-5.918	18.082	21.916	0	0.02
	1.818	27.529	15.143	-8.857	15.143	27.529	0	0.03
	2.424	29.847	12.313	-11.687	12.313	29.847	0	0.03
	3.03	29.194	9.635	-14.365	9.635	29.194	0	0.03
	3.636	26.001	7.151	-16.849	7.151	26.001	0	0.03
	4.242	20.804	4.904	-19.096	4.904	20.804	0	0.02
	4.848	14.292	2.948	-21.052	2.948	14.292	0	0.02
	5.454	7.092	1.3	-22.7	1.3	7.092	0	0.01
2	0	3.108	0.513	-2.564	24.149	0	-0.268	0
	0.606	7.79	22.138	-1.862	22.311	7.685	0	0.01
	1.212	14.893	20.051	-4.115	20.051	14.893	0	0.01
	1.818	20.576	17.49	-6.51	17.49	20.576	0	0.02
	2.424	24.142	14.735	-9.265	14.735	24.142	0	0.02
	3.03	25.251	11.889	-12.111	11.889	25.251	0	0.02
	3.636	23.82	9.059	-14.941	9.059	23.82	0	0.02
	4.242	20.027	6.35	-17.65	6.35	20.027	0	0.02
	4.848	14.356	3.884	-20.116	3.884	14.356	0	0.01
	5.454	7.385	1.734	-22.266	3.174	2.293	0	0.01
3	0	4.228	3.173	-1.012	24.153	0	-0.287	0
	0.606	7.437	22.222	-1.778	22.398	7.319	0	0.01
	1.212	14.4	20.023	-3.977	20.192	14.389	0	0.01
	1.818	20.077	17.659	-6.341	17.659	20.077	0	0.02
	2.424	23.732	14.909	-9.091	14.909	23.732	0	0.02
	3.03	25.008	11.875	-12.125	12.051	24.968	0	0.02
	3.636	23.736	9.011	-14.989	9.196	23.663	0	0.02
	4.242	20.04	6.264	-17.736	6.454	19.971	0	0.02
	4.848	14.36	3.951	-20.049	3.951	14.36	0	0.01
	5.454	7.406	1.765	-22.235	2.665	1.95	0	0.01
4	0	3.565	2.665	-0.865	24.153	0	-0.289	0
	0.606	7.412	22.228	-1.772	22.405	7.293	0	0.01
	1.212	14.364	20.034	-3.966	20.202	14.353	0	0.01
	1.818	20.041	17.671	-6.329	17.671	20.041	0	0.02
	2.424	23.703	14.921	-9.079	14.921	23.703	0	0.02
	3.03	24.947	12.063	-11.937	12.063	24.947	0	0.02
	3.636	23.677	9.062	-14.938	9.205	23.652	0	0.02
	4.242	20.012	6.314	-17.686	6.462	19.967	0	0.02
	4.848	14.361	3.956	-20.044	3.956	14.361	0	0.01
	5.454	7.407	1.767	-22.233	2.672	1.951	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

5	0	3.614	0.908	-2.67	24.153	0	-0.289	0
	0.606	7.41	22.229	-1.771	22.405	7.291	0	0.01
	1.212	14.362	20.033	-3.967	20.203	14.35	0	0.01
	1.818	20.039	17.672	-6.328	17.672	20.039	0	0.02
	2.424	23.701	14.922	-9.078	14.922	23.701	0	0.02
	3.03	24.946	12.064	-11.936	12.064	24.946	0	0.02
	3.636	23.665	9.062	-14.938	9.206	23.651	0	0.02
	4.242	20.001	6.315	-17.685	6.462	19.967	0	0.02
	4.848	14.361	3.957	-20.043	3.957	14.361	0	0.01
	5.454	7.407	1.767	-22.233	2.659	1.946	0	0.01
6	0	3.557	2.659	-2.659	24.156	0	-0.299	0
	0.606	7.407	22.233	-1.767	22.411	7.265	0	0.01
	1.212	14.361	20.043	-3.957	20.213	14.315	0	0.01
	1.818	20.001	17.685	-6.315	17.685	20.001	0	0.02
	2.424	23.665	14.938	-9.062	14.938	23.665	0	0.02
	3.03	24.946	11.936	-12.064	12.08	24.918	0	0.02
	3.636	23.701	9.078	-14.922	9.222	23.633	0	0.02
	4.242	20.039	6.328	-17.672	6.476	19.959	0	0.02
	4.848	14.362	3.967	-20.033	3.967	14.362	0	0.01
	5.454	7.41	1.771	-22.229	2.67	1.996	0	0.01
7	0	3.614	2.67	-0.908	24.157	0	-0.297	0
	0.606	7.407	22.233	-1.767	22.412	7.272	0	0.01
	1.212	14.361	20.044	-3.956	20.213	14.325	0	0.01
	1.818	20.012	17.686	-6.314	17.686	20.012	0	0.02
	2.424	23.677	14.938	-9.062	14.938	23.677	0	0.02
	3.03	24.947	11.937	-12.063	12.08	24.929	0	0.02
	3.636	23.703	9.079	-14.921	9.222	23.641	0	0.02
	4.242	20.041	6.329	-17.671	6.475	19.963	0	0.02
	4.848	14.364	3.966	-20.034	3.966	14.364	0	0.01
	5.454	7.412	1.772	-22.228	2.614	1.763	0	0.01
8	0	3.565	0.865	-2.665	24.184	0	-0.331	0
	0.606	7.406	22.235	-1.765	22.449	7.248	0	0.01
	1.212	14.36	20.049	-3.951	20.258	14.323	0	0.01
	1.818	20.04	17.736	-6.264	17.736	20.04	0	0.02
	2.424	23.736	14.989	-9.011	14.989	23.736	0	0.02
	3.03	25.008	12.125	-11.875	12.125	25.008	0	0.02
	3.636	23.732	9.091	-14.909	9.254	23.716	0	0.02
	4.242	20.077	6.341	-17.659	6.487	19.998	0	0.02
	4.848	14.4	3.977	-20.023	3.977	14.4	0	0.01
	5.454	7.437	1.778	-22.222	2.611	1.749	0	0.01
9	0	4.228	1.012	-3.173	24.029	0	-0.288	0
	0.606	7.385	22.266	-1.734	22.304	7.225	0	0.01
	1.212	14.356	20.116	-3.884	20.14	14.268	0	0.01
	1.818	20.027	17.65	-6.35	17.659	19.999	0	0.02
	2.424	23.82	14.941	-9.059	14.98	23.726	0	0.02
	3.03	25.251	12.111	-11.889	12.186	25.114	0	0.02
	3.636	24.142	9.265	-14.735	9.377	24.006	0	0.02
	4.242	20.576	6.51	-17.49	6.653	20.489	0	0.02
	4.848	14.893	4.115	-20.051	4.115	14.893	0	0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	5.454	7.79	1.862	-22.138	2.564	1.554	0	0.01
10	0	3.108	2.564	-0.513	24.022	0	-0.278	0
	0.606	7.092	22.7	-1.3	22.728	6.939	0	0.01
	1.212	14.292	21.052	-2.948	21.07	14.204	0	0.02
	1.818	20.804	19.096	-4.904	19.103	20.775	0	0.02
	2.424	26.001	16.849	-7.151	16.878	25.896	0	0.03
	3.03	29.194	14.365	-9.635	14.421	29.024	0	0.03
	3.636	29.847	11.687	-12.313	11.771	29.644	0	0.03
	4.242	27.529	8.857	-15.143	8.965	27.334	0	0.03
	4.848	21.916	5.918	-18.082	6.041	21.766	0	0.02
	5.454	12.78	2.91	-21.09	3.039	12.702	0	0.01
	6.06	0	1.914	-24.093	1.914	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shee	Corr. Shee	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	24.093	-1.914	-1.914	0	0	0
	0.606	-1.16	0	-1.914	-3.039	12.702	0	0
	1.212	-2.32	0	-1.914	-6.041	21.766	0	-0.01
	1.818	-3.479	0	-1.914	-8.965	27.334	0	-0.01
	2.424	-4.639	0	-1.914	-11.771	29.644	0	-0.01
	3.03	-5.799	0	-1.914	-14.421	29.024	0	-0.01
	3.636	-6.959	0	-1.914	-16.878	25.896	0	-0.01
	4.242	-8.118	0	-1.914	-19.103	20.775	0	-0.01
	4.848	-9.278	0	-1.914	-21.07	14.204	0	-0.01
	5.454	-10.438	0	-1.914	-22.728	6.939	0	0
2	0	-15.016	3.174	-16.878	-24.022	0	-0.278	0
	0.606	-13.093	3.174	0	-2.564	1.554	0	-0.01
	1.212	-11.188	3.022	0	-4.115	14.893	0	-0.01
	1.818	-9.357	3.022	0	-6.653	20.489	0	-0.01
	2.424	-7.526	3.022	0	-9.377	24.006	0	-0.01
	3.03	-5.773	2.824	0	-12.186	25.114	0	-0.01
	3.636	-6.346	0	-2.321	-14.98	23.726	0	-0.01
	4.242	-7.769	0	-2.564	-17.659	19.999	0	-0.01
	4.848	-9.323	0	-2.564	-20.14	14.268	0	-0.01
	5.454	-10.877	0	-2.564	-22.304	7.225	0	0
3	0	-12.586	2.665	-14.98	-24.029	0	-0.288	0
	0.606	-10.971	2.665	0	-2.611	1.749	0	0
	1.212	-9.356	2.665	0	-3.977	14.4	0	-0.01
	1.818	-7.82	2.518	0	-6.487	19.998	0	-0.01
	2.424	-6.296	2.499	0	-9.254	23.716	0	-0.01
	3.03	-4.781	2.499	0	-12.125	25.008	0	-0.01
	3.636	-6.203	0	-2.466	-14.989	23.736	0	-0.01
	4.242	-7.744	0	-2.611	-17.736	20.04	0	-0.01
	4.848	-9.326	0	-2.611	-20.258	14.323	0	-0.01
	5.454	-10.908	0	-2.611	-22.449	7.248	0	0
4	0	-12.62	2.672	-15.277	-24.184	0	-0.331	0
	0.606	-11.001	2.672	0	-2.614	1.763	0	0
	1.212	-9.382	2.672	0	-3.966	14.364	0	-0.01
	1.818	-7.763	2.672	0	-6.475	19.963	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	2.424	-6.208	2.482	0	-9.222	23.641	0	-0.01
	3.03	-4.715	2.462	0	-12.08	24.929	0	-0.01
	3.636	-6.192	0	-2.474	-14.938	23.677	0	-0.01
	4.242	-7.742	0	-2.614	-17.686	20.012	0	-0.01
	4.848	-9.326	0	-2.614	-20.213	14.325	0	-0.01
	5.454	-10.91	0	-2.614	-22.412	7.272	0	0
5	0	-12.556	2.659	-15.226	-24.157	0	-0.297	0
	0.606	-10.944	2.659	0	-2.67	1.996	0	0
	1.212	-9.333	2.659	0	-3.967	14.362	0	-0.01
	1.818	-7.722	2.659	0	-6.476	19.959	0	-0.01
	2.424	-6.202	2.479	0	-9.222	23.633	0	-0.01
	3.03	-4.711	2.459	0	-12.08	24.918	0	-0.01
	3.636	-6.201	0	-2.479	-14.938	23.665	0	-0.01
	4.242	-7.712	0	-2.67	-17.685	20.001	0	-0.01
	4.848	-9.33	0	-2.67	-20.213	14.315	0	-0.01
	5.454	-10.948	0	-2.67	-22.411	7.265	0	0
6	0	-12.566	15.226	-2.67	-24.156	0	-0.299	0
	0.606	-10.948	2.67	0	-2.659	1.946	0	0
	1.212	-9.33	2.67	0	-3.957	14.361	0	-0.01
	1.818	-7.712	2.67	0	-6.462	19.967	0	-0.01
	2.424	-6.201	2.479	0	-9.206	23.651	0	-0.01
	3.03	-4.711	0	-2.459	-12.064	24.946	0	-0.01
	3.636	-6.202	0	-2.479	-14.922	23.701	0	-0.01
	4.242	-7.722	0	-2.659	-17.672	20.039	0	-0.01
	4.848	-9.333	0	-2.659	-20.203	14.35	0	-0.01
	5.454	-10.944	0	-2.659	-22.405	7.291	0	0
7	0	-12.556	15.226	-2.659	-24.153	0	-0.289	0
	0.606	-10.91	2.614	0	-2.672	1.951	0	0
	1.212	-9.326	2.614	0	-3.956	14.361	0	-0.01
	1.818	-7.742	2.614	0	-6.462	19.967	0	-0.01
	2.424	-6.192	2.474	0	-9.205	23.652	0	-0.01
	3.03	-4.715	0	-2.462	-12.063	24.947	0	-0.01
	3.636	-6.208	0	-2.482	-14.921	23.703	0	-0.01
	4.242	-7.763	0	-2.672	-17.671	20.041	0	-0.01
	4.848	-9.382	0	-2.672	-20.202	14.353	0	-0.01
	5.454	-11.001	0	-2.672	-22.405	7.293	0	0
8	0	-12.62	15.277	-2.672	-24.153	0	-0.289	0
	0.606	-10.908	2.611	0	-2.665	1.95	0	0
	1.212	-9.326	2.611	0	-3.951	14.36	0	-0.01
	1.818	-7.744	2.611	0	-6.454	19.971	0	-0.01
	2.424	-6.203	2.466	0	-9.196	23.663	0	-0.01
	3.03	-4.781	0	-2.499	-12.051	24.968	0	-0.01
	3.636	-6.296	0	-2.499	-14.909	23.732	0	-0.01
	4.242	-7.82	0	-2.518	-17.659	20.077	0	-0.01
	4.848	-9.356	0	-2.665	-20.192	14.389	0	-0.01
	5.454	-10.971	0	-2.665	-22.398	7.319	0	0
9	0	-12.586	14.98	-2.665	-24.153	0	-0.287	0
	0.606	-10.877	2.564	0	-3.174	2.293	0	0
	1.212	-9.323	2.564	0	-3.884	14.356	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 6 Interior Strin

	1.818	-7.769	2.564	0	-6.35	20.027	0	-0.01
	2.424	-6.346	2.321	0	-9.059	23.82	0	-0.01
	3.03	-5.773	0	-2.824	-11.889	25.251	0	-0.01
	3.636	-7.526	0	-3.022	-14.735	24.142	0	-0.01
	4.242	-9.357	0	-3.022	-17.49	20.576	0	-0.01
	4.848	-11.188	0	-3.022	-20.051	14.893	0	-0.01
	5.454	-13.093	0	-3.174	-22.311	7.685	0	-0.01
10	0	-15.016	16.878	-3.174	-24.149	0	-0.268	0
	0.606	-10.438	1.914	0	-1.3	7.092	0	0
	1.212	-9.278	1.914	0	-2.948	14.292	0	-0.01
	1.818	-8.118	1.914	0	-4.904	20.804	0	-0.01
	2.424	-6.959	1.914	0	-7.151	26.001	0	-0.01
	3.03	-5.799	1.914	0	-9.635	29.194	0	-0.01
	3.636	-4.639	1.914	0	-12.313	29.847	0	-0.01
	4.242	-3.479	1.914	0	-15.143	27.529	0	-0.01
	4.848	-2.32	1.914	0	-18.082	21.916	0	-0.01
	5.454	-1.16	1.914	0	-21.09	12.78	0	0
	6.06	0	1.914	-24.093	-24.093	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.914	-24.123
2	3.077	-24.262
3	4.186	-24.213
4	3.53	-24.256
5	3.578	-24.222
6	3.522	-24.224
7	3.578	-24.222
8	3.53	-24.256
9	4.186	-24.213
10	3.077	-24.262
11	1.914	-24.123

Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Sheæ	Corr. Sheæ	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	18.81	-1.09	18.81	0	0	0
	0.488	7.599	15.571	-1.429	15.571	7.599	0	0
	0.976	12.597	12.907	-4.093	12.907	12.597	0	0.01
	1.464	15.789	10.785	-6.215	10.785	15.789	0	0.01
	1.952	17.065	8.742	-8.258	8.742	17.065	0	0.01
	2.44	16.621	6.812	-10.188	6.812	16.621	0	0.01
	2.928	14.8	5.055	-11.945	5.055	14.8	0	0.01
	3.416	11.879	3.477	-13.523	3.477	11.879	0	0.01
	3.904	8.165	2.091	-14.909	2.091	8.165	0	0.01
	4.392	3.128	0	-17.805	0.65	2.857	0	0
2	0	1.414	0.29	-1.449	19.419	0	-2.315	0
	0.488	4.009	16.588	-0.412	17.634	0	-0.795	0
	0.976	8.495	13.898	-3.202	16.394	3.098	0	0
	1.464	11.196	11.28	-5.72	14.799	6.782	0	0.01
	1.952	12.21	8.838	-8.162	12.89	9.779	0	0.01
	2.44	11.734	6.598	-10.402	10.711	11.691	0	0.01
	2.928	12.207	8.304	-8.696	8.304	12.207	0	0.01
	3.416	11.096	5.711	-11.289	5.711	11.096	0	0.01
	3.904	8.244	2.987	-14.013	2.987	8.244	0	0
	4.392	3.704	0.208	-16.792	2.367	1.936	0	0
3	0	4.133	2.102	-2.979	19.754	0	-2.781	0
	0.488	3.658	16.84	-0.16	17.243	0.436	0	0
	0.976	8.221	14.04	-2.96	16.122	4.099	0	0
	1.464	10.941	11.338	-5.662	14.661	7.595	0	0.01
	1.952	11.882	8.771	-8.229	12.891	10.48	0	0.01
	2.44	12.371	10.843	-6.157	10.843	12.371	0	0.01
	2.928	12.945	8.547	-8.453	8.547	12.945	0	0.01
	3.416	11.938	6.033	-10.967	6.033	11.938	0	0.01
	3.904	9.146	3.333	-13.667	3.333	9.146	0	0
	4.392	4.438	0.486	-16.514	1.521	2.041	0	0
4	0	3.076	1.267	-1.92	22.743	0	-7.089	0
	0.608	3.066	11.649	-0.351	19.66	2.225	0	0
	1.216	9.374	16.283	-0.717	16.399	9.354	0	0.01
	1.824	13.857	13.158	-3.842	14.233	9.95	0	0.01
	2.432	15.724	10.102	-6.898	12.341	13.625	0	0.01
	3.04	16.057	10.071	-6.929	10.071	16.057	0	0.01
	3.648	16.693	7.446	-9.554	7.446	16.693	0	0.01
	4.256	15.035	4.492	-12.508	4.492	15.035	0	0.01
	4.864	10.708	1.296	-15.704	2.125	7.528	0	0.01
	5.472	3.721	0.906	-11.094	1.064	0.72	0	0

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5	0	2.58	0.549	-1.996	22.609	0	-6.442	0
	0.608	3.451	11.18	-0.82	19.476	3.001	0	0
	1.216	10.138	16.071	-0.929	16.198	10.076	0	0.01
	1.824	14.635	12.848	-4.152	14.551	9.005	0	0.01
	2.432	16.42	9.807	-7.193	12.506	13.235	0	0.01
	3.04	16.012	10.098	-6.902	10.098	16.012	0	0.02
	3.648	16.793	7.361	-9.639	7.361	16.793	0	0.02
	4.256	15.123	4.331	-12.669	4.331	15.123	0	0.01
	4.864	10.696	1.1	-15.9	2.07	7.519	0	0.01
	5.472	3.697	0.881	-11.119	1.921	1.354	0	0
6	0	2.546	0.51	-2.002	22.606	0	-6.404	0
	0.608	3.892	11.074	-0.926	19.469	3.052	0	0
	1.216	10.658	15.926	-1.074	16.231	3.832	0	0.01
	1.824	15.096	12.693	-4.307	14.577	8.941	0	0.01
	2.432	16.773	9.658	-7.342	12.523	13.213	0	0.02
	3.04	16.019	10.106	-6.894	10.106	16.019	0	0.02
	3.648	16.815	7.361	-9.639	7.361	16.815	0	0.02
	4.256	15.149	4.326	-12.674	4.326	15.149	0	0.01
	4.864	10.716	1.092	-15.908	2.047	7.45	0	0.01
	5.472	3.59	0.854	-11.146	1.957	1.324	0	0
7	0	2.565	0.535	-1.996	22.695	0	-6.509	0
	0.608	3.716	11.117	-0.883	19.551	3.007	0	0
	1.216	10.69	15.926	-1.074	16.263	3.821	0	0.01
	1.824	15.13	12.69	-4.31	14.627	8.962	0	0.01
	2.432	16.802	9.652	-7.348	12.591	13.289	0	0.02
	3.04	16.164	10.187	-6.813	10.187	16.164	0	0.02
	3.648	17.031	7.449	-9.551	7.449	17.031	0	0.02
	4.256	15.42	4.414	-12.586	4.414	15.42	0	0.01
	4.864	11.002	1.169	-15.831	2.311	8.395	0	0.01
	5.472	4.513	1.074	-10.926	1.986	1.335	0	0.01
8	0	3.149	0.661	-2.446	22.471	0	-6.228	0
	0.608	3.705	11.133	-0.867	19.412	3.094	0	0
	1.216	10.684	16.051	-0.949	16.203	10.13	0	0.01
	1.824	15.188	12.793	-4.207	14.383	8.509	0	0.01
	2.432	16.867	9.706	-7.294	12.321	12.696	0	0.02
	3.04	15.976	6.883	-10.117	9.919	15.492	0	0.02
	3.648	16.395	7.181	-9.819	7.198	16.375	0	0.02
	4.256	14.873	4.184	-12.816	4.224	14.848	0	0.01
	4.864	10.632	1.067	-15.933	2.051	7.465	0	0.01
	5.472	3.902	0.928	-11.072	1.953	1.191	0	0
9	0	2.378	1.953	-0.392	24.118	0	-8.324	0
	0.606	3.551	11.349	-0.651	21.185	1.893	0	0.01
	1.212	10.541	17.799	0	17.913	9.989	0	0.01
	1.818	15.918	14.217	-2.783	14.936	8.754	0	0.02
	2.424	19.146	11.734	-5.266	13.24	13.672	0	0.02
	3.03	21.326	9.962	-7.038	11.187	17.615	0	0.02
	3.636	21.639	8.073	-8.927	8.768	19.955	0	0.02
	4.242	20.043	5.975	-11.025	6.348	19.365	0	0.02
	4.848	17.172	2.832	-14.168	4.28	15.416	0	0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5.454	10.668	0	-17.604	2.157	8.995	0	0.01
6.06	0	1.465	-21.233	1.465	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	18.81	-1.09	-1.09	0	0	0
	0.488	-0.532	0	-1.09	-2.153	7.246	0	0
	0.976	-1.064	0	-1.09	-4.518	12.182	0	0
	1.464	-1.596	0	-1.09	-7.193	14.358	0	0
	1.952	-2.127	0	-1.09	-9.548	14.546	0	0
	2.44	-2.659	0	-1.09	-11.594	13.191	0	0
	2.928	-3.191	0	-1.09	-13.337	10.724	0	0
	3.416	-3.723	0	-1.09	-14.788	7.557	0	0
	3.904	-4.255	0	-1.09	-15.954	4.085	0	0
	4.392	-9.44	0	-11.594	-17.897	2.725	0	0
2	0	-15.383	12.89	-13.018	-20.925	0	-4.359	0
	0.488	-9.22	12.482	0	-1.449	0.707	0	0
	0.976	-6.38	2.202	0	-3.202	8.495	0	0
	1.464	-5.305	2.202	0	-5.84	11.137	0	0
	1.952	-4.231	2.202	0	-8.29	12.085	0	0
	2.44	-3.265	1.577	0	-10.529	11.548	0	0
	2.928	-2.829	0	-1.449	-12.532	9.784	0	0
	3.416	-3.536	0	-1.449	-14.275	7.096	0	0
	3.904	-4.243	0	-1.449	-15.735	3.837	0	0
	4.392	-9.003	0	-10.529	-16.887	0.404	0	0
3	0	-14.688	12.702	-12.346	-19.636	0	-2.918	0
	0.488	-8.795	10.843	0	-3.021	2.544	0	0
	0.976	-4.259	1.44	0	-3.021	1.07	0	0
	1.464	-3.645	1.22	0	-5.713	10.919	0	0
	1.952	-3.133	0.926	0	-8.319	11.799	0	0
	2.44	-3.882	0	-2.748	-10.738	11.029	0	0
	2.928	-5.223	0	-2.748	-12.952	9.237	0	-0.01
	3.416	-6.564	0	-2.748	-14.984	5.985	0	0
	3.904	-7.905	0	-2.748	-16.721	1.871	0	0
	4.392	-10.176	0	-11.956	-18.12	0	-2.656	0
4	0	-16.404	13.581	-12.935	-19.387	0	-2.214	0
	0.608	-8.961	11.779	0	-2.049	1.591	0	0
	1.216	-3.807	1.064	0	-2.049	0.345	0	0
	1.824	-3.48	0.251	0	-3.884	13.838	0	-0.01
	2.432	-3.356	0.082	0	-6.898	15.724	0	-0.01
	3.04	-3.789	0	-1.198	-9.699	15.304	0	-0.01
	3.648	-4.743	0	-1.668	-12.21	12.851	0	-0.01
	4.256	-5.883	0	-2.049	-14.39	8.834	0	-0.01
	4.864	-7.129	0	-2.049	-16.194	3.825	0	-0.01
	5.472	-9.66	0	-12.146	-19.061	3.332	0	0
5	0	-17.651	14.05	-13.643	-22.145	0	-5.809	0
	0.608	-9.592	12.219	0	-1.996	1.366	0	0
	1.216	-6.823	1.917	0	-1.996	0.152	0	-0.01
	1.824	-6.033	1.211	0	-4.152	14.635	0	-0.01



## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

	2.432	-5.344	1.002	0	-7.193	16.42	0	-0.01
	3.04	-4.806	0.69	0	-9.957	15.758	0	-0.01
	3.648	-5.412	0	-1.193	-12.403	13.073	0	-0.01
	4.256	-6.171	0	-1.304	-14.492	8.889	0	-0.01
	4.864	-7.13	0	-1.996	-16.182	3.826	0	-0.01
	5.472	-9.731	0	-12.246	-19.299	3.171	0	0
6	0	-17.748	14.074	-13.716	-22.432	0	-6.178	0
	0.608	-9.661	12.441	0	-2.002	1.328	0	0
	1.216	-7.003	1.957	0	-2.101	7.644	0	-0.01
	1.824	-6.181	1.259	0	-4.307	15.096	0	-0.01
	2.432	-5.452	1.147	0	-7.342	16.773	0	-0.01
	3.04	-4.861	0.718	0	-10.09	15.99	0	-0.01
	3.648	-5.46	0	-1.158	-12.511	13.194	0	-0.01
	4.256	-6.197	0	-1.269	-14.57	8.927	0	-0.01
	4.864	-7.194	0	-2.002	-16.229	3.817	0	-0.01
	5.472	-9.781	0	-12.264	-19.45	3.071	0	0
7	0	-17.823	14.148	-13.716	-22.586	0	-6.374	0
	0.608	-9.73	12.256	0	-1.996	1.351	0	0
	1.216	-7.116	1.986	0	-2.067	7.532	0	-0.01
	1.824	-6.204	1.239	0	-4.31	15.13	0	-0.01
	2.432	-5.488	1.126	0	-7.348	16.802	0	-0.01
	3.04	-4.909	0.835	0	-10.1	16.004	0	-0.01
	3.648	-5.534	0	-1.185	-12.526	13.185	0	-0.01
	4.256	-6.294	0	-1.299	-14.589	8.888	0	-0.01
	4.864	-7.155	0	-1.995	-16.254	3.742	0	-0.01
	5.472	-9.662	0	-12.526	-19.451	3.1	0	0
8	0	-17.814	13.77	-14.084	-22.59	0	-6.358	0
	0.608	-9.778	12.321	0	-2.446	1.661	0	0
	1.216	-7.122	1.953	0	-2.446	0.174	0	-0.01
	1.824	-6.38	0.919	0	-4.207	15.188	0	-0.01
	2.432	-5.873	0.684	0	-7.294	16.867	0	-0.01
	3.04	-5.995	0	-0.942	-10.117	15.976	0	-0.01
	3.648	-6.602	0	-1.003	-12.63	12.941	0	-0.01
	4.256	-7.604	0	-1.879	-14.787	8.301	0	-0.01
	4.864	-8.748	0	-2.446	-16.544	2.704	0	-0.01
	5.472	-10.235	0	-2.446	-19.332	3.598	0	0
9	0	-18.671	13.977	-14.787	-22.504	0	-5.943	0
	0.606	-10.398	13.24	0	-0.651	3.551	0	0
	1.212	-7.1	1.465	0	-1.541	7.469	0	-0.01
	1.818	-6.213	1.465	0	-2.783	15.918	0	-0.01
	2.424	-5.325	1.465	0	-5.266	19.146	0	-0.01
	3.03	-4.438	1.465	0	-7.038	21.326	0	-0.01
	3.636	-3.55	1.465	0	-8.927	21.639	0	-0.01
	4.242	-2.663	1.465	0	-11.025	20.043	0	-0.01
	4.848	-1.775	1.465	0	-14.168	17.172	0	0
	5.454	-0.888	1.465	0	-17.604	10.668	0	0
	6.06	0	1.465	-21.233	-21.233	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.09	-18.844
2	1.739	-26.041
3	5.081	-25.049
4	3.194	-26.86
5	2.546	-27.693
6	2.512	-27.789
7	2.531	-27.865
8	3.107	-27.854
9	2.345	-28.795
10	1.465	-21.271

Id Ohio 4F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shez	Corr. Shez	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	15.554	-1.037	15.554	0	0	0
	0.488	6.264	12.836	-1.164	12.836	6.264	0	0
	0.976	10.455	10.712	-3.288	10.712	10.455	0	0.01
	1.464	13.226	9.034	-4.966	9.034	13.226	0	0.01
	1.952	14.434	7.395	-6.605	7.395	14.434	0	0.01
	2.44	14.206	5.822	-8.178	5.822	14.206	0	0.01
	2.928	12.725	4.346	-9.654	4.346	12.725	0	0.01
	3.416	10.23	2.995	-11.005	2.995	10.23	0	0.01
	3.904	7.017	1.797	-12.203	1.797	7.017	0	0.01
	4.392	2.857	0.65	-11.35	0.65	2.857	0	0
2	0	1.379	0.283	-1.413	17.106	0	-5.39	0
	0.488	3.731	12.781	-1.219	15.146	0	-0.953	0
	0.976	6.996	10.96	-3.155	13.531	2.551	0	0
	1.464	9.136	9.118	-4.882	12.33	5.655	0	0.01
	1.952	10.147	7.373	-6.627	10.843	8.275	0	0.01
	2.44	10.715	6.319	-5.681	9.106	10.046	0	0.01
	2.928	10.672	7.155	-6.845	7.155	10.672	0	0.01
	3.416	9.802	5.314	-8.686	5.314	9.802	0	0.01
	3.904	7.697	3.5	-10.5	3.5	7.697	0	0
	4.392	4.417	1.543	-12.457	1.823	0.979	0	0
3	0	1.919	0.492	-1.868	17.119	0	-4.716	0
	0.488	4.1	12.143	-1.857	15.112	0	-0.126	0
	0.976	7.303	10.041	-3.959	13.025	3.389	0	0
	1.464	9.18	8.066	-5.934	11.422	7.309	0	0.01
	1.952	10.367	7.136	-4.864	10.188	9.387	0	0.01
	2.44	10.858	5.681	-6.319	8.75	10.737	0	0.01
	2.928	11.125	7.143	-6.857	7.143	11.125	0	0.01
	3.416	10.385	5.398	-8.602	5.398	10.385	0	0.01
	3.904	8.413	3.524	-10.476	3.524	8.413	0	0
	4.392	5.124	1.518	-12.482	1.518	5.124	0	0
4	0	1.928	0.5	-1.393	19.238	0	-7.834	0
	0.608	3.744	10.775	-1.225	17.051	0	-1.093	0
	1.216	8.318	11.89	-2.11	14.649	4.418	0	0.01
	1.824	11.369	9.448	-4.552	12.139	8.379	0	0.01
	2.432	12.508	7.229	-6.771	9.77	11.443	0	0.01
	3.04	13.19	8.217	-5.783	8.217	13.19	0	0.01
	3.648	13.668	6.418	-7.582	6.418	13.668	0	0.01
	4.256	12.578	4.359	-9.641	4.359	12.578	0	0.01
	4.864	9.631	2.058	-11.942	2.332	8.247	0	0.01
	5.472	4.736	1.155	-10.845	1.155	4.736	0	0

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5	0	1.748	0.372	-1.353	19.74	0	-10.237	0
	0.608	4.276	14.222	0	17.484	0	-2.902	0
	1.216	9.177	11.65	-2.35	14.996	3.177	0	0.01
	1.824	11.98	9.242	-4.758	12.39	7.633	0	0.01
	2.432	12.832	7.092	-6.908	10.304	10.181	0	0.01
	3.04	12.989	6.323	-5.677	8.771	12.218	0	0.01
	3.648	13.059	6.95	-7.05	6.95	13.059	0	0.01
	4.256	12.323	4.834	-9.166	4.834	12.323	0	0.01
	4.864	9.66	2.456	-11.544	2.456	9.66	0	0.01
	5.472	4.899	0	-14.092	1.421	4.079	0	0
6	0	1.816	0.379	-1.413	19.776	0	-10.398	0
	0.608	4.89	10.836	-1.164	17.518	0	-3.027	0
	1.216	9.627	11.523	-2.477	15.026	3.092	0	0.01
	1.824	12.28	9.139	-4.861	12.414	7.585	0	0.01
	2.432	13.002	7.018	-6.982	10.332	10.117	0	0.01
	3.04	13.057	5.66	-6.34	8.806	12.164	0	0.01
	3.648	13.028	6.987	-7.013	6.987	13.028	0	0.01
	4.256	12.32	4.869	-9.131	4.869	12.32	0	0.01
	4.864	9.682	2.489	-11.511	2.489	9.682	0	0.01
	5.472	4.939	0	-14.065	1.317	0.891	0	0
7	0	1.691	1.317	-0.352	19.835	0	-10.482	0
	0.608	4.919	14.056	0	17.593	0	-3.085	0
	1.216	9.659	11.497	-2.503	15.111	3.08	0	0.01
	1.824	12.29	9.112	-4.888	12.503	7.628	0	0.01
	2.432	12.989	6.991	-7.009	10.344	10.123	0	0.01
	3.04	13.398	6.536	-5.464	8.836	12.208	0	0.01
	3.648	13.135	7.036	-6.964	7.036	13.135	0	0.01
	4.256	12.509	4.936	-9.064	4.936	12.509	0	0.01
	4.864	9.962	2.569	-11.431	2.569	9.962	0	0.01
	5.472	5.642	1.344	-10.656	1.357	0.912	0	0
8	0	2.586	0.539	-2.013	19.613	0	-10.511	0
	0.608	5.049	13.867	-0.133	17.331	0	-3.172	0
	1.216	9.678	11.258	-2.742	14.826	2.936	0	0.01
	1.824	12.143	8.836	-5.164	12.197	7.458	0	0.01
	2.432	12.723	7.15	-4.85	10.381	9.887	0	0.01
	3.04	13.168	5.777	-6.223	8.738	11.72	0	0.01
	3.648	12.477	6.758	-7.242	6.849	12.367	0	0.01
	4.256	11.542	4.611	-9.389	4.694	11.491	0	0.01
	4.864	8.758	2.296	-11.704	2.296	8.758	0	0.01
	5.472	4.141	1.319	-10.681	1.328	0.81	0	0
9	0	1.617	1.328	-0.267	20.692	0	-11.885	0
	0.606	4.507	11.174	-0.826	18.454	0	-3.937	0.01
	1.212	9.438	14.502	0	15.863	2.839	0	0.01
	1.818	13.602	11.592	-2.408	12.955	7.822	0	0.01
	2.424	15.961	9.61	-4.39	11.076	10.633	0	0.02
	3.03	17.461	8.237	-5.763	9.635	13.225	0	0.02
	3.636	17.467	6.794	-7.206	7.906	14.772	0	0.02
	4.242	16.825	4.745	-9.255	5.852	14.813	0	0.02
	4.848	14.347	2.162	-11.838	3.794	12.37	0	0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5.454	8.872	0	-14.64	2.249	7.121	0	0.01
6.06	0	0.996	-17.581	0.996	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	15.554	-1.037	-1.037	0	0	0
	0.488	-0.506	0	-1.037	-1.824	5.942	0	0
	0.976	-1.012	0	-1.037	-4.037	9.724	0	0
	1.464	-1.519	0	-1.037	-6.003	11.708	0	0
	1.952	-2.025	0	-1.037	-7.874	11.957	0	0
	2.44	-2.531	0	-1.037	-9.58	10.784	0	0
	2.928	-3.037	0	-1.037	-11.032	8.69	0	0
	3.416	-3.543	0	-1.037	-12.237	6.023	0	0
	3.904	-4.049	0	-1.037	-13.202	3.114	0	0
	4.392	-7.919	0	-9.657	-15.359	0	-0.481	0
2	0	-12.891	10.843	-10.766	-17.6	0	-5.386	0
	0.488	-7.798	10.018	0	-1.413	0.689	0	0
	0.976	-5.247	1.823	0	-3.155	6.996	0	0
	1.464	-4.862	0.78	0	-4.982	9.087	0	0
	1.952	-4.5	0.639	0	-6.709	10.067	0	-0.01
	2.44	-4.194	0.488	0	-8.335	10.002	0	-0.01
	2.928	-3.96	0.323	0	-9.834	9.007	0	0
	3.416	-3.803	0.164	0	-11.179	7.252	0	0
	3.904	-4.137	0	-1.413	-12.833	3.005	0	0
	4.392	-6.405	0	-7.284	-14.829	0	-0.366	0
3	0	-10.671	9.551	-9.388	-16.782	0	-4.683	0
	0.488	-6.429	8.136	0	-1.917	3.975	0	0
	0.976	-3.764	1.272	0	-3.959	7.303	0	0
	1.464	-3.711	0	-0.094	-5.934	9.18	0	0
	1.952	-3.771	0	-0.149	-7.767	9.818	0	0
	2.44	-3.951	0	-0.594	-9.449	9.334	0	0
	2.928	-4.281	0	-0.756	-10.974	7.855	0	0
	3.416	-4.687	0	-0.953	-12.328	5.539	0	0
	3.904	-5.807	0	-6.833	-13.476	2.633	0	0
	4.392	-9.465	0	-8.053	-15.51	0	-2.774	0
4	0	-13.784	13.236	-9.178	-17.534	0	-7.471	0
	0.608	-7.052	9.472	0	-1.393	1.081	0	0
	1.216	-3.642	1.018	0	-2.11	8.318	0	0
	1.824	-3.304	0	-0.348	-4.552	11.369	0	-0.01
	2.432	-3.516	0	-0.348	-6.771	12.508	0	-0.01
	3.04	-3.739	0	-0.375	-8.723	12.009	0	-0.01
	3.648	-3.988	0	-0.47	-10.408	10.196	0	-0.01
	4.256	-4.274	0	-0.47	-12.044	7.376	0	-0.01
	4.864	-4.845	0	-1.393	-14.633	3.112	0	0
	5.472	-9.416	0	-8.566	-17.159	0	-2.792	0
5	0	-15.205	13.908	-9.997	-19.496	0	-10.047	0
	0.608	-9.114	8.771	0	-1.353	0.926	0	0
	1.216	-4.956	1.385	0	-2.35	9.177	0	-0.01
	1.824	-4.829	0.099	0	-4.758	11.98	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

	2.432	-4.769	0.099	0	-6.908	12.832	0	-0.01
	3.04	-4.708	0.099	0	-8.76	12.074	0	-0.01
	3.648	-4.648	0.099	0	-10.325	9.816	0	-0.01
	4.256	-4.588	0.099	0	-12.252	7.493	0	-0.01
	4.864	-4.832	0	-1.353	-14.875	3.096	0	-0.01
	5.472	-9.488	0	-8.665	-17.39	0	-2.948	0
6	0	-15.315	13.935	-10.078	-19.678	0	-10.281	0
	0.608	-9.35	9.002	0	-1.413	0.957	0	0
	1.216	-4.714	1.317	0	-2.477	9.627	0	-0.01
	1.824	-4.509	0.028	0	-4.861	12.28	0	-0.01
	2.432	-4.494	0	-0.019	-6.982	13.002	0	-0.01
	3.04	-4.505	0	-0.019	-8.805	12.147	0	-0.01
	3.648	-4.517	0	-0.019	-10.354	9.767	0	-0.01
	4.256	-4.528	0	-0.019	-12.399	7.569	0	-0.01
	4.864	-5.056	0	-1.413	-15.012	3.082	0	-0.01
	5.472	-9.582	0	-8.693	-17.507	0	-3.032	0
7	0	-15.433	14.023	-10.107	-19.769	0	-10.403	0
	0.608	-9.478	8.673	0	-1.31	0.887	0	0
	1.216	-4.862	1.357	0	-2.503	9.659	0	-0.01
	1.824	-4.478	0.099	0	-4.888	12.29	0	-0.01
	2.432	-4.498	0	-0.046	-7.009	12.989	0	-0.01
	3.04	-4.526	0	-0.046	-8.829	12.115	0	-0.01
	3.648	-4.554	0	-0.046	-10.353	10.066	0	-0.01
	4.256	-4.581	0	-0.046	-12.42	7.541	0	-0.01
	4.864	-4.69	0	-1.31	-15.037	3.027	0	-0.01
	5.472	-9.357	0	-8.829	-17.534	0	-3.116	0
8	0	-15.383	10.137	-13.944	-19.796	0	-10.511	0
	0.608	-9.531	8.738	0	-2.013	1.362	0	0
	1.216	-4.843	1.328	0	-2.742	9.678	0	-0.01
	1.824	-4.918	0	-0.714	-5.164	12.143	0	-0.01
	2.432	-5.356	0	-0.723	-7.305	12.651	0	-0.01
	3.04	-5.797	0	-0.77	-9.116	11.613	0	-0.01
	3.648	-6.265	0	-0.77	-10.586	9.516	0	-0.01
	4.256	-6.734	0	-0.77	-12.576	7.079	0	-0.01
	4.864	-7.204	0	-2.013	-15.248	2.273	0	-0.01
	5.472	-10.557	0	-9.116	-17.79	0	-4.187	0
9	0	-16.395	15.772	-9.816	-20.083	0	-11.883	0
	0.606	-10.132	9.635	0	-0.826	4.507	0	0
	1.212	-4.827	0.996	0	-1.689	8.187	0	0
	1.818	-4.224	0.996	0	-2.694	11.427	0	-0.01
	2.424	-3.62	0.996	0	-4.39	15.961	0	-0.01
	3.03	-3.017	0.996	0	-5.763	17.461	0	-0.01
	3.636	-2.414	0.996	0	-7.206	17.467	0	-0.01
	4.242	-1.81	0.996	0	-9.255	16.825	0	0
	4.848	-1.207	0.996	0	-11.838	14.347	0	0
	5.454	-0.603	0.996	0	-14.64	8.872	0	0
	6.06	0	0.996	-17.581	-17.581	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.037	-15.583
2	1.695	-21.647
3	2.36	-19.929
4	1.893	-22.955
5	1.725	-25.182
6	1.792	-25.34
7	1.669	-25.424
8	2.552	-25.452
9	1.595	-26.819
10	0.996	-17.611

Id Ohio 3F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Sheæ	Corr. Sheæ	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	18.873	-1.101	18.873	0	0	0
	0.488	7.605	15.584	-1.416	15.584	7.605	0	0
	0.976	12.647	12.958	-4.042	12.958	12.647	0	0.01
	1.464	15.979	10.915	-6.085	10.915	15.979	0	0.01
	1.952	17.421	8.925	-8.075	8.925	17.421	0	0.01
	2.44	17.131	7.021	-9.979	7.021	17.131	0	0.01
	2.928	15.335	5.238	-11.762	5.238	15.335	0	0.01
	3.416	12.325	3.608	-13.392	3.608	12.325	0	0.01
	3.904	8.456	2.166	-14.834	2.166	8.456	0	0.01
	4.392	3.223	0	-17.783	0.65	2.857	0	0
2	0	1.486	0.305	-1.523	19.7	0	-2.589	0
	0.488	3.977	16.653	-0.347	17.441	0	-0.701	0
	0.976	8.495	14.02	-3.105	16.35	3.098	0	0
	1.464	11.219	11.327	-5.673	14.878	6.82	0	0.01
	1.952	12.207	8.835	-8.165	13.066	9.95	0	0.01
	2.44	12.054	10.959	-6.041	10.959	12.054	0	0.01
	2.928	12.78	8.597	-8.403	8.597	12.78	0	0.01
	3.416	11.861	6.025	-10.975	6.025	11.861	0	0.01
	3.904	9.113	3.283	-13.717	3.283	9.113	0	0
	4.392	4.449	0.426	-16.574	2.213	1.189	0	0
3	0	2.903	0.744	-2.826	20.044	0	-3.079	0
	0.488	3.843	16.786	-0.214	17.234	3.446	0	0
	0.976	8.683	13.883	-3.117	15.657	4.123	0	0
	1.464	11.555	11.084	-5.916	14.386	7.475	0	0.01
	1.952	12.525	8.44	-8.56	12.78	10.377	0	0.01
	2.44	12.408	10.869	-6.131	10.869	12.408	0	0.01
	2.928	13.205	8.684	-8.316	8.684	13.205	0	0.01
	3.416	12.468	6.255	-10.745	6.255	12.468	0	0.01
	3.904	9.954	3.614	-13.386	3.614	9.954	0	0
	4.392	5.492	0.8	-16.2	1.44	0.66	0	0
4	0	2.917	0.757	-2.107	22.827	0	-7.204	0
	0.608	3.779	10.731	-1.269	19.825	2.097	0	0
	1.216	9.733	16.184	-0.816	16.616	9.318	0	0.01
	1.824	14.332	12.949	-4.051	13.978	9.569	0	0.01
	2.432	16.202	9.899	-7.101	12.071	13.342	0	0.01
	3.04	15.876	9.961	-7.039	9.961	15.876	0	0.01
	3.648	16.74	7.467	-9.533	7.467	16.74	0	0.02
	4.256	15.381	4.612	-12.388	4.612	15.381	0	0.01
	4.864	11.37	1.486	-15.514	2.461	8.694	0	0.01
	5.472	5.096	1.243	-10.757	1.243	5.096	0	0.01



## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5	0	2.653	0.565	-2.053	22.69	0	-6.546	0
	0.608	4.271	10.984	-1.016	19.636	2.891	0	0
	1.216	10.852	15.871	-1.129	16.409	10.06	0	0.01
	1.824	15.137	12.678	-4.322	14.286	8.652	0	0.01
	2.432	16.652	9.709	-7.291	12.243	12.935	0	0.02
	3.04	15.825	9.991	-7.009	9.991	15.825	0	0.02
	3.648	16.84	7.38	-9.62	7.38	16.84	0	0.02
	4.256	15.47	4.449	-12.551	4.449	15.47	0	0.01
	4.864	11.357	1.285	-15.715	2.398	8.69	0	0.01
	5.472	5.073	1.21	-10.79	1.923	1.302	0	0.01
6	0	2.664	0.556	-2.072	22.684	0	-6.505	0
	0.608	5.102	10.785	-1.215	19.628	2.944	0	0.01
	1.216	11.319	15.741	-1.259	16.4	10.113	0	0.01
	1.824	15.452	12.573	-4.427	14.25	8.76	0	0.01
	2.432	16.833	9.633	-7.367	12.256	12.907	0	0.02
	3.04	15.825	9.995	-7.005	9.995	15.825	0	0.02
	3.648	16.855	7.378	-9.622	7.378	16.855	0	0.02
	4.256	15.491	4.442	-12.558	4.442	15.491	0	0.01
	4.864	11.377	1.277	-15.723	2.396	8.697	0	0.01
	5.472	5.055	1.204	-10.796	2.006	1.357	0	0.01
7	0	2.577	2.006	-0.537	22.743	0	-6.578	0
	0.608	5.074	10.793	-1.207	19.703	2.897	0	0.01
	1.216	11.351	15.741	-1.259	16.486	10.111	0	0.01
	1.824	15.479	12.573	-4.427	14.255	8.757	0	0.01
	2.432	16.851	9.631	-7.369	12.268	12.918	0	0.02
	3.04	15.876	10.025	-6.975	10.025	15.876	0	0.02
	3.648	16.971	7.426	-9.574	7.426	16.971	0	0.02
	4.256	15.69	4.508	-12.492	4.508	15.69	0	0.01
	4.864	11.669	1.357	-15.643	2.575	9.339	0	0.01
	5.472	6.052	1.442	-10.558	2.041	1.372	0	0.01
8	0	3.14	0.655	-2.444	22.471	0	-6.228	0
	0.608	5.058	10.815	-1.185	19.412	3.094	0	0.01
	1.216	11.345	15.87	-1.13	16.203	10.13	0	0.01
	1.824	15.537	12.678	-4.322	14.295	8.778	0	0.01
	2.432	16.915	9.686	-7.314	12.242	12.888	0	0.02
	3.04	15.831	9.733	-7.267	9.863	15.593	0	0.02
	3.648	16.64	6.979	-10.021	7.182	16.394	0	0.02
	4.256	15.011	3.957	-13.043	4.224	14.848	0	0.01
	4.864	10.632	1.067	-15.933	2.133	7.465	0	0.01
	5.472	4.167	1.362	-10.638	2.008	1.224	0	0.01
9	0	2.445	2.008	-0.404	24.118	0	-8.324	0
	0.606	4.85	11.111	-0.889	21.185	1.893	0	0.01
	1.212	11.202	17.663	0	17.913	9.991	0	0.01
	1.818	16.286	14.131	-2.869	14.87	9.034	0	0.02
	2.424	19.204	11.718	-5.282	13.18	13.889	0	0.02
	3.03	21.094	10.038	-6.962	11.145	17.742	0	0.02
	3.636	21.177	8.264	-8.736	8.755	19.986	0	0.02
	4.242	20.353	5.805	-11.195	6.428	19.22	0	0.02
	4.848	17.36	2.676	-14.324	4.548	15.092	0	0.02

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5.454	10.74	0	-17.723	2.628	8.709	0	0.01
6.06	0	1.506	-21.295	1.506	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	18.873	-1.101	-1.101	0	0	0
	0.488	-0.537	0	-1.101	-2.151	7.246	0	0
	0.976	-1.075	0	-1.101	-4.452	12.247	0	0
	1.464	-1.612	0	-1.101	-7.16	14.405	0	0
	1.952	-2.15	0	-1.101	-9.545	14.553	0	0
	2.44	-2.687	0	-1.101	-11.614	13.143	0	0
	2.928	-3.225	0	-1.101	-13.376	10.612	0	0
	3.416	-3.762	0	-1.101	-14.84	7.38	0	0
	3.904	-4.299	0	-1.101	-16.013	3.852	0	0
	4.392	-9.531	0	-11.707	-17.807	3.118	0	0
2	0	-15.555	13.066	-13.053	-20.851	0	-3.998	0
	0.488	-9.42	12.064	0	-1.523	0.743	0	0
	0.976	-6.371	2.213	0	-3.105	8.495	0	0
	1.464	-5.795	1.17	0	-5.723	11.194	0	-0.01
	1.952	-5.226	1.02	0	-8.178	12.194	0	-0.01
	2.44	-4.728	1.02	0	-10.465	11.641	0	-0.01
	2.928	-4.295	0.853	0	-12.51	9.826	0	-0.01
	3.416	-3.955	0	-0.474	-14.288	7.064	0	0
	3.904	-4.458	0	-1.523	-15.776	3.717	0	0
	4.392	-8.793	0	-10.501	-16.949	0.192	0	0
3	0	-14.593	12.427	-12.51	-19.544	0	-2.561	0
	0.488	-8.809	10.869	0	-2.826	1.524	0	0
	0.976	-4.259	1.44	0	-3.117	8.683	0	0
	1.464	-4.167	0.024	0	-5.916	11.555	0	0
	1.952	-4.357	0	-0.962	-8.56	12.525	0	-0.01
	2.44	-4.991	0	-1.537	-11.008	11.755	0	-0.01
	2.928	-5.832	0	-1.876	-13.217	9.491	0	-0.01
	3.416	-6.794	0	-2.05	-15.146	6.057	0	-0.01
	3.904	-8.129	0	-2.826	-16.753	1.861	0	0
	4.392	-9.955	0	-12.235	-17.995	0	-2.608	0
4	0	-16.391	12.549	-14.203	-19.523	0	-2.342	0
	0.608	-9.002	11.701	0	-2.107	1.636	0	0
	1.216	-3.807	1.064	0	-2.107	0.355	0	-0.01
	1.824	-3.744	0	-0.264	-4.051	14.332	0	-0.01
	2.432	-4.205	0	-1.037	-7.101	16.202	0	-0.01
	3.04	-4.85	0	-1.151	-9.867	15.6	0	-0.01
	3.648	-5.55	0	-1.151	-12.305	12.96	0	-0.01
	4.256	-6.251	0	-1.154	-14.37	8.823	0	-0.01
	4.864	-7.331	0	-2.107	-16.02	3.837	0	-0.01
	5.472	-9.486	0	-12.334	-19.19	3.244	0	0
5	0	-17.472	13.504	-14.02	-22.335	0	-6.054	0
	0.608	-9.502	12.198	0	-2.053	1.405	0	0
	1.216	-6.883	1.923	0	-2.178	7.92	0	-0.01
	1.824	-6.351	0.613	0	-4.322	15.137	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

	2.432	-5.978	0.613	0	-7.291	16.652	0	-0.01
	3.04	-5.642	0	-0.702	-9.944	15.734	0	-0.01
	3.648	-6.069	0	-0.702	-12.238	12.883	0	-0.01
	4.256	-6.495	0	-0.702	-14.247	8.752	0	-0.01
	4.864	-7.333	0	-2.053	-16.24	10.128	0	-0.01
	5.472	-9.439	0	-12.238	-19.49	3.041	0	0
6	0	-17.246	13.162	-14.176	-22.577	0	-6.364	0
	0.608	-9.448	12.256	0	-2.072	1.404	0	0
	1.216	-7.181	2.006	0	-2.39	8.679	0	-0.01
	1.824	-6.502	0.662	0	-4.427	15.452	0	-0.01
	2.432	-6.1	0.662	0	-7.367	16.833	0	-0.01
	3.04	-5.702	0	-0.673	-9.99	15.814	0	-0.01
	3.648	-6.111	0	-0.673	-12.255	12.901	0	-0.01
	4.256	-6.519	0	-0.673	-14.253	8.751	0	-0.01
	4.864	-7.417	0	-2.072	-16.381	10.121	0	-0.01
	5.472	-9.453	0	-12.255	-19.611	2.962	0	0
7	0	-17.257	13.167	-14.181	-22.671	0	-6.483	0
	0.608	-9.459	12.268	0	-1.996	1.351	0	0
	1.216	-7.316	2.041	0	-2.39	8.689	0	-0.01
	1.824	-6.524	0.645	0	-4.427	15.479	0	-0.01
	2.432	-6.132	0.645	0	-7.369	16.851	0	-0.01
	3.04	-5.763	0	-0.703	-9.994	15.818	0	-0.01
	3.648	-6.19	0	-0.703	-12.264	12.884	0	-0.01
	4.256	-6.619	0	-0.731	-14.266	8.712	0	-0.01
	4.864	-7.145	0	-1.996	-16.381	10.154	0	-0.01
	5.472	-9.486	0	-12.264	-19.611	2.993	0	0
8	0	-17.34	13.27	-14.152	-22.671	0	-6.462	0
	0.608	-9.442	12.242	0	-2.444	1.654	0	0
	1.216	-7.323	2.008	0	-2.799	7.261	0	-0.01
	1.824	-6.685	0.366	0	-4.322	15.537	0	-0.01
	2.432	-6.463	0.366	0	-7.314	16.915	0	-0.01
	3.04	-6.554	0	-1.201	-10.013	15.786	0	-0.01
	3.648	-7.285	0	-1.201	-12.373	12.629	0	-0.01
	4.256	-8.015	0	-1.201	-14.469	8.108	0	-0.01
	4.864	-8.747	0	-2.444	-16.293	2.704	0	-0.01
	5.472	-10.233	0	-2.444	-19.489	3.503	0	-0.01
9	0	-18.284	13.913	-14.469	-22.584	0	-6.039	0
	0.606	-10.073	13.18	0	-0.889	4.85	0	0
	1.212	-7.301	1.506	0	-1.78	8.631	0	-0.01
	1.818	-6.389	1.506	0	-2.869	16.286	0	-0.01
	2.424	-5.476	1.506	0	-5.282	19.204	0	-0.01
	3.03	-4.563	1.506	0	-6.962	21.094	0	-0.01
	3.636	-3.651	1.506	0	-8.736	21.177	0	-0.01
	4.242	-2.738	1.506	0	-11.195	20.353	0	-0.01
	4.848	-1.825	1.506	0	-14.324	17.36	0	0
	5.454	-0.913	1.506	0	-17.723	10.74	0	0
	6.06	0	1.506	-21.295	-21.295	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.101	-18.907
2	1.827	-26.169
3	3.569	-24.942
4	2.864	-26.846
5	2.618	-27.524
6	2.629	-27.34
7	2.543	-27.351
8	3.099	-27.422
9	2.412	-28.439
10	1.506	-21.332

Id Ohio 2F1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	20.032	-1.656	20.032	0	0	0
	0.488	8.595	17.612	-2.388	17.612	8.595	0	0
	0.976	14.801	15.165	-4.835	15.165	14.801	0	0.01
	1.464	18.67	12.752	-7.248	12.752	18.67	0	0.01
	1.952	20.325	10.412	-9.588	10.412	20.325	0	0.01
	2.44	19.963	8.182	-11.818	8.182	19.963	0	0.01
	2.928	17.855	6.098	-13.902	6.098	17.855	0	0.01
	3.416	14.344	4.199	-15.801	4.199	14.344	0	0.01
	3.904	9.845	2.522	-17.478	2.522	9.845	0	0.01
	4.392	4.849	1.104	-18.896	1.104	4.849	0	0
2	0	2.18	0.447	-2.234	20.073	0	-0.13	0
	0.488	5.224	18.454	-1.546	18.676	5.116	0	0
	0.976	9.994	16.9	-3.415	16.9	9.994	0	0.01
	1.464	13.94	14.845	-5.155	14.845	13.94	0	0.01
	1.952	16.515	12.601	-7.399	12.601	16.515	0	0.01
	2.44	17.455	10.256	-9.744	10.256	17.455	0	0.01
	2.928	16.667	7.898	-12.102	7.898	16.667	0	0.01
	3.416	14.233	5.617	-14.383	5.617	14.233	0	0.01
	3.904	10.406	3.501	-16.499	3.501	10.406	0	0.01
	4.392	5.615	1.638	-18.362	2.604	1.399	0	0
3	0	3.079	0.789	-2.997	19.988	0	-0.049	0
	0.488	5.12	18.52	-1.48	18.52	5.12	0	0
	0.976	10.043	16.656	-3.344	16.792	9.658	0	0.01
	1.464	13.999	14.539	-5.461	14.914	13.56	0	0.01
	1.952	16.56	12.255	-7.745	12.809	16.282	0	0.01
	2.44	17.492	10.565	-9.435	10.565	17.492	0	0.01
	2.928	17.028	8.267	-11.733	8.267	17.028	0	0.01
	3.416	14.895	6.003	-13.997	6.003	14.895	0	0.01
	3.904	11.269	3.86	-16.14	3.86	11.269	0	0.01
	4.392	6.497	1.925	-18.075	2.121	0.972	0	0
4	0	3.094	0.803	-2.234	20.004	0	-0.142	0
	0.608	6.148	18.078	-1.922	18.614	5.831	0	0
	1.216	11.63	16.808	-3.192	16.808	11.63	0	0.01
	1.824	16.431	14.703	-5.297	14.737	15.974	0	0.02
	2.432	19.597	12.403	-7.597	12.659	19.24	0	0.02
	3.04	20.743	10.012	-9.988	10.413	20.699	0	0.02
	3.648	20.106	8.1	-11.9	8.1	20.106	0	0.02
	4.256	17.465	5.822	-14.178	5.822	17.465	0	0.02
	4.864	13.026	3.68	-16.32	3.68	13.026	0	0.01
	5.472	7.287	1.776	-18.224	1.776	7.287	0	0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5	0	2.811	0.599	-2.176	19.908	0.322	0	0
	0.608	6.717	18.402	-1.598	18.402	6.717	0	0.01
	1.216	12.597	16.538	-3.462	16.538	12.597	0	0.01
	1.824	17.252	14.427	-5.573	14.529	16.591	0	0.02
	2.432	20.152	12.168	-7.832	12.439	19.76	0	0.02
	3.04	21.065	10.204	-9.796	10.204	21.065	0	0.02
	3.648	20.313	7.921	-12.079	7.921	20.313	0	0.02
	4.256	17.541	5.683	-14.317	5.683	17.541	0	0.02
	4.864	13.021	3.588	-16.412	3.6	12.028	0	0.01
	5.472	7.258	1.73	-18.27	2.157	1.46	0	0.01
6	0	2.796	0.584	-2.175	19.79	0.887	0	0
	0.608	7.217	18.283	-1.717	18.283	7.217	0	0.01
	1.216	12.99	16.428	-3.572	16.428	12.99	0	0.01
	1.824	17.525	14.336	-5.664	14.514	16.635	0	0.02
	2.432	20.317	12.1	-7.9	12.424	19.798	0	0.02
	3.04	21.095	10.191	-9.809	10.191	21.095	0	0.02
	3.648	20.335	7.911	-12.089	7.911	20.335	0	0.02
	4.256	17.559	5.677	-14.323	5.677	17.559	0	0.02
	4.864	13.038	3.586	-16.414	3.614	12.031	0	0.01
	5.472	7.277	1.732	-18.268	2.165	1.464	0	0.01
7	0	2.806	0.585	-2.184	19.782	0.924	0	0
	0.608	7.249	18.277	-1.723	18.277	7.249	0	0.01
	1.216	13.017	16.425	-3.575	16.425	13.017	0	0.01
	1.824	17.548	14.335	-5.665	14.514	16.639	0	0.02
	2.432	20.338	12.103	-7.897	12.436	19.816	0	0.02
	3.04	21.147	10.219	-9.781	10.219	21.147	0	0.02
	3.648	20.441	7.954	-12.046	7.954	20.441	0	0.02
	4.256	17.732	5.735	-14.265	5.735	17.732	0	0.02
	4.864	13.283	3.654	-16.346	3.654	13.283	0	0.01
	5.472	7.582	1.805	-18.195	2.167	1.457	0	0.01
8	0	3.336	0.696	-2.597	19.785	0.922	0	0
	0.608	7.232	18.306	-1.694	18.306	7.232	0	0.01
	1.216	13.015	16.484	-3.516	16.484	13.015	0	0.01
	1.824	17.598	14.425	-5.575	14.53	16.648	0	0.02
	2.432	20.471	12.218	-7.782	12.471	19.857	0	0.02
	3.04	21.347	9.957	-10.043	10.141	21.011	0	0.02
	3.648	20.16	7.731	-12.269	7.8	20.076	0	0.02
	4.256	17.127	5.531	-14.469	5.631	17.066	0	0.02
	4.864	12.442	3.73	-16.27	3.73	12.442	0	0.01
	5.472	6.832	2.085	-17.915	2.13	1.298	0	0.01
9	0	2.593	2.13	-0.428	19.991	0	-0.065	0
	0.606	6.934	18.729	-1.271	18.915	5.918	0	0.01
	1.212	12.93	17.333	-2.667	17.541	11.921	0	0.01
	1.818	18.245	15.699	-4.301	15.91	17.349	0	0.02
	2.424	22.308	13.865	-6.135	14.055	21.617	0	0.02
	3.03	24.643	11.867	-8.133	12.007	24.22	0	0.03
	3.636	24.86	9.744	-10.256	9.798	24.73	0	0.03
	4.242	22.796	7.461	-12.539	7.533	22.666	0	0.02
	4.848	18.147	5.027	-14.973	5.256	17.869	0	0.02

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5.454	10.587	2.53	-17.47	2.928	10.346	0	0.01
6.06	0	1.597	-19.975	1.597	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	20.032	-1.656	-1.656	0	0	0
	0.488	-0.808	0	-1.656	-2.53	8.525	0	0
	0.976	-1.616	0	-1.656	-5.028	14.612	0	0
	1.464	-2.425	0	-1.656	-7.462	18.355	0	0
	1.952	-3.233	0	-1.656	-9.8	19.911	0	0
	2.44	-4.041	0	-1.656	-12.009	19.499	0	0
	2.928	-4.849	0	-1.656	-14.057	17.402	0	-0.01
	3.416	-5.658	0	-1.656	-15.912	13.964	0	0
	3.904	-6.466	0	-1.656	-17.543	9.594	0	0
	4.392	-7.274	0	-1.656	-18.916	4.761	0	0
2	0	-10.037	2.604	-14.057	-20.007	0	-0.133	0
	0.488	-8.766	2.604	0	-2.234	1.09	0	0
	0.976	-7.496	2.604	0	-3.415	9.994	0	0
	1.464	-6.644	1.734	0	-5.524	13.76	0	-0.01
	1.952	-5.797	1.734	0	-7.79	16.134	0	-0.01
	2.44	-4.989	1.592	0	-10.128	16.892	0	-0.01
	2.928	-5.192	0	-0.98	-12.457	15.973	0	-0.01
	3.416	-5.727	0	-1.117	-14.692	13.479	0	-0.01
	3.904	-6.541	0	-2.234	-16.75	9.673	0	0
	4.392	-7.631	0	-2.234	-18.547	4.984	0	0
3	0	-8.721	12.809	-2.234	-19.987	0	-0.049	0
	0.488	-7.308	2.121	0	-2.997	1.616	0	0
	0.976	-6.273	2.121	0	-3.344	10.043	0	0
	1.464	-5.828	0.77	0	-5.461	13.999	0	-0.01
	1.952	-5.453	0.717	0	-7.745	16.56	0	-0.01
	2.44	-5.613	0	-1.928	-10.108	17.465	0	-0.01
	2.928	-6.58	0	-2.042	-12.464	16.624	0	-0.01
	3.416	-7.577	0	-2.042	-14.726	14.117	0	-0.01
	3.904	-8.62	0	-2.997	-16.807	10.191	0	-0.01
	4.392	-10.083	0	-2.997	-18.621	5.264	0	0
4	0	-11.545	12.659	-2.997	-20.068	0	-0.121	0
	0.608	-6.728	1.607	0	-2.234	1.735	0	0
	1.216	-5.751	1.607	0	-3.435	11.386	0	-0.01
	1.824	-5.054	0.45	0	-5.297	16.431	0	-0.01
	2.432	-4.781	0.45	0	-7.597	19.597	0	-0.01
	3.04	-4.977	0	-1.468	-9.988	20.743	0	-0.01
	3.648	-5.87	0	-1.468	-12.367	19.737	0	-0.01
	4.256	-6.763	0	-1.468	-14.629	16.701	0	-0.01
	4.864	-7.774	0	-2.234	-16.669	12.009	0	-0.01
	5.472	-9.133	0	-2.234	-18.387	6.288	0	0
5	0	-10.491	12.439	-2.234	-19.775	0.935	0	0
	0.608	-9.031	2.157	0	-2.176	1.489	0	0
	1.216	-7.719	2.157	0	-3.602	11.982	0	-0.01
	1.824	-6.787	1.057	0	-5.573	17.252	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

	2.432	-6.144	1.057	0	-7.832	20.152	0	-0.01
	3.04	-5.541	0	-1.126	-10.14	21.01	0	-0.01
	3.648	-6.226	0	-1.126	-12.399	19.775	0	-0.01
	4.256	-6.91	0	-1.126	-14.512	16.638	0	-0.01
	4.864	-7.771	0	-2.176	-16.412	13.021	0	-0.01
	5.472	-9.094	0	-2.176	-18.27	7.258	0	0
6	0	-10.417	12.424	-2.176	-19.78	0.93	0	0
	0.608	-9.064	2.165	0	-2.175	1.473	0	0
	1.216	-7.748	2.165	0	-3.614	12.025	0	-0.01
	1.824	-6.913	1.098	0	-5.664	17.525	0	-0.01
	2.432	-6.246	1.098	0	-7.9	20.317	0	-0.01
	3.04	-5.583	0	-1.106	-10.184	21.089	0	-0.01
	3.648	-6.255	0	-1.106	-12.419	19.8	0	-0.01
	4.256	-6.928	0	-1.106	-14.512	16.641	0	-0.01
	4.864	-7.783	0	-2.175	-16.414	13.038	0	-0.01
	5.472	-9.106	0	-2.175	-18.268	7.277	0	0
7	0	-10.428	12.436	-2.175	-19.776	0.953	0	0
	0.608	-9.086	2.167	0	-2.184	1.478	0	0
	1.216	-7.768	2.167	0	-3.624	12.029	0	-0.01
	1.824	-6.93	1.087	0	-5.665	17.548	0	-0.01
	2.432	-6.269	1.087	0	-7.897	20.338	0	-0.01
	3.04	-5.633	0	-1.132	-10.177	21.111	0	-0.01
	3.648	-6.322	0	-1.132	-12.411	19.826	0	-0.01
	4.256	-7.012	0	-1.224	-14.503	16.669	0	-0.01
	4.864	-7.817	0	-2.184	-16.377	12.058	0	-0.01
	5.472	-9.145	0	-2.184	-18.195	7.582	0	0
8	0	-10.473	12.471	-2.184	-19.707	1.285	0	0
	0.608	-9.062	2.13	0	-2.597	1.758	0	0
	1.216	-7.767	2.13	0	-3.742	12.037	0	-0.01
	1.824	-7.037	0.895	0	-5.575	17.598	0	-0.01
	2.432	-6.493	0.895	0	-7.782	20.471	0	-0.01
	3.04	-6.3	0	-1.511	-10.043	21.347	0	-0.01
	3.648	-7.285	0	-1.651	-12.269	20.16	0	-0.01
	4.256	-8.289	0	-1.651	-14.469	17.127	0	-0.01
	4.864	-9.294	0	-2.597	-16.581	12.442	0	-0.01
	5.472	-10.873	0	-2.597	-18.453	6.504	0	-0.01
9	0	-12.452	14.055	-2.597	-19.986	0	-0.056	0
	0.606	-8.711	1.597	0	-1.271	6.934	0	0
	1.212	-7.743	1.597	0	-2.667	12.93	0	-0.01
	1.818	-6.775	1.597	0	-4.301	18.245	0	-0.01
	2.424	-5.807	1.597	0	-6.135	22.308	0	-0.01
	3.03	-4.84	1.597	0	-8.133	24.643	0	-0.01
	3.636	-3.872	1.597	0	-10.256	24.86	0	-0.01
	4.242	-2.904	1.597	0	-12.539	22.796	0	-0.01
	4.848	-1.936	1.597	0	-14.973	18.147	0	0
	5.454	-0.968	1.597	0	-17.47	10.587	0	0
	6.06	0	1.597	-19.975	-19.975	0	0	0

Support    Reac. Pos    Reac. Negative



1	1.656	-20.057
2	2.681	-20.125
3	3.785	-20
4	3.037	-20.162
5	2.774	-19.627
6	2.759	-19.083
7	2.769	-19.049
8	3.292	-19.036
9	2.558	-20.071
10	1.597	-20

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	32.135	-2.53	32.135	0	0	0
	0.488	13.659	27.99	-4.01	27.99	13.659	0	0.01
	0.976	23.38	23.955	-8.045	23.955	23.38	0	0.01
	1.464	29.368	20.06	-11.94	20.06	29.368	0	0.02
	1.952	31.858	16.321	-15.679	16.321	31.858	0	0.02
	2.44	31.198	12.786	-19.214	12.786	31.198	0	0.02
	2.928	27.843	9.509	-22.491	9.509	27.843	0	0.02
	3.416	22.342	6.541	-25.459	6.541	22.342	0	0.02
	3.904	15.35	3.932	-28.068	3.932	15.35	0	0.01
	4.392	7.618	1.735	-30.265	1.735	7.618	0	0.01
2	0	3.502	0.718	-3.588	32.738	0	-0.813	0
	0.488	8.359	29.527	-2.473	30.076	8.091	0	0
	0.976	15.991	26.87	-5.464	26.87	15.991	0	0.01
	1.464	22.081	23.296	-8.704	23.296	22.081	0	0.01
	1.952	25.814	19.537	-12.463	19.537	25.814	0	0.02
	2.44	27.027	15.794	-16.206	15.794	27.027	0	0.02
	2.928	25.557	12.069	-19.931	12.069	25.557	0	0.02
	3.416	21.566	8.493	-23.507	8.493	21.566	0	0.01
	3.904	15.477	5.201	-26.799	5.434	3.917	0	0.01
	4.392	7.974	2.325	-29.675	5.434	6.569	0	0
3	0	9.221	5.434	-5.903	33.177	0	-1.308	0
	0.488	7.946	29.703	-2.297	30.759	7.376	0	0
	0.976	15.453	26.858	-5.142	27.728	15.408	0	0.01
	1.464	21.866	24.254	-7.746	24.254	21.866	0	0.01
	1.952	26.041	20.483	-11.517	20.483	26.041	0	0.02
	2.44	27.506	16.563	-15.437	16.563	27.506	0	0.02
	2.928	26.126	12.639	-19.361	12.639	26.126	0	0.02
	3.416	22.312	8.969	-23.031	8.969	22.312	0	0.01
	3.904	16.291	5.572	-26.428	5.572	16.291	0	0.01
	4.392	8.534	2.451	-29.549	4.453	5.49	0	0
4	0	7.693	4.307	-4.068	32.92	0	-1.469	0
	0.608	8.577	29.961	-2.039	30.81	8.259	0	0.01
	1.216	17.979	27.918	-4.082	27.956	17.817	0	0.02
	1.824	25.962	24.499	-7.501	24.548	25.805	0	0.02
	2.432	31.258	20.706	-11.294	20.759	31.132	0	0.03
	3.04	33.207	16.714	-15.286	16.762	33.131	0	0.03
	3.648	31.577	12.698	-19.302	12.731	31.555	0	0.03
	4.256	26.59	8.839	-23.161	8.839	26.59	0	0.02
	4.864	19.21	5.258	-26.742	5.289	18.757	0	0.02
	5.472	9.722	2.081	-29.919	2.719	3.457	0	0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5	0	5.557	2.269	-3.215	32.911	0	-1.42	0
	0.608	9.211	30.596	-1.404	30.624	9.044	0	0.01
	1.216	19.067	27.618	-4.382	27.653	18.907	0	0.02
	1.824	27.023	24.145	-7.855	24.18	26.901	0	0.03
	2.432	32.119	20.343	-11.657	20.369	32.057	0	0.03
	3.04	33.801	16.382	-15.618	16.382	33.801	0	0.03
	3.648	31.954	12.384	-19.616	12.422	31.911	0	0.03
	4.256	26.878	8.304	-23.696	8.629	26.69	0	0.03
	4.864	19.178	4.793	-27.207	5.161	18.765	0	0.02
	5.472	9.496	1.746	-30.254	3.348	2.266	0	0.01
6	0	5.939	2.855	-3.006	32.929	0	-1.472	0
	0.608	9.271	30.581	-1.419	30.621	9.103	0	0.01
	1.216	19.145	27.602	-4.398	27.628	19.05	0	0.02
	1.824	27.106	24.131	-7.869	24.132	27.103	0	0.03
	2.432	32.287	20.296	-11.704	20.333	32.199	0	0.03
	3.04	34.014	16.289	-15.711	16.372	33.868	0	0.03
	3.648	32.256	11.758	-20.242	12.411	31.955	0	0.03
	4.256	27.089	7.922	-24.078	8.614	26.701	0	0.03
	4.864	19.158	4.447	-27.553	5.141	18.727	0	0.02
	5.472	9.304	1.459	-30.541	3.482	2.356	0	0.01
7	0	5.957	3.162	-2.717	33.079	0	-1.716	0
	0.608	9.152	30.761	-1.239	30.81	8.946	0	0.01
	1.216	19.135	27.815	-4.185	27.846	19.026	0	0.02
	1.824	27.236	24.362	-7.638	24.362	27.234	0	0.03
	2.432	32.557	20.517	-11.483	20.557	32.462	0	0.03
	3.04	34.358	16.471	-15.529	16.559	34.203	0	0.03
	3.648	32.391	12.389	-19.611	12.526	32.233	0	0.03
	4.256	27.154	7.908	-24.092	8.633	26.76	0	0.03
	4.864	19.261	5.29	-26.71	5.29	19.261	0	0.02
	5.472	9.945	2.365	-29.635	3.581	2.407	0	0.01
8	0	6.301	2.63	-3.589	32.216	0	-1.244	0
	0.608	9.879	29.687	-2.313	29.886	9.034	0	0.01
	1.216	19.204	26.819	-5.181	26.943	18.75	0	0.02
	1.824	26.788	23.53	-8.47	23.536	26.767	0	0.03
	2.432	32.157	19.795	-12.205	19.954	31.771	0	0.03
	3.04	34.252	15.877	-16.123	16.226	33.618	0	0.03
	3.648	32.779	11.938	-20.062	12.479	32.122	0	0.03
	4.256	27.837	8.133	-23.867	8.849	27.403	0	0.03
	4.864	19.907	5.47	-26.53	5.47	19.907	0	0.02
	5.472	10.406	2.475	-29.525	3.54	2.158	0	0.01
9	0	4.311	3.54	-0.711	32.163	0	-1.184	0
	0.606	9.468	30.264	-1.736	30.415	8.647	0	0.01
	1.212	19.074	28.066	-3.934	28.161	18.614	0	0.02
	1.818	27.758	25.456	-6.544	25.463	27.729	0	0.03
	2.424	35.014	22.37	-9.63	22.488	34.587	0	0.04
	3.03	39.537	18.952	-13.048	19.21	38.752	0	0.04
	3.636	40.545	15.274	-16.726	15.677	39.568	0	0.04
	4.242	37.446	11.403	-20.597	11.937	36.474	0	0.04
	4.848	29.804	7.409	-24.591	8.044	29.035	0	0.03

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5.454	17.354	3.363	-28.637	4.048	16.939	0	0.01
6.06	0	2.647	-32.628	2.647	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	32.135	-2.53	-2.53	0	0	0
	0.488	-1.235	0	-2.53	-4.048	13.64	0	0
	0.976	-2.469	0	-2.53	-8.124	23.303	0	0
	1.464	-3.704	0	-2.53	-12.1	29.134	0	-0.01
	1.952	-4.938	0	-2.53	-15.894	31.44	0	-0.01
	2.44	-6.173	0	-2.53	-19.458	30.603	0	-0.01
	2.928	-7.407	0	-2.53	-22.744	27.1	0	-0.01
	3.416	-8.642	0	-2.53	-25.705	21.503	0	-0.01
	3.904	-9.876	0	-2.53	-28.292	14.476	0	-0.01
	4.392	-11.111	0	-2.53	-30.457	6.777	0	0
2	0	-17.297	5.434	-22.744	-32.152	0	-0.744	0
	0.488	-14.645	5.434	0	-3.588	1.751	0	0
	0.976	-11.993	5.434	0	-5.464	15.991	0	-0.01
	1.464	-9.96	4.166	0	-8.838	22.015	0	-0.01
	1.952	-7.927	4.166	0	-12.505	25.774	0	-0.01
	2.44	-5.894	4.166	0	-16.375	26.78	0	-0.01
	2.928	-7.004	0	-3.588	-20.189	25.054	0	-0.01
	3.416	-8.755	0	-3.588	-23.819	20.804	0	-0.01
	3.904	-10.505	0	-3.588	-27.137	14.49	0	-0.01
	4.392	-12.256	0	-3.588	-30.011	6.824	0	0
3	0	-14.435	4.442	-21.164	-32.315	0	-1.231	0
	0.488	-12.267	4.442	0	-5.903	6.34	0	0
	0.976	-10.102	4.436	0	-5.903	3.459	0	-0.01
	1.464	-8.381	3.393	0	-8.406	21.578	0	-0.01
	1.952	-6.725	3.393	0	-11.956	25.634	0	-0.01
	2.44	-7.016	0	-4.967	-15.665	27.185	0	-0.01
	2.928	-9.44	0	-4.967	-19.399	26.053	0	-0.01
	3.416	-11.864	0	-4.967	-23.148	22.031	0	-0.01
	3.904	-14.325	0	-5.254	-26.654	15.642	0	-0.01
	4.392	-16.889	0	-5.254	-29.775	7.585	0	0
4	0	-19.587	21.382	-5.903	-32.422	0	-0.73	0
	0.608	-10.352	2.491	0	-4.1	5.011	0	0
	1.216	-8.838	2.491	0	-4.792	17.479	0	-0.01
	1.824	-7.367	2.358	0	-8.043	25.008	0	-0.01
	2.432	-6.1	1.67	0	-11.65	30.162	0	-0.01
	3.04	-6.136	0	-3.707	-15.468	32.287	0	-0.01
	3.648	-8.389	0	-3.707	-19.353	31.081	0	-0.01
	4.256	-10.643	0	-3.707	-23.166	26.561	0	-0.01
	4.864	-12.897	0	-3.707	-26.774	19.099	0	-0.01
	5.472	-15.22	0	-3.835	-29.97	9.511	0	-0.01
5	0	-17.552	22.707	-3.835	-32.548	0	-1.038	0
	0.608	-14.017	3.348	0	-3.606	2.467	0	-0.01
	1.216	-12.013	2.876	0	-5.074	18.491	0	-0.01
	1.824	-10.312	2.726	0	-8.429	26.154	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

	2.432	-8.88	1.802	0	-12.107	31.242	0	-0.02
	3.04	-8.25	0	-0.752	-15.975	33.178	0	-0.02
	3.648	-9.08	0	-2.031	-19.893	31.702	0	-0.02
	4.256	-10.761	0	-3.471	-23.697	26.875	0	-0.01
	4.864	-12.881	0	-3.606	-27.239	19.066	0	-0.01
	5.472	-15.074	0	-3.606	-30.305	9.284	0	-0.01
6	0	-17.266	20.436	-3.606	-32.702	0	-1.237	0
	0.608	-14.583	3.482	0	-3.662	2.481	0	-0.01
	1.216	-12.465	3.482	0	-5.168	18.828	0	-0.01
	1.824	-10.577	2.68	0	-8.609	26.691	0	-0.01
	2.432	-9.107	1.888	0	-12.382	31.894	0	-0.02
	3.04	-8.438	0	-0.143	-16.327	33.8	0	-0.02
	3.648	-9.211	0	-1.996	-20.281	32.151	0	-0.02
	4.256	-10.956	0	-3.521	-24.083	27.088	0	-0.01
	4.864	-13.107	0	-3.662	-27.59	19.036	0	-0.01
	5.472	-15.333	0	-3.662	-30.599	9.066	0	-0.01
7	0	-17.56	20.751	-3.662	-32.927	0	-1.558	0
	0.608	-15.01	3.581	0	-3.495	2.365	0	-0.01
	1.216	-12.833	3.581	0	-5.144	18.765	0	-0.01
	1.824	-10.742	3.428	0	-8.599	26.697	0	-0.01
	2.432	-9.236	1.886	0	-12.382	31.94	0	-0.02
	3.04	-8.543	0.581	0	-16.334	33.866	0	-0.02
	3.648	-9.265	0	-1.953	-20.291	32.221	0	-0.02
	4.256	-10.716	0	-2.871	-24.092	27.154	0	-0.01
	4.864	-12.507	0	-3.495	-27.566	19.206	0	-0.01
	5.472	-14.632	0	-3.495	-30.557	9.325	0	-0.01
8	0	-17.214	3.54	-21.92	-32.877	0	-1.245	0
	0.608	-15.062	3.54	0	-4.155	2.812	0	-0.01
	1.216	-12.909	3.54	0	-5.181	19.204	0	-0.01
	1.824	-10.937	2.338	0	-8.47	26.788	0	-0.02
	2.432	-10.058	1.081	0	-12.205	32.157	0	-0.02
	3.04	-10.058	0	-1.525	-16.123	34.252	0	-0.02
	3.648	-11.163	0	-2.726	-20.062	32.779	0	-0.02
	4.256	-12.836	0	-2.769	-23.867	27.837	0	-0.02
	4.864	-14.887	0	-3.544	-27.378	19.905	0	-0.01
	5.472	-17.396	0	-4.155	-30.438	9.849	0	-0.01
9	0	-19.922	22.488	-4.155	-32.867	0	-1.173	0
	0.606	-14.437	2.647	0	-1.736	9.468	0	-0.01
	1.212	-12.833	2.647	0	-3.934	19.074	0	-0.01
	1.818	-11.229	2.647	0	-6.544	27.758	0	-0.01
	2.424	-9.625	2.647	0	-9.63	35.014	0	-0.02
	3.03	-8.021	2.647	0	-13.048	39.537	0	-0.02
	3.636	-6.417	2.647	0	-16.726	40.545	0	-0.01
	4.242	-4.812	2.647	0	-20.597	37.446	0	-0.01
	4.848	-3.208	2.647	0	-24.591	29.804	0	-0.01
	5.454	-1.604	2.647	0	-28.637	17.354	0	0
	6.06	0	2.647	-32.628	-32.628	0	0	0

Support    Reac. Pos    Reac. Negative

1	2.53	-32.177
2	4.306	-33.27
3	11.337	-33.517
4	8.401	-33.742
5	5.484	-33.319
6	5.861	-33.357
7	5.879	-33.6
8	6.218	-33.133
9	4.252	-33.096
10	2.647	-32.668

Id HS20 Lane Load  
Type Lane Load

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	27.367	-2.225	27.367	0	0	0
	0.488	8.28	16.81	-1.19	23.818	11.623	0	0
	0.976	14.212	14.25	-3.75	20.317	19.829	0	0.01
	1.464	17.883	11.747	-6.253	16.938	24.798	0	0.01
	1.952	19.433	9.331	-8.669	13.722	26.786	0	0.01
	2.44	19.06	7.031	-10.969	10.709	26.13	0	0.01
	2.928	17.018	4.875	-13.125	7.938	23.241	0	0.01
	3.416	13.616	2.893	-15.107	5.448	18.609	0	0.01
	3.904	9.226	1.29	-16.71	3.277	12.794	0	0.01
	4.392	4.574	0.746	-17.254	1.465	6.433	0	0
2	0	2.13	0.436	-2.182	27.944	0	-1.697	0
	0.488	4.922	16.876	-1.124	25.604	5.742	-1.05	0
	0.976	9.452	15.839	-2.161	22.9	12.543	-0.45	0.01
	1.464	13.265	13.741	-4.259	19.916	17.844	-0.044	0.01
	1.952	15.673	11.39	-6.61	16.762	21.177	0	0.01
	2.44	16.475	8.973	-9.027	13.549	22.293	0	0.01
	2.928	15.615	6.565	-11.435	10.386	21.155	0	0.01
	3.416	13.185	4.241	-13.759	7.38	17.937	0	0.01
	3.904	9.437	2.392	-15.608	4.639	13.024	0	0.01
	4.392	5.065	1.164	-16.836	3.762	2.345	0	0
3	0	3.416	1.07	-3.13	28.244	0	-1.141	0
	0.488	5.005	16.764	-1.236	25.726	5.522	-0.934	0
	0.976	9.333	15.563	-2.437	23.137	12.215	-0.341	0.01
	1.464	13.161	13.953	-4.047	20.24	17.59	0	0.01
	1.952	15.698	11.643	-6.357	17.141	21.121	0	0.01
	2.44	16.675	9.245	-8.755	13.951	22.495	0	0.01
	2.928	15.99	6.832	-11.168	10.775	21.608	0	0.01
	3.416	13.685	4.477	-13.523	7.72	18.565	0	0.01
	3.904	9.945	2.258	-15.742	4.888	13.676	0	0.01
	4.392	5.379	1.236	-16.764	3.079	1.745	0	0
4	0	3.356	1.027	-2.323	28.51	0	-1.77	0
	0.608	5.65	16.782	-1.218	26.073	6.322	-1.101	0
	1.216	10.947	15.923	-2.077	23.451	14.473	-0.257	0.01
	1.824	15.723	14.2	-3.8	20.477	21.112	0	0.02
	2.432	18.947	11.781	-6.219	17.278	25.49	0	0.02
	3.04	20.198	9.262	-8.738	13.979	27.167	0	0.02
	3.648	19.333	6.727	-11.273	10.703	26.007	0	0.02
	4.256	16.418	4.261	-13.739	7.573	22.171	0	0.02
	4.864	11.738	2.203	-15.797	4.707	16.112	0	0.01
	5.472	6.167	0.974	-17.026	2.256	1.838	0	0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5	0	3.08	0.775	-2.265	28.512	0	-2.132	0
	0.608	6.054	16.993	-1.007	26.008	6.597	-1.409	0.01
	1.216	11.578	15.832	-2.168	23.3	15.016	-0.529	0.01
	1.824	16.38	13.981	-4.019	20.284	21.688	0	0.02
	2.432	19.486	11.555	-6.445	17.08	25.962	0	0.02
	3.04	20.577	9.049	-8.951	13.804	27.479	0	0.02
	3.648	19.551	6.541	-11.459	10.572	26.163	0	0.02
	4.256	16.503	4.112	-13.888	7.498	22.216	0	0.02
	4.864	11.742	2.203	-15.797	4.695	16.116	0	0.01
	5.472	6.213	1.035	-16.965	3.087	2.405	0	0.01
6	0	3.198	0.861	-2.294	28.612	0	-2.018	0
	0.608	6.199	16.954	-1.046	25.999	6.619	-1.429	0.01
	1.216	11.72	15.789	-2.211	23.285	15.054	-0.55	0.01
	1.824	16.504	13.934	-4.066	20.266	21.726	0	0.02
	2.432	19.583	11.508	-6.492	17.061	25.991	0	0.02
	3.04	20.643	9.002	-8.998	13.787	27.494	0	0.02
	3.648	19.586	6.497	-11.503	10.559	26.163	0	0.02
	4.256	16.51	4.071	-13.929	7.489	22.206	0	0.02
	4.864	11.726	2.199	-15.801	4.69	16.1	0	0.01
	5.472	6.195	1.034	-16.966	3.149	2.428	0	0.01
7	0	3.216	0.87	-2.304	28.64	0	-2.092	0
	0.608	6.195	16.973	-1.027	26.026	6.577	-1.472	0.01
	1.216	11.729	15.807	-2.193	23.314	15.03	-0.578	0.01
	1.824	16.526	13.954	-4.046	20.298	21.721	0	0.02
	2.432	19.619	11.53	-6.47	17.095	26.008	0	0.02
	3.04	20.694	9.026	-8.974	13.823	27.534	0	0.02
	3.648	19.654	6.521	-11.479	10.595	26.227	0	0.02
	4.256	16.591	4.095	-13.905	7.525	22.29	0	0.02
	4.864	11.816	2.232	-15.768	4.724	16.198	0	0.01
	5.472	6.289	1.063	-16.937	3.174	2.49	0	0.01
8	0	3.781	0.993	-2.738	28.589	0	-1.909	0
	0.608	6.228	16.935	-1.065	25.983	6.604	-1.423	0.01
	1.216	11.737	15.808	-2.192	23.309	15.029	-0.575	0.01
	1.824	16.535	13.959	-4.041	20.33	21.737	-0.029	0.02
	2.432	19.659	11.558	-6.442	17.16	26.081	0	0.02
	3.04	20.783	9.072	-8.928	13.911	27.687	0	0.02
	3.648	19.79	6.576	-11.424	10.693	26.456	0	0.02
	4.256	16.747	4.145	-13.855	7.614	22.551	0	0.02
	4.864	11.906	1.941	-16.059	4.781	16.4	0	0.01
	5.472	6.181	1.037	-16.963	3.034	1.901	0	0.01
9	0	2.648	2.175	-0.437	28.667	0	-2.572	0
	0.606	5.749	17.312	-0.688	26.617	6.156	-1.537	0.01
	1.212	11.624	16.936	-1.064	24.477	14.907	-0.591	0.01
	1.818	17.215	15.299	-2.701	22.032	22.591	0	0.02
	2.424	21.533	13.241	-4.759	19.329	28.487	0	0.02
	3.03	24.117	11.01	-6.99	16.413	31.986	0	0.03
	3.636	24.582	8.635	-9.365	13.33	32.592	0	0.03
	4.242	22.613	6.143	-11.857	10.124	29.919	0	0.02
	4.848	17.965	3.565	-14.435	6.84	23.692	0	0.02



## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5.454	10.462	0.93	-17.07	3.52	13.741	-0.022	0.01
6.06	0	2.265	-27.702	2.265	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	27.367	-2.225	-2.225	0	0	0
	0.488	-0.846	0	-1.734	-3.483	11.065	-0.018	0
	0.976	-1.693	0	-1.735	-6.789	19.054	0	0
	1.464	-2.539	0	-1.735	-10.051	24.035	0	0
	1.952	-3.386	0	-1.735	-13.225	26.157	0	0
	2.44	-4.233	0	-1.735	-16.267	25.654	0	0
	2.928	-5.079	0	-1.735	-19.133	22.85	0	0
	3.416	-5.926	0	-1.735	-21.779	18.152	-0.001	0
	3.904	-6.776	0	-1.911	-24.16	12.059	-0.413	0
	4.392	-10.913	0	-11.595	-26.231	5.159	-1.031	0
2	0	-17.833	15.244	-16.013	-28.17	0	-1.703	0
	0.488	-11.193	10.229	0	-3.058	1.526	0	0
	0.976	-7.508	0.664	0	-4.727	13.138	0	0
	1.464	-7.3	0.426	0	-7.539	18.063	0	0
	1.952	-7.092	0.426	0	-10.588	21.187	0	-0.01
	2.44	-6.884	0.426	0	-13.768	22.174	0	0
	2.928	-6.677	0.426	0	-16.972	20.904	0	0
	3.416	-6.469	0.426	0	-20.089	17.463	-0.059	0
	3.904	-6.943	0	-2.421	-23.01	12.156	-0.419	0
	4.392	-10.257	0	-12.05	-25.623	5.506	-0.973	0
3	0	-16.842	15.074	-14.965	-28.253	0	-1.138	0
	0.488	-10.207	12.167	0	-4.329	2.567	0	0
	0.976	-6.319	3.69	0	-4.681	12.918	0	0
	1.464	-6.562	0	-0.945	-7.398	17.817	0	0
	1.952	-7.023	0	-0.945	-10.383	21.045	0	0
	2.44	-7.485	0	-0.945	-13.53	22.208	0	-0.01
	2.928	-7.946	0	-0.945	-16.736	21.118	-0.051	-0.01
	3.416	-8.408	0	-0.945	-19.894	17.792	-0.337	-0.01
	3.904	-9.364	0	-3.049	-22.896	12.456	-0.781	0
	4.392	-12.477	0	-10.58	-25.633	5.549	-1.418	0
4	0	-19.223	14.924	-15.579	-28.308	0	-1.736	0
	0.608	-10.994	12.075	0	-3.222	2.684	0	0
	1.216	-6.003	1.893	0	-4.426	15.125	0	0
	1.824	-5.606	0	-0.733	-7.171	21.233	0	-0.01
	2.432	-6.052	0	-0.733	-10.225	25.348	0	-0.01
	3.04	-6.498	0	-0.733	-13.47	26.908	0	-0.01
	3.648	-6.944	0	-0.733	-16.783	25.644	0	-0.01
	4.256	-7.39	0	-0.733	-20.043	21.578	-0.024	-0.01
	4.864	-8.446	0	-2.522	-23.125	15.037	-0.58	-0.01
	5.472	-12.733	0	-12.024	-25.902	6.655	-1.433	0
5	0	-21.056	15.307	-15.186	-28.554	0	-2.13	0
	0.608	-12.669	12.17	0	-3.141	2.35	0	0
	1.216	-8.085	2.386	0	-4.652	15.938	0	-0.01
	1.824	-7.587	0	-0.065	-7.447	22.055	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

	2.432	-7.627	0	-0.065	-10.515	26.036	0	-0.01
	3.04	-7.666	0	-0.065	-13.744	27.395	0	-0.01
	3.648	-7.706	0	-0.065	-17.021	25.922	0	-0.01
	4.256	-7.746	0	-0.066	-20.23	21.684	-0.011	-0.01
	4.864	-8.444	0	-2.462	-23.254	15.033	-0.577	-0.01
	5.472	-12.828	0	-12.171	-25.973	6.611	-1.443	0
6	0	-21.21	15.336	-15.309	-28.606	0	-2.02	0
	0.608	-12.812	12.2	0	-3.17	2.444	0	0
	1.216	-8.257	2.434	0	-4.7	16.092	0	-0.01
	1.824	-7.75	0	-0.019	-7.497	22.191	0	-0.01
	2.432	-7.762	0	-0.019	-10.566	26.144	0	-0.01
	3.04	-7.773	0	-0.019	-13.795	27.47	0	-0.01
	3.648	-7.784	0	-0.019	-17.069	25.963	0	-0.01
	4.256	-7.795	0	-0.02	-20.274	21.694	-0.01	-0.01
	4.864	-8.565	0	-2.518	-23.294	15.016	-0.596	-0.01
	5.472	-12.879	0	-12.214	-26.01	6.572	-1.482	0
7	0	-21.285	15.368	-15.351	-28.622	0	-2.095	0
	0.608	-12.869	12.233	0	-3.191	2.463	0	0
	1.216	-8.426	2.496	0	-4.678	16.101	0	-0.01
	1.824	-7.789	0	-0.018	-7.474	22.216	0	-0.01
	2.432	-7.8	0	-0.018	-10.54	26.186	0	-0.01
	3.04	-7.811	0	-0.018	-13.766	27.532	0	-0.01
	3.648	-7.822	0	-0.018	-17.039	26.044	0	-0.01
	4.256	-7.833	0	-0.019	-20.245	21.792	0	-0.01
	4.864	-8.054	0	-3.683	-23.266	15.126	-0.524	-0.01
	5.472	-12.874	0	-12.215	-25.985	6.682	-1.398	0
8	0	-21.276	15.359	-15.351	-28.667	0	-1.911	0
	0.608	-12.875	12.24	0	-3.79	2.876	0	0
	1.216	-8.431	2.374	0	-4.669	16.108	0	-0.01
	1.824	-8.046	0	-0.49	-7.424	22.25	0	-0.01
	2.432	-8.343	0	-0.49	-10.454	26.292	0	-0.01
	3.04	-8.641	0	-0.49	-13.652	27.739	0	-0.01
	3.648	-8.939	0	-0.49	-16.911	26.355	0	-0.01
	4.256	-9.236	0	-0.49	-20.12	22.171	-0.094	-0.01
	4.864	-9.539	0	-3.174	-23.168	15.484	-0.69	-0.01
	5.472	-14.2	0	-10.423	-25.942	6.868	-1.587	0
9	0	-22.665	16.475	-15.642	-28.366	0	-2.563	0
	0.606	-13.839	11.916	0	-1.476	8.048	0	0
	1.212	-8.41	1.832	0	-3.296	15.977	0	-0.01
	1.818	-7.355	1.734	0	-5.479	23.241	0	-0.01
	2.424	-6.304	1.734	0	-7.988	29.044	0	-0.01
	3.03	-5.253	1.734	0	-10.785	32.68	0	-0.01
	3.636	-4.203	1.734	0	-13.833	33.531	0	-0.01
	4.242	-3.152	1.734	0	-17.091	31.072	0	-0.01
	4.848	-2.101	1.734	0	-20.521	24.872	0	0
	5.454	-1.05	1.733	0	-24.083	14.594	0	0
	6.06	0	2.265	-27.702	-27.702	0	0	0

Support    Reac. Pos    Reac. Negative

1	2.225	-27.4
2	3.655	-29.957
3	5.701	-29.708
4	4.555	-30.344
5	4.14	-30.536
6	4.249	-30.556
7	4.281	-30.615
8	5.048	-30.521
9	3.626	-30.826
10	2.265	-27.702

Id HS15  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	24.002	-1.897	24.002	0	0	0
	0.488	10.234	20.971	-3.029	20.971	10.234	0	0.01
	0.976	17.535	17.966	-6.034	17.966	17.535	0	0.01
	1.464	22.026	15.045	-8.955	15.045	22.026	0	0.01
	1.952	23.893	12.24	-11.76	12.24	23.893	0	0.02
	2.44	23.399	9.59	-14.41	9.59	23.399	0	0.02
	2.928	20.883	7.132	-16.868	7.132	20.883	0	0.02
	3.416	16.763	4.907	-19.093	4.907	16.763	0	0.01
	3.904	11.523	2.952	-21.048	2.952	11.523	0	0.01
	4.392	5.728	1.304	-22.696	1.304	5.728	0	0
2	0	2.554	0.523	-2.617	24.126	0	-0.193	0
	0.488	6.278	22.127	-1.873	22.248	6.219	0	0
	0.976	11.993	19.965	-4.115	19.965	11.993	0	0.01
	1.464	16.524	17.396	-6.604	17.396	16.524	0	0.01
	1.952	19.36	14.652	-9.348	14.652	19.36	0	0.01
	2.44	20.27	11.846	-12.154	11.846	20.27	0	0.01
	2.928	19.168	9.052	-14.948	9.052	19.168	0	0.01
	3.416	16.174	6.37	-17.63	6.37	16.174	0	0.01
	3.904	11.608	3.9	-20.1	3.9	11.608	0	0.01
	4.392	5.985	1.745	-22.255	3.36	2.482	0	0
3	0	4.465	1.72	-3.77	24.208	0	-0.288	0
	0.488	5.968	22.262	-1.738	22.474	5.853	0	0
	0.976	11.59	20.125	-3.875	20.306	11.581	0	0.01
	1.464	16.238	17.819	-6.181	17.819	16.238	0	0.01
	1.952	19.302	15.115	-8.885	15.115	19.302	0	0.01
	2.44	20.449	12.294	-11.706	12.294	20.449	0	0.01
	2.928	19.553	9.458	-14.542	9.458	19.553	0	0.01
	3.416	16.734	6.727	-17.273	6.727	16.734	0	0.01
	3.904	12.218	4.179	-19.821	4.179	12.218	0	0.01
	4.392	6.431	1.904	-22.096	2.739	1.813	0	0
4	0	4.135	1.457	-2.739	24.159	0	-0.32	0
	0.608	6.854	22.368	-1.632	22.549	6.714	0	0.01
	1.216	13.598	20.261	-3.739	20.436	13.569	0	0.01
	1.824	19.286	17.95	-6.05	17.95	19.286	0	0.02
	2.432	23.109	15.21	-8.79	15.21	23.109	0	0.02
	3.04	24.568	12.332	-11.668	12.332	24.568	0	0.02
	3.648	23.478	9.433	-14.567	9.433	23.478	0	0.02
	4.256	19.941	6.632	-17.368	6.632	19.941	0	0.02
	4.864	14.416	4.067	-19.933	4.067	14.416	0	0.01
	5.472	7.466	1.818	-22.182	1.888	1.416	0	0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5	0	3.383	0.721	-2.618	24.153	0	-0.291	0
	0.608	7.39	22.242	-1.758	22.416	7.271	0	0.01
	1.216	14.35	20.06	-3.94	20.221	14.338	0	0.01
	1.824	20.047	17.694	-6.306	17.694	20.047	0	0.02
	2.432	23.734	14.946	-9.054	14.946	23.734	0	0.02
	3.04	25	12.086	-11.914	12.086	25	0	0.02
	3.648	23.717	9.225	-14.775	9.225	23.717	0	0.02
	4.256	20.059	6.413	-17.587	6.474	20.026	0	0.02
	4.864	14.409	3.965	-20.035	3.965	14.409	0	0.01
	5.472	7.434	1.771	-22.229	2.581	1.943	0	0.01
6	0	3.514	2.579	-0.888	24.154	0	-0.291	0
	0.608	7.429	22.233	-1.767	22.409	7.31	0	0.01
	1.216	14.404	20.045	-3.955	20.209	14.393	0	0.01
	1.824	20.104	17.68	-6.32	17.68	20.104	0	0.02
	2.432	23.783	14.93	-9.07	14.93	23.783	0	0.02
	3.04	25.037	12.071	-11.929	12.071	25.037	0	0.02
	3.648	23.777	9.082	-14.918	9.215	23.736	0	0.02
	4.256	20.105	6.333	-17.667	6.47	20.031	0	0.02
	4.864	14.412	3.967	-20.033	3.967	14.412	0	0.01
	5.472	7.441	1.779	-22.221	2.586	1.749	0	0.01
7	0	3.482	0.792	-2.645	24.177	0	-0.309	0
	0.608	7.442	22.232	-1.768	22.441	7.3	0	0.01
	1.216	14.415	20.046	-3.954	20.25	14.401	0	0.01
	1.824	20.136	17.727	-6.273	17.727	20.136	0	0.02
	2.432	23.839	14.98	-9.02	14.98	23.839	0	0.02
	3.04	25.109	12.118	-11.882	12.118	25.109	0	0.02
	3.648	23.812	9.088	-14.912	9.249	23.806	0	0.02
	4.256	20.144	6.339	-17.661	6.483	20.065	0	0.02
	4.864	14.446	3.977	-20.023	3.977	14.446	0	0.01
	5.472	7.465	1.783	-22.217	2.607	1.752	0	0.01
8	0	4.225	1.004	-3.165	24.029	0	-0.287	0
	0.608	7.412	22.265	-1.735	22.302	7.253	0	0.01
	1.216	14.403	20.114	-3.886	20.137	14.32	0	0.01
	1.824	20.091	17.647	-6.353	17.651	20.08	0	0.02
	2.432	23.9	14.936	-9.064	14.972	23.813	0	0.02
	3.04	25.332	12.104	-11.896	12.177	25.198	0	0.02
	3.648	24.215	9.258	-14.742	9.369	24.08	0	0.02
	4.256	20.633	6.503	-17.497	6.646	20.547	0	0.02
	4.864	14.93	4.109	-19.891	4.109	14.93	0	0.01
	5.472	7.806	1.859	-22.141	2.562	1.562	0	0.01
9	0	3.12	2.562	-0.515	24.022	0	-0.278	0
	0.606	7.101	22.698	-1.302	22.726	6.95	0	0.01
	1.212	14.305	21.049	-2.951	21.066	14.222	0	0.02
	1.818	20.819	19.092	-4.908	19.099	20.789	0	0.02
	2.424	26.021	16.844	-7.156	16.874	25.91	0	0.03
	3.03	29.211	14.359	-9.641	14.417	29.036	0	0.03
	3.636	29.859	11.682	-12.318	11.767	29.653	0	0.03
	4.242	27.537	8.853	-15.147	8.961	27.34	0	0.03
	4.848	21.919	5.915	-18.085	6.039	21.769	0	0.02

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

5.454	12.781	2.909	-21.091	3.038	12.703	0	0.01
6.06	0	1.922	-24.093	1.922	0	0	0

## Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	24.002	-1.897	-1.897	0	0	0
	0.488	-0.926	0	-1.897	-3.047	10.225	0	0
	0.976	-1.852	0	-1.897	-6.048	17.521	0	0
	1.464	-2.777	0	-1.897	-8.984	21.984	0	0
	1.952	-3.703	0	-1.897	-11.799	23.816	0	-0.01
	2.44	-4.629	0	-1.897	-14.455	23.289	0	-0.01
	2.928	-5.555	0	-1.897	-16.915	20.744	0	-0.01
	3.416	-6.481	0	-1.897	-19.14	16.601	0	-0.01
	3.904	-7.407	0	-1.897	-21.093	11.35	0	0
	4.392	-8.332	0	-1.897	-22.735	5.556	0	0
2	0	-12.274	3.36	-16.915	-24.017	0	-0.202	0
	0.488	-10.634	3.36	0	-2.617	1.277	0	0
	0.976	-9.013	3.131	0	-4.115	11.993	0	0
	1.464	-7.485	3.131	0	-6.644	16.504	0	-0.01
	1.952	-5.957	3.131	0	-9.36	19.348	0	-0.01
	2.44	-4.429	3.131	0	-12.185	20.225	0	-0.01
	2.928	-5.109	0	-2.617	-14.996	19.075	0	0
	3.416	-6.386	0	-2.617	-17.688	16.034	0	0
	3.904	-7.663	0	-2.617	-20.162	11.425	0	0
	4.392	-8.941	0	-2.617	-22.319	5.767	0	0
3	0	-10.218	15.84	-2.617	-24.059	0	-0.229	0
	0.488	-8.881	2.739	0	-3.77	2.625	0	0
	0.976	-7.544	2.739	0	-3.875	11.59	0	0
	1.464	-6.286	2.545	0	-6.323	16.176	0	0
	1.952	-5.044	2.545	0	-8.986	19.209	0	-0.01
	2.44	-5.093	0	-3.605	-11.765	20.365	0	-0.01
	2.928	-6.852	0	-3.605	-14.564	19.512	0	-0.01
	3.416	-8.612	0	-3.605	-17.294	16.684	0	-0.01
	3.904	-10.371	0	-3.605	-19.862	12.1	0	-0.01
	4.392	-12.13	0	-3.605	-22.151	6.247	0	0
4	0	-13.931	15.785	-3.77	-24.053	0	-0.125	0
	0.608	-7.769	1.888	0	-2.739	2.47	0	0
	1.216	-6.626	1.85	0	-3.739	13.598	0	-0.01
	1.824	-5.501	1.85	0	-6.204	19.218	0	-0.01
	2.432	-4.388	1.828	0	-8.913	22.981	0	-0.01
	3.04	-4.45	0	-2.688	-11.753	24.427	0	-0.01
	3.648	-6.084	0	-2.688	-14.614	23.371	0	-0.01
	4.256	-7.719	0	-2.688	-17.382	19.902	0	-0.01
	4.864	-9.353	0	-2.688	-19.975	14.377	0	-0.01
	5.472	-10.987	0	-2.688	-22.253	7.395	0	0
5	0	-12.622	15.02	-2.688	-24.082	0	-0.207	0
	0.608	-10.611	2.581	0	-2.618	1.791	0	0
	1.216	-9.042	2.581	0	-3.94	14.35	0	-0.01
	1.824	-7.555	2.409	0	-6.443	19.974	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 5 Interior Strin

	2.432	-6.091	2.409	0	-9.158	23.615	0	-0.01
	3.04	-4.709	0	-2.479	-11.981	24.883	0	-0.01
	3.648	-6.217	0	-2.479	-14.834	23.678	0	-0.01
	4.256	-7.76	0	-2.618	-17.587	20.059	0	-0.01
	4.864	-9.352	0	-2.618	-20.128	14.403	0	-0.01
	5.472	-10.943	0	-2.618	-22.344	7.356	0	0
6	0	-12.535	15.005	-2.618	-24.109	0	-0.232	0
	0.608	-10.827	2.586	0	-2.633	1.803	0	0
	1.216	-9.255	2.586	0	-3.955	14.404	0	-0.01
	1.824	-7.721	2.464	0	-6.46	20.028	0	-0.01
	2.432	-6.224	2.459	0	-9.204	23.727	0	-0.01
	3.04	-4.738	0	-2.468	-12.06	25.025	0	-0.01
	3.648	-6.238	0	-2.468	-14.918	23.777	0	-0.01
	4.256	-7.802	0	-2.633	-17.667	20.105	0	-0.01
	4.864	-9.403	0	-2.633	-20.198	14.4	0	-0.01
	5.472	-11.004	0	-2.633	-22.401	7.32	0	0
7	0	-12.605	15.119	-2.633	-24.149	0	-0.284	0
	0.608	-10.926	2.607	0	-2.645	1.874	0	0
	1.216	-9.341	2.607	0	-3.954	14.415	0	-0.01
	1.824	-7.757	2.607	0	-6.455	20.038	0	-0.01
	2.432	-6.242	2.454	0	-9.198	23.746	0	-0.01
	3.04	-4.803	0	-2.503	-12.054	25.054	0	-0.01
	3.648	-6.325	0	-2.503	-14.912	23.812	0	-0.01
	4.256	-7.849	0	-2.508	-17.661	20.144	0	-0.01
	4.864	-9.389	0	-2.644	-20.193	14.435	0	-0.01
	5.472	-10.996	0	-2.644	-22.398	7.343	0	0
8	0	-12.604	15.727	-2.644	-24.152	0	-0.286	0
	0.608	-10.902	2.562	0	-3.165	2.3	0	0
	1.216	-9.344	2.562	0	-3.886	14.403	0	-0.01
	1.824	-7.796	2.342	0	-6.353	20.091	0	-0.01
	2.432	-6.377	2.328	0	-9.064	23.9	0	-0.01
	3.04	-5.781	0	-2.801	-11.896	25.332	0	-0.01
	3.648	-7.508	0	-3.004	-14.742	24.215	0	-0.01
	4.256	-9.335	0	-3.004	-17.497	20.633	0	-0.01
	4.864	-11.171	0	-3.165	-20.056	14.93	0	-0.01
	5.472	-13.095	0	-3.165	-22.313	7.701	0	-0.01
9	0	-15.019	16.023	-3.165	-24.148	0	-0.268	0
	0.606	-10.48	1.922	0	-1.302	7.101	0	0
	1.212	-9.316	1.922	0	-2.951	14.305	0	-0.01
	1.818	-8.151	1.922	0	-4.908	20.819	0	-0.01
	2.424	-6.987	1.922	0	-7.156	26.021	0	-0.01
	3.03	-5.822	1.922	0	-9.641	29.211	0	-0.01
	3.636	-4.658	1.922	0	-12.318	29.859	0	-0.01
	4.242	-3.493	1.922	0	-15.147	27.537	0	-0.01
	4.848	-2.329	1.922	0	-18.085	21.919	0	-0.01
	5.454	-1.164	1.922	0	-21.091	12.781	0	0
	6.06	0	1.922	-24.093	-24.093	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.897	-24.033
2	3.141	-24.305
3	5.489	-24.282
4	4.197	-24.377
5	3.339	-24.215
6	3.467	-24.215
7	3.436	-24.233
8	4.169	-24.211
9	3.077	-24.251
10	1.922	-24.124



Id Ohio 5C1  
 Type Truck

Factors: Moment 1  
 Shear 1  
 Deflection 1

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.47	-1.497	21.47	0	0	0
	0.619	11.029	17.818	0	17.818	11.029	0	0.01
	1.238	17.769	14.353	-2.647	14.353	17.769	0	0.02
	1.857	20.749	11.173	-5.827	11.173	20.749	0	0.02
	2.476	22.088	8.921	-8.079	8.921	22.088	0	0.02
	3.095	21.793	7.041	-9.959	7.041	21.793	0	0.03
	3.714	19.593	5.275	-11.725	5.275	19.593	0	0.02
	4.333	16.486	2.498	-14.502	2.621	11.355	0	0.02
	4.952	10.845	0	-18.078	1.565	7.75	0	0.01
	5.571	3.729	0.669	-11.331	0.669	3.729	0	0.01
2	0	2.485	0.401	-2.007	22.752	0	-6.26	0
	0.619	3.977	11.071	-0.929	19.567	3.575	0	0.01
	1.238	10.852	16.251	-0.893	16.524	2.695	0	0.01
	1.857	15.261	12.988	-4.012	14.758	8.476	0	0.01
	2.476	16.834	9.926	-7.074	12.584	13.275	0	0.02
	3.095	16.421	10.049	-6.951	10.049	16.421	0	0.02
	3.714	17.352	7.196	-9.804	7.196	17.352	0	0.02
	4.333	15.623	4.075	-12.925	4.075	15.623	0	0.01
	4.952	10.978	0.786	-16.214	2.551	0.252	0	0.01
	5.571	3.875	0.891	-11.109	2.551	1.831	0	0.01
3	0	3.412	2.55	-0.757	22.851	0	-6.719	0
	0.619	4.834	10.87	-1.13	19.699	3.035	0	0.01
	1.238	11.334	15.976	-1.024	16.393	10.355	0	0.01
	1.857	15.865	12.702	-4.298	14.568	9.062	0	0.02
	2.476	17.505	9.635	-7.365	12.494	13.509	0	0.02
	3.095	16.585	6.871	-10.129	10.049	16.441	0	0.02
	3.714	17.29	7.269	-9.731	7.269	17.29	0	0.02
	4.333	15.582	4.195	-12.805	4.195	15.582	0	0.01
	4.952	11.01	0.926	-16.074	2.082	7.723	0	0.01
	5.571	3.786	0.883	-11.117	2.043	1.407	0	0.01
4	0	2.672	2.043	-0.547	22.952	0	-6.874	0
	0.619	3.786	11.117	-0.883	19.802	2.932	0	0.01
	1.238	11.01	16.074	-0.926	16.485	10.314	0	0.01
	1.857	15.582	12.805	-4.195	14.598	9.128	0	0.01
	2.476	17.29	9.731	-7.269	12.551	13.599	0	0.02
	3.095	16.585	10.129	-6.871	10.129	16.585	0	0.02
	3.714	17.505	7.365	-9.635	7.365	17.505	0	0.02
	4.333	15.865	4.298	-12.702	4.298	15.865	0	0.02
	4.952	11.334	1.024	-15.976	2.36	8.727	0	0.01
	5.571	4.834	1.13	-10.87	2.066	1.413	0	0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

5	0	3.412	0.757	-2.55	22.7	0	-6.546	0
	0.619	3.875	11.109	-0.891	19.625	3.051	0	0.01
	1.238	10.978	16.214	-0.786	16.392	10.318	0	0.01
	1.857	15.623	12.925	-4.075	14.376	8.691	0	0.01
	2.476	17.352	9.804	-7.196	12.281	13.03	0	0.02
	3.095	16.421	6.951	-10.049	9.84	15.927	0	0.02
	3.714	16.834	7.074	-9.926	7.083	16.824	0	0.02
	4.333	15.261	4.012	-12.988	4.084	15.217	0	0.01
	4.952	10.852	0.893	-16.251	2.053	7.606	0	0.01
	5.571	3.977	0.929	-11.071	2.007	1.242	0	0.01
6	0	2.485	2.007	-0.401	24.397	0	-8.766	0
	0.619	3.729	11.331	-0.669	21.477	1.765	0	0.01
	1.238	10.845	18.078	0	18.214	10.17	0	0.01
	1.857	16.486	14.502	-2.498	14.924	8.996	0	0.02
	2.476	19.593	11.725	-5.275	13.202	14.107	0	0.02
	3.095	21.793	9.959	-7.041	11.117	18.209	0	0.03
	3.714	22.088	8.079	-8.921	8.666	20.634	0	0.02
	4.333	20.749	5.827	-11.173	6.352	19.773	0	0.02
	4.952	17.769	2.647	-14.353	4.284	15.742	0	0.02
	5.571	11.029	0	-17.818	2.16	9.186	0	0.01
	6.19	0	1.497	-21.47	1.497	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.47	-1.497	-1.497	0	0	0
	0.619	-0.927	0	-1.497	-2.16	9.186	0	0
	1.238	-1.853	0	-1.497	-4.284	15.742	0	0
	1.857	-2.78	0	-1.497	-6.352	19.773	0	-0.01
	2.476	-3.707	0	-1.497	-8.666	20.634	0	-0.01
	3.095	-4.634	0	-1.497	-11.117	18.209	0	-0.01
	3.714	-5.56	0	-1.497	-13.202	14.107	0	-0.01
	4.333	-6.487	0	-1.497	-14.924	8.996	0	-0.01
	4.952	-7.414	0	-1.497	-18.214	10.17	0	-0.01
	5.571	-10.408	0	-13.202	-21.477	1.765	0	0
2	0	-18.93	14.758	-14.173	-24.397	0	-8.766	0
	0.619	-10.8	2.551	0	-2.007	1.242	0	-0.01
	1.238	-9.221	2.551	0	-2.053	7.606	0	-0.01
	1.857	-8.065	1.869	0	-4.084	15.217	0	-0.01
	2.476	-6.972	1.741	0	-7.083	16.824	0	-0.01
	3.095	-6.187	0.918	0	-9.84	15.927	0	-0.01
	3.714	-6.195	0	-0.617	-12.281	13.03	0	-0.01
	4.333	-6.691	0	-0.852	-14.376	8.691	0	-0.01
	4.952	-7.455	0	-2.007	-16.392	10.318	0	-0.01
	5.571	-9.803	0	-12.622	-19.625	3.051	0	0
3	0	-18.004	13.658	-14.376	-22.7	0	-6.546	0
	0.619	-9.692	12.494	0	-2.066	1.413	0	0
	1.238	-7.446	2.043	0	-2.36	8.727	0	-0.01
	1.857	-6.6	1.259	0	-4.298	15.865	0	-0.01
	2.476	-5.84	1.208	0	-7.365	17.505	0	-0.01

## SECTION I

## CONSYS

## Section I Unit 17 Interior Stri

	3.095	-5.208	0.863	0	-10.129	16.585	0	-0.01
	3.714	-5.789	0	-1.149	-12.551	13.599	0	-0.01
	4.333	-6.509	0	-1.2	-14.598	9.128	0	-0.01
	4.952	-7.537	0	-2.066	-16.485	10.314	0	-0.01
	5.571	-9.801	0	-12.57	-19.802	2.932	0	0
4	0	-18.022	14.35	-14.35	-22.952	0	-6.874	0
	0.619	-9.801	12.57	0	-2.043	1.407	0	0
	1.238	-7.537	2.066	0	-2.082	7.723	0	-0.01
	1.857	-6.509	1.2	0	-4.195	15.582	0	-0.01
	2.476	-5.789	1.149	0	-7.269	17.29	0	-0.01
	3.095	-5.208	0	-0.863	-10.049	16.441	0	-0.01
	3.714	-5.84	0	-1.208	-12.494	13.509	0	-0.01
	4.333	-6.6	0	-1.259	-14.568	9.062	0	-0.01
	4.952	-7.446	0	-2.043	-16.393	10.355	0	-0.01
	5.571	-9.692	0	-12.494	-19.699	3.035	0	0
5	0	-18.004	14.376	-13.658	-22.851	0	-6.719	0
	0.619	-9.803	12.622	0	-2.551	1.831	0	0
	1.238	-7.455	2.007	0	-2.551	0.252	0	-0.01
	1.857	-6.691	0.852	0	-4.075	15.623	0	-0.01
	2.476	-6.195	0.617	0	-7.196	17.352	0	-0.01
	3.095	-6.187	0	-0.918	-10.049	16.421	0	-0.01
	3.714	-6.972	0	-1.741	-12.584	13.275	0	-0.01
	4.333	-8.065	0	-1.869	-14.758	8.476	0	-0.01
	4.952	-9.221	0	-2.551	-16.524	2.695	0	-0.01
	5.571	-10.8	0	-2.551	-19.567	3.575	0	-0.01
6	0	-18.93	14.173	-14.758	-22.752	0	-6.26	0
	0.619	-10.408	13.202	0	-0.669	3.729	0	0
	1.238	-7.414	1.497	0	-1.565	7.75	0	-0.01
	1.857	-6.487	1.497	0	-2.621	11.355	0	-0.01
	2.476	-5.56	1.497	0	-5.275	19.593	0	-0.01
	3.095	-4.634	1.497	0	-7.041	21.793	0	-0.01
	3.714	-3.707	1.497	0	-8.921	22.088	0	-0.01
	4.333	-2.78	1.497	0	-11.173	20.749	0	-0.01
	4.952	-1.853	1.497	0	-14.353	17.769	0	0
	5.571	-0.927	1.497	0	-17.818	11.029	0	0
	6.19	0	1.497	-21.47	-21.47	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.497	-21.507
2	2.409	-28.977
3	3.307	-28.034
4	2.59	-28.051
5	3.307	-28.034
6	2.409	-28.977
7	1.497	-21.507

Section I

FLOOR BEAM OVERHANG



Made By RAH  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For **CUY-2-1441**

**NORTH CANTILIVER FB AS BUILT.No significant Degradation Found on FB. Rate AB Condition Only.**

FB# (North Overhang)	Critical for:	Beam Type	FB Spacing (ft)	Spacing between Fascia Beam & Ext. Girder (ft)	Fascia Overhang (ft)	Slab DL (Kip/ft). *Slab thickness = 10" min (Fascia Overhang) & 6.75" (Between Exterior Girders)	W.S. DL (Kip/ft)	Barrier DL (Kip/ft)	Self weight of Fascia DL (Kip/ft)	Self weight DL of FB @ Overhang (Kip/ft)
99	Smallest A & I	W18X55	6.190	7.690	3.604	0.604	0.097	0.158	0.075	0.055
112	Max. FB Spacing	W21X59	6.310	6.360	3.604	0.561	0.097	0.158	0.075	0.059
127	Longest Cantiliver	W21X59	6.190	10.040	3.604	0.682	0.097	0.158	0.073	0.059
FB# (North Overhang)	Un- factored Point DL @ Fascia (kip)	Un- factored Connection Between Exterior Girder and FB Overhang (include add. 10% for MISC)	Un- factored Connection Between Exterior Girder and FB Overhang (include add. 10% for MISC)	Shear Area Ashear (sq. in)	Section Modulus Sx (c. in.)	Fy Bending (ksi)	Fy Shear (ksi)	AB Mom. Capacity (kip-ft) Fy*Sx	AB Shear Capacity (kip) 0.58*Fy*Ashear	
99	5.78543	6.82921609	50.727805	4.63	182.97	33	33	503.1675	88.6182	
112	5.62143	6.59633268	40.640086	5.23	296.29	33	33	814.7975	100.1022	
127	6.25225	7.52907208	72.320872	21.23	462.81	33	33	1272.728	406.3422	
FB# (North Overhang)	Factored Fascia Reaction (Kip) HS-20 Truck Inv.: 1.3*1.67*(LL+IM)*DF. DF=0.7 & IM=1.3	Factored Fascia Reaction (Kip) HS-20 Lane Inv.: 1.3*1.67*(L+IM)*DF. DF=0.7 & IM=1.3	Factored Fascia Reaction (Kip) HS-20 Truck Op.: 1.3*1.0*(LL+IM)*DF. DF=0.7 & IM=1.3	Factored Fascia Reaction (Kip) HS-20 Lane Op.: 1.3*1.0*(LL+IM)*DF. DF=0.7 & IM=1.3	Factored Fascia Reaction (Kip) OH2F1 Truck Op.: 1.3*1.0*(L+IM)*DF. DF=0.7 & IM=1.3	Factored Fascia Reaction (Kip) OH3F1 Truck Op.: 1.3*1.0*(LL+IM)*DF. DF=0.7 & IM=1.3	Factored Fascia Reaction (Kip) OH4F1 Truck Op.: 1.3*1.0*(L+IM)*DF. DF=0.7 & IM=1.3	Factored Fascia Reaction (Kip) OH5C1 Truck Op.: 1.3*1.0*(L+IM)*DF. DF=0.7 & IM=1.3	Factored Fascia Reaction (Kip) HS-15 Truck Fatigue: 1.0*1.0*(LL+IM)*DF. DF=0.7 & IM=1.15	
99	55.231	51.594	33.079	30.901	20.058	28.622	27.252	28.948	16.529	
112	47.224	43.561	28.279	26.086	16.565	23.439	21.818	23.807	14.068	
127	64.204	59.977	38.443	35.912	23.311	33.263	31.671	33.642	19.215	

Section I

FLOOR BEAM OVERHANG



Made By RAH  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For **CUY-2-1441**

**AS BUILT (AB). No significant Degradation Found on these FB during Insp. therefore only rate AB Condition**

FB# (North Over- hang)	Factored				Factored		Factored	Factored	Factored LL Mom (Kip-ft) HS15: 1.0*1.0*(LL+IM)*DF. DF=0.7 & IM=1.15
	LL Mom (Kip-ft) HS-20 Truck Inv.: 1.3*1.67* (LL+IM)* DF. DF=0.7 & IM=1.3	Factored LL Mom (Kip-ft) HS- 20 Lane Inv.: 1.3*1.67*(L +IM)*DF. DF=0.7 & IM=1.3	Factored LL Mom (Kip-ft) HS- 20 Truck Op.: 1.3*1.0*(LL +IM)*DF. DF=0.7 & IM=1.3	Factored LL Mom (Kip-ft) HS- 20 Lane Op.: 1.3*1.0*(LL +IM)*DF. DF=0.7 & IM=1.3	LL Mom (Kip-ft) OH2F1 Truck Op.: 1.3*1.0*(L +IM)*DF. DF=0.7 & IM=1.3	Factored LL Mom (Kip- ft) OH3F1 Truck Op.: 1.3*1.0*(LL+ IM)*DF. DF=0.7 & IM=1.3	LL Mom (Kip-ft) OH4F1 Truck Op.: 1.3*1.0*(L +IM)*DF. DF=0.7 & IM=1.3	LL Mom (Kip-ft) OH5C1 Truck Op.: 1.3*1.0*(L +IM)*DF. DF=0.7 & IM=1.3	
99	424.726	396.75786	254.37751	237.62869	154.246	220.10318	209.5679	222.6101	127.10801
112	300.345	277.04796	179.85444	165.90696	105.3534	149.07204	138.7625	151.4125	89.47248
127	644.608	602.16908	385.96772	360.55648	234.0424	333.96052	317.9768	337.7657	192.9186
FB# (North Over- hang)	Factored				Factored		Factored	Factored	Factored LL Shear (Kip) HS- 20 Truck Inv.: 1.3*1.67* (LL+IM)* DF. DF=0.7 & IM=1.3
	LL Shear (Kip) HS- 20 Truck Inv.: 1.3*1.67*(L +IM)*DF. DF=0.7 & IM=1.3	Factored LL Shear (Kip) HS-20 Lane Inv.: 1.3*1.67*(L +IM)*DF. DF=0.7 & IM=1.3	Factored LL Shear (Kip) HS-20 Truck Op.: 1.3*1.0*(LL +IM)*DF. DF=0.7 & IM=1.3	Factored LL Shear (Kip) HS-20 Lane Op.: 1.3*1.0*(LL +IM)*DF. DF=0.7 & IM=1.3	LL Shear (Kip) OH2F1 Truck Op.: 1.3*1.0*(L +IM)*DF. DF=0.7 & IM=1.3	Factored LL Shear (Kip) OH3F1 Truck Op.: 1.3*1.0*(LL+ IM)*DF. DF=0.7 & IM=1.3	LL Shear (Kip) OH4F1 Truck Op.: 1.3*1.0*(L +IM)*DF. DF=0.7 & IM=1.3	LL Shear (Kip) OH5C1 Truck Op.: 1.3*1.0*(L +IM)*DF. DF=0.7 & IM=1.3	
99	55.231	51.594	33.079	30.901	20.058	28.622	27.252	28.948	
112	47.224	43.561	28.279	26.086	16.565	23.439	21.818	23.807	
127	64.204	59.977	38.443	35.912	23.311	33.263	31.671	33.642	
FB# (North Over- hang)	Shear (RF) HS- 20 Truck Inv.	Shear (RF) HS-20 Lane Inv.	Shear (RF) HS-20 Truck Op.	Shear (RF) HS-20 Lane Op.	Shear (RF) OH2F1 Truck Op.	Shear (RF) OH3F1 Truck Op.	Shear (RF) OH4F1 Truck Op.	Shear (RF) OH5C1 Truck Op.	Shear (RF) OH5C1 Truck Op.
	99	1.444	1.546	2.411	2.581	3.975	2.786	2.926	
112	1.938	2.101	3.237	3.509	5.525	3.905	4.195	3.845	
127	6.176	6.612	10.315	11.042	17.011	11.922	12.521	11.787	
FB# (North Over- hang)	Mom				Mom		Mom	Mom	Mom (RF) OH5C1 Truck Op.
	Mom (RF) HS- 20 Truck Inv.	Mom (RF) HS-20 Lane Inv.	Mom (RF) HS-20 Truck Op.	Mom (RF) HS-20 Lane Op.	Mom (RF) OH2F1 Truck Op.	Mom (RF) OH3F1 Truck Op.	Mom (RF) OH4F1 Truck Op.	Mom (RF) OH5C1 Truck Op.	
99	1.029	1.102	1.719	1.840	2.835	1.986	2.086	1.964	
112	2.537	2.750	4.237	4.593	7.232	5.111	5.491	5.032	
127	1.829	1.957	3.054	3.269	5.036	3.529	3.707	3.490	

**Section I**

**FLOOR BEAM OVERHANG**



Made By RAH  
Checked By DBH

Date 3/8/2013  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH CANTILIVER FB AS BUILT.No significant Degradation Found on FB. Rate AB Condition Only.**

FB# (South Overhang)	Critical for:	Beam Type	FB Spacing (ft)	Spacing between Fascia Beam & Ext. Girder (ft)	Fascia Overhang (ft)	Slab DL (Kip/ft). *Slab thickness = 10" min (Fascia Overhang) & 6.75" (Between Exterior Girders)	W.S. DL (Kip/ft)	Barrier DL (Kip/ft)	Self weight of Fascia DL (Kip/ft)	Self weight DL of FB @ Overhang (Kip/ft)
107	Smallest A & I	W18X55	6.19	8.94	3.604	0.646	0.097	0.158	0.077	0.055
112	Max. FB Spacing	W21X59	6.31	8.87	3.604	0.643	0.097	0.158	0.075	0.059
146	Longest Cantiliver	W27X98	3.72	10.97	3.604	0.712	0.097	0.158	0.075	0.098

FB# (South Overhang)	Un-factored Point DL @ Fascia (kip)	Unfactored DL Shear (Kip) @ Connection Between Exterior Girder and FB Overhang (include add. 10% for MISC DL)	Unfactored DL Mom. (kip-ft) @ Connection Between Exterior Girder and FB Overhang (include add. 10% for MISC DL)	Shear Area Ashear (sq. in)	Section Modulus Sx (c. in.)	Fy Bending (ksi)	Fy Shear (ksi)	AB Mom. Capacity (kip-ft) Fy*Sx	AB Shear Capacity (kip) 0.58*Fy*Ashear
107	6.049	7.194	61.899	12.050	459.050	33.000	33.000	1262.388	230.637
112	6.139	7.328	62.449	8.450	226.760	33.000	33.000	623.590	161.733
146	1.938	3.314	29.873	13.500	685.990	33.000	33.000	1886.473	258.390

**Section I**

**FLOOR BEAM OVERHANG**



Made By RAH  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

FB# (South Over- hang)	Factored Fascia Reaction (Kip) HS- 20 Truck Inv.: $1.3*1.67*(LL+IM)*D$ F. IM=1.3	Factored Fascia Reaction (Kip) HS-20 Lane Inv.: $1.3*1.67*(LL+IM)*DF.$ IM=1.3	Factored Fascia Reaction (Kip) HS-20 Truck Op.: $1.3*1.0*(LL+IM)*DF.$ IM=1.3	Factored Fascia Reaction (Kip) HS-20 Lane Op.: $1.3*1.0*(LL+IM)*DF.$ IM=1.3	Factored Fascia Reaction (Kip) OH2F1 Truck Op.: $1.3*1.0*(L+IM)*DF.$ IM=1.3	Factored Fascia Reaction (Kip) OH3F1 Truck Op.: $1.3*1.0*(LL+IM)*DF.$ IM=1.3	Factored Fascia Reaction (Kip) OH4F1 Truck Op.: $1.3*1.0*(L+IM)*DF.$ IM=1.3	Factored Fascia Reaction (Kip) OH5C1 Truck Op.: $1.3*1.0*(L+IM)*DF.$ IM=1.3	Factored Fascia Reaction (Kip) HS15.: $1.0*1.0*(LL+IM)*DF.$ IM=1.15
107	61.387	56.154	36.76	33.626	20.948	30.21	28.26	30.701	18.062
112	60.307	55.63	36.114	33.313	21.154	29.933	27.863	30.403	17.966
146	65.608	54.378	39.285	32.561	24.665	21.16	17.545	21.275	19.776



Made By RAH  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

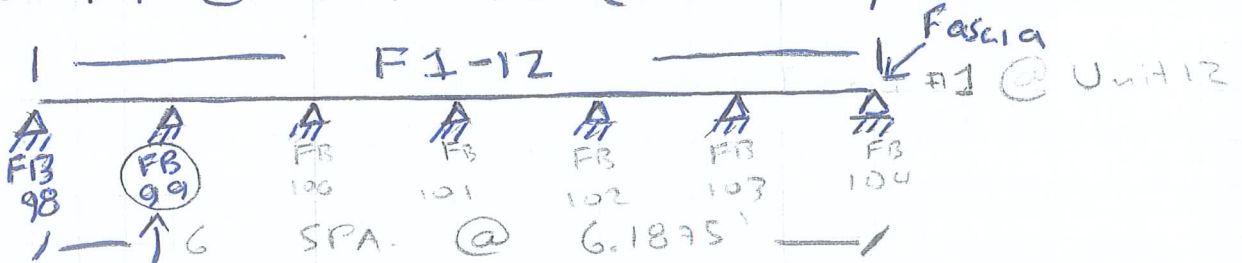
Calculations For: **CUY-2-1441**

**AS BUILT (AB). No significant Degradation Found on these FB during Insp. therefore only rate AB Condition**

FB# (South Overhang)	Factored LL Mom (Kip-ft) HS-20 Truck Inv.: 1.3*1.67*(LL+IM)*D F. IM=1.3	Factored LL Mom (Kip-ft) HS-20 Lane Inv.: 1.3*1.67*(LL+IM)*DF. IM=1.3	Factored LL Mom (Kip-ft) HS-20 Truck Op.: 1.3*1.0*(LL+IM)*DF. IM=1.3	Factored LL Mom (Kip-ft) HS-20 Lane Op.: 1.3*1.0*(LL+IM)*DF. IM=1.3	Factored LL Mom (Kip-ft) OH2F1 Truck Op.: 1.3*1.0*(L+IM)*DF. IM=1.3	Factored LL Mom (Kip-ft) OH3F1 Truck Op.: 1.3*1.0*(LL+IM)*DF. IM=1.3	Factored LL Mom (Kip-ft) OH4F1 Truck Op.: 1.3*1.0*(L+IM)*DF. IM=1.3	Factored LL Mom (Kip-ft) OH5C1 Truck Op.: 1.3*1.0*(L+IM)*DF. IM=1.3	Factored LL Mom (Kip-ft) HS15: 1.0*1.0*(LL+IM)*DF. IM=1.15
	107	548.80	502.02	328.63	300.62	187.28	270.08	252.64	
112	534.92	493.44	320.33	295.49	187.64	265.51	247.14	269.67	159.36
146	719.72	596.53	430.96	357.19	270.58	232.13	192.47	233.39	216.94
FB# (South Overhang)	Factored LL Shear (Kip) HS-20 Truck Inv.: 1.3*1.67*(LL+IM)*D F. IM=1.3	Factored LL Shear (Kip) HS-20 Lane Inv.: 1.3*1.67*(LL+IM)*DF. IM=1.3	Factored LL Shear (Kip) HS-20 Truck Op.: 1.3*1.0*(LL+IM)*DF. IM=1.3	Factored LL Shear (Kip) HS-20 Lane Op.: 1.3*1.0*(LL+IM)*DF. IM=1.3	Factored LL Shear (Kip) OH2F1 Truck Op.: 1.3*1.0*(L+IM)*DF. IM=1.3	Factored LL Shear (Kip) OH3F1 Truck Op.: 1.3*1.0*(LL+IM)*DF. IM=1.3	Factored LL Shear (Kip) OH4F1 Truck Op.: 1.3*1.0*(L+IM)*DF. IM=1.3	Factored LL Shear (Kip) OH5C1 Truck Op.: 1.3*1.0*(L+IM)*DF. IM=1.3	
	107	61.387	56.154	36.760	33.626	20.948	30.210	28.260	30.701
112	60.307	55.630	36.114	33.313	21.154	29.933	27.863	30.403	
146	65.608	54.378	39.285	32.561	24.665	21.160	17.545	21.275	
FB# (South Overhang)	Shear (RF) HS-20 Truck Inv.	Shear (RF) HS-20 Lane Inv.	Shear (RF) HS-20 Truck Op.	Shear (RF) HS-20 Lane Op.	Shear (RF) OH2F1 Truck Op.	Shear (RF) OH3F1 Truck Op.	Shear (RF) OH4F1 Truck Op.	Shear (RF) OH5C1 Truck Op.	
	107	3.605	3.941	6.020	6.581	10.564	7.325	7.830	7.208
112	2.524	2.736	4.215	4.569	7.195	5.085	5.463	5.006	
146	3.873	4.673	6.468	7.803	10.301	12.008	14.482	11.943	
FB# (South Overhang)	Mom (RF) HS-20 Truck Inv.	Mom (RF) HS-20 Lane Inv.	Mom (RF) HS-20 Truck Op.	Mom (RF) HS-20 Lane Op.	Mom (RF) OH2F1 Truck Op.	Mom (RF) OH3F1 Truck Op.	Mom (RF) OH4F1 Truck Op.	Mom (RF) OH5C1 Truck Op.	
	107	2.154	2.354	3.596	3.932	6.311	4.376	4.678	4.306
112	1.014	1.099	1.693	1.836	2.891	2.043	2.195	2.011	
146	2.567	3.097	4.287	5.173	6.829	7.960	9.600	7.917	



FB 99 @ UNIT 12 (FASCIA 1)



FB FOR RATING: FIND First INTERIOR REACTION ON FASCIA UNIT

DF For Ext. F1-12 (NORTH FASCIA)

Spacing Between F1-12 & EXT. GIRDER = 7.69'

$$DF = \frac{P}{2}(7.69' + 3.604' - 3.75') + \frac{P}{2}(7.69' + 3.604' - 9.75')$$

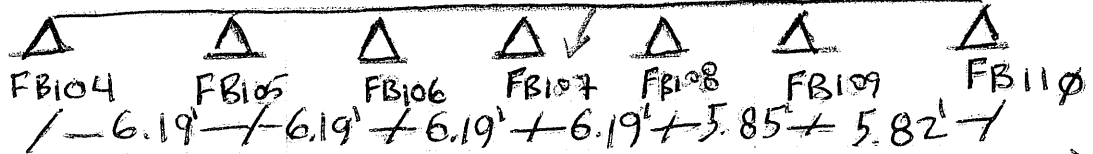
7.69'

= 0.591P ← Controls Over

$$DF \text{ interior girder} = \frac{P}{(5.5)(2)} = \frac{7.69'}{11} = 0.7$$

FB 107 @ Unit 13 (Fascia-2)

FOR RATING FIND MIDDLE REACTION ON FASCIA-2 UNIT 13



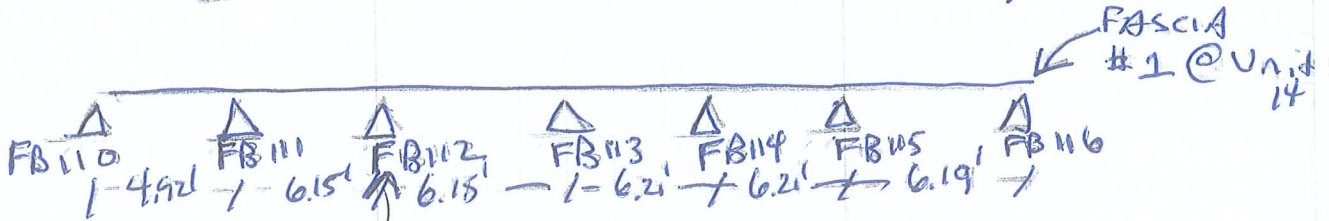
DF FOR EXT F2-13 (SOUTH FASCIA)

Spacing Between F2-13 & EXT. Girder = 8.94'

$$DF = \frac{\frac{P}{2}(8.94' + 3.604' - 3.75') + \frac{P}{2}(8.94' + 3.604' - 9.75')}{8.94'}$$

$$= 0.6481$$

FB 112 @ Unit 14 (FASCIA 1)



FOR RATING & FIND SECOND INTERIOR REACTION @ N FASCIA 1 UNIT

DF FOR EXT F1-14 (NORTH FASCIA)

Spacing between F1-14 & EXT GIRDER = 6.36'

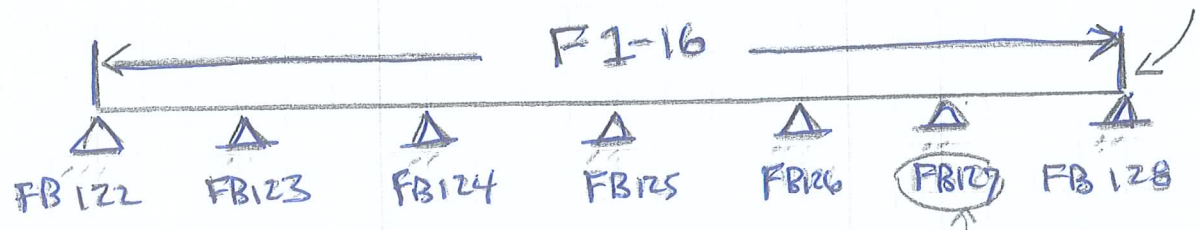
$$DF = \frac{P}{Z} (6.36' + 3.60' - 3.75') + \frac{P}{Z} (6.36' + 3.604' - 9.75')$$

$$6.36'$$

$$= 0.5053$$

FB 127 @ Unit 16 (FASCIA 1)

FASCIA #1 @ UNIT 16



FB FOR RATING  
∴ FIND REACTION @ FIRST

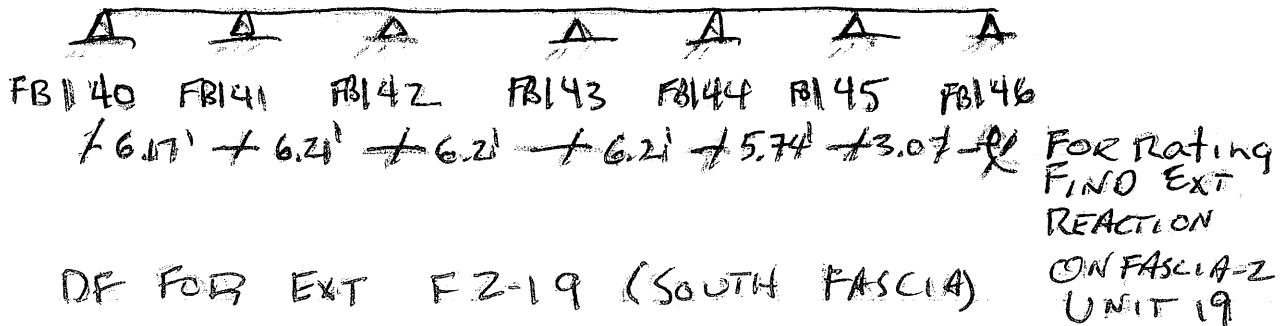
6 spc @ 619' INT. SUP. FASCIA 1 UNIT 16  
DF FOR EXT. F1-16 (NORTH FASCIA)

$$D.F. = \frac{P}{2} (10.04 + 3.604 - 3.75) + \frac{P}{2} (10.04 + 3.604 - 9.75)$$

19.04

$$= 0.687$$

FB 146 @ UNIT 19 (FASCIA 2)



DF FOR EXT F2-19 (SOUTH FASCIA)

Spacing Between F2-19 & EXT-Girder = 10.97'

$$DF = \frac{P}{2} \frac{(10.97' + 3.604' - 3.75') + (10.97' + 3.604' - 9.75')}{10.97'}$$

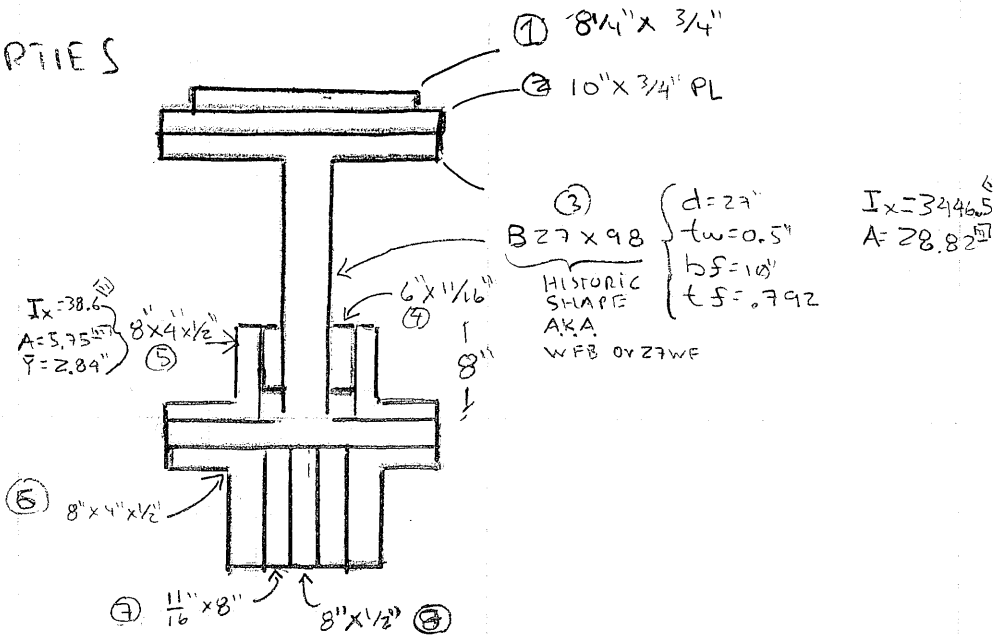
$$= \phi .71322$$

## FB 146 SECTION PROPERTIES

$Y_{bot} = 16.622 \text{ in}$

$Y_{top} = 19.878 \text{ in}$

$S_x(top) = 685.99 \text{ in}^3$   
 $S_x(bot) = 820.366 \text{ in}^3$



### X-Axis Section Properties:

Gross Section (without Losses)				Floorbeam 146		South Overhang		
Element	Description	A (in <sup>2</sup> )	y (in)	Ay (in <sup>3</sup> )	I <sub>o</sub> (in <sup>4</sup> )	d (in)	Ad <sup>2</sup> (in <sup>4</sup> )	I <sub>x, gross</sub> (in <sup>4</sup> )
1	Top Cover Plate (8.25" X 0.75")	6.1875	36.1250	223.5234	0.2900	19.5027	2353.4372	2353.7272
2	Top Fill Plate (10" X 0.75")	7.5000	35.3750	265.3125	0.3516	18.7527	2637.4650	2637.8166
3	B27X98	28.8200	21.5000	619.6300	3446.5000	4.8777	685.6711	4132.1711
4	Fill Plate bottom upper angles 6" X 11/16"	8.2500	13.7920	113.7840	24.7500	-2.8303	66.0896	90.8396
5	Bottom Upper Angles 8" X 4" X 1/2"	11.5000	11.6320	133.7680	77.2000	-4.9903	286.3909	363.5909
6	Bottom Lower Angles 8" X 4" X 1/2	11.5000	5.1600	59.3400	77.2000	-11.4623	1510.9320	1588.1320
7	Bottom Lower Angles Fill Plates 8" X 11/16"	11.0000	4.0000	44.0000	58.6667	-12.6223	1752.5600	1811.2267
8	Bottom Lower Fill Plate 8" X 1/2"	4.0000	4.0000	16.0000	21.3333	-12.6223	637.2945	658.6279
Total		88.76		1475.36				13636.13

Centroid(measured from bottom of Build-up 16.62235 in

\*No significant deficiencies found on FB 146 (South Overhang)

\*Assume the effective shear area is only the Web portion of the B27X98

13.5 sq. in.

Id Group 9, HS-15 Truck Fatigue: (truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	16.37	-1.301	16.37	0	0	0
	0.619	8.873	14.334	-1.978	14.334	8.873	0	0
	1.238	15.219	12.294	-4.018	12.294	15.219	0	0
	1.857	19.124	10.298	-6.013	10.298	19.124	0	0
	2.476	20.741	8.377	-7.935	8.377	20.741	0	0
	3.095	20.296	6.558	-9.754	6.558	20.296	0	0
	3.714	18.082	4.869	-11.443	4.869	18.082	0	0
	4.333	14.466	3.339	-12.973	3.339	14.466	0	0
	4.952	9.922	2.004	-14.308	2.004	9.922	0	0
	5.571	4.924	0.884	-15.428	0.884	4.924	0	0
2	0	2.158	0.349	-1.743	16.407	0	-0.178	0
	0.619	5.406	15.048	-1.263	15.164	5.335	0	0
	1.238	10.339	13.633	-2.791	13.633	10.339	0	0
	1.857	14.29	11.897	-4.415	11.897	14.29	0	0
	2.476	16.774	10.026	-6.285	10.026	16.774	0	0
	3.095	17.553	8.093	-8.219	8.093	17.553	0	0
	3.714	16.565	6.168	-10.143	6.168	16.565	0	0
	4.333	13.926	4.323	-11.988	4.323	13.926	0	0
	4.952	9.966	2.64	-13.672	2.64	9.966	0	0
	5.571	5.127	1.179	-15.133	2.168	1.64	0	0
3	0	2.982	2.168	-0.723	16.411	0	-0.193	0
	0.619	5.161	15.106	-1.206	15.225	5.08	0	0
	1.238	9.996	13.615	-2.696	13.731	9.989	0	0
	1.857	13.945	12.014	-4.298	12.014	13.945	0	0
	2.476	16.517	10.015	-6.297	10.147	16.492	0	0
	3.095	17.406	8.065	-8.247	8.205	17.36	0	0
	3.714	16.514	6.12	-10.191	6.263	16.46	0	0
	4.333	13.938	4.256	-12.056	4.395	13.891	0	0
	4.952	9.971	2.686	-13.625	2.686	9.971	0	0
	5.571	5.143	1.2	-15.112	1.782	1.227	0	0
4	0	2.33	1.782	-1.782	16.426	0	-0.214	0
	0.619	5.143	15.112	-1.2	15.252	5.046	0	0
	1.238	9.971	13.625	-2.686	13.767	9.961	0	0
	1.857	13.938	12.056	-4.256	12.056	13.938	0	0
	2.476	16.514	10.191	-6.12	10.191	16.514	0	0
	3.095	17.406	8.247	-8.065	8.247	17.406	0	0
	3.714	16.517	6.297	-10.015	6.297	16.517	0	0
	4.333	13.945	4.298	-12.014	4.414	13.931	0	0
	4.952	9.996	2.696	-13.615	2.696	9.996	0	0
	5.571	5.161	1.206	-15.106	1.784	1.221	0	0
5	0	2.982	0.723	-2.168	16.33	0	-0.193	0
	0.619	5.127	15.133	-1.179	15.155	5.032	0	0
	1.238	9.966	13.672	-2.64	13.682	9.929	0	0

	1.857	13.926	11.988	-4.323	11.996	13.903	0	0
	2.476	16.565	10.143	-6.168	10.173	16.491	0	0
	3.095	17.553	8.219	-8.093	8.273	17.451	0	0
	3.714	16.774	6.285	-10.026	6.364	16.677	0	0
	4.333	14.29	4.415	-11.897	4.514	14.229	0	0
	4.952	10.339	2.791	-13.633	2.791	10.339	0	0
	5.571	5.406	1.263	-15.048	1.743	1.079	0	0
6	0	2.158	1.743	-0.349	16.325	0	-0.185	0
	0.619	4.924	15.428	-0.884	15.444	4.833	0	0
	1.238	9.922	14.308	-2.004	14.316	9.884	0	0
	1.857	14.466	12.973	-3.339	12.986	14.41	0	0
	2.476	18.082	11.443	-4.869	11.473	17.969	0	0
	3.095	20.296	9.754	-6.558	9.803	20.145	0	0
	3.714	20.741	7.935	-8.377	8	20.58	0	0
	4.333	19.124	6.013	-10.298	6.092	18.979	0	0
	4.952	15.219	4.018	-12.294	4.103	15.114	0	0
	5.571	8.873	1.978	-14.334	2.064	8.819	0	0
	6.19	0	1.301	-16.37	1.301	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	16.37	-1.301	-1.301	0	0	0
	0.619	-0.805	0	-1.301	-2.064	8.819	0	0
	1.238	-1.61	0	-1.301	-4.103	15.114	0	0
	1.857	-2.415	0	-1.301	-6.092	18.979	0	0
	2.476	-3.22	0	-1.301	-8	20.58	0	0
	3.095	-4.025	0	-1.301	-9.803	20.145	0	0
	3.714	-4.83	0	-1.301	-11.473	17.969	0	0
	4.333	-5.635	0	-1.301	-12.986	14.41	0	0
	4.952	-6.44	0	-1.301	-14.316	9.884	0	0
	5.571	-7.245	0	-1.301	-15.444	4.833	0	0
2	0	-10.439	2.168	-11.473	-16.325	0	-0.185	0
	0.619	-9.096	2.168	0	-1.743	1.079	0	0
	1.238	-7.754	2.168	0	-2.791	10.339	0	0
	1.857	-6.513	1.951	0	-4.514	14.229	0	0
	2.476	-5.306	1.951	0	-6.364	16.677	0	0
	3.095	-4.098	1.951	0	-8.273	17.451	0	0
	3.714	-4.482	0	-1.534	-10.173	16.491	0	0
	4.333	-5.431	0	-1.534	-11.996	13.903	0	0
	4.952	-6.474	0	-1.743	-13.682	9.929	0	0
	5.571	-7.553	0	-1.743	-15.155	5.032	0	0
3	0	-8.699	1.782	-10.173	-16.33	0	-0.193	0
	0.619	-7.596	1.782	0	-1.784	1.221	0	0
	1.238	-6.493	1.782	0	-2.696	9.996	0	0
	1.857	-5.453	1.668	0	-4.414	13.931	0	0
	2.476	-4.421	1.668	0	-6.297	16.517	0	0
	3.095	-3.402	1.56	0	-8.247	17.406	0	0
	3.714	-4.369	0	-1.636	-10.191	16.514	0	0
	4.333	-5.406	0	-1.784	-12.056	13.938	0	0



	4.952	-6.511	0	-1.784	-13.767	9.961	0	0
	5.571	-7.615	0	-1.784	-15.252	5.046	0	0
4	0	-8.72	10.191	-10.191	-16.426	0	-0.214	0
	0.619	-7.615	1.784	0	-1.782	1.227	0	0
	1.238	-6.511	1.784	0	-2.686	9.971	0	0
	1.857	-5.406	1.784	0	-4.395	13.891	0	0
	2.476	-4.369	1.636	0	-6.263	16.46	0	0
	3.095	-3.402	0	-1.56	-8.205	17.36	0	0
	3.714	-4.421	0	-1.668	-10.147	16.492	0	0
	4.333	-5.453	0	-1.668	-12.014	13.945	0	0
	4.952	-6.493	0	-1.782	-13.731	9.989	0	0
	5.571	-7.596	0	-1.782	-15.225	5.08	0	0
5	0	-8.699	10.173	-1.782	-16.411	0	-0.193	0
	0.619	-7.553	1.743	0	-2.168	1.64	0	0
	1.238	-6.474	1.743	0	-2.64	9.966	0	0
	1.857	-5.431	1.534	0	-4.323	13.926	0	0
	2.476	-4.482	1.534	0	-6.168	16.565	0	0
	3.095	-4.098	0	-1.951	-8.093	17.553	0	0
	3.714	-5.306	0	-1.951	-10.026	16.774	0	0
	4.333	-6.513	0	-1.951	-11.897	14.29	0	0
	4.952	-7.754	0	-2.168	-13.633	10.339	0	0
	5.571	-9.096	0	-2.168	-15.164	5.335	0	0
6	0	-10.439	11.473	-2.168	-16.407	0	-0.178	0
	0.619	-7.245	1.301	0	-0.884	4.924	0	0
	1.238	-6.44	1.301	0	-2.004	9.922	0	0
	1.857	-5.635	1.301	0	-3.339	14.466	0	0
	2.476	-4.83	1.301	0	-4.869	18.082	0	0
	3.095	-4.025	1.301	0	-6.558	20.296	0	0
	3.714	-3.22	1.301	0	-8.377	20.741	0	0
	4.333	-2.415	1.301	0	-10.298	19.124	0	0
	4.952	-1.61	1.301	0	-12.294	15.219	0	0
	5.571	-0.805	1.301	0	-14.334	8.873	0	0
	6.19	0	1.301	-16.37	-16.37	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.301	-16.391
2	2.092	-16.529
3	2.891	-16.45
4	2.259	-16.47
5	2.891	-16.45
6	2.092	-16.529
7	1.301	-16.391

Id Group 7, Ohio 4F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.361	-1.2	21.361	0	0	0
	0.617	10.99	17.811	0	17.811	10.99	0	0
	1.234	17.795	14.421	-2.454	14.421	17.795	0	0
	1.851	20.893	11.287	-5.587	11.287	20.893	0	0
	2.468	21.311	8.635	-8.239	8.635	21.311	0	0
	3.085	21.33	6.914	-9.96	6.914	21.33	0	0
	3.702	19.53	5.275	-11.599	5.275	19.53	0	0
	4.319	16.823	2.649	-14.225	3.262	14.089	0	0
	4.936	11.627	0	-17.719	2.053	10.133	0	0
	5.553	5.634	1.015	-13.449	1.015	5.634	0	0
2	0	1.974	0.32	-1.585	24.475	0	-14.995	0
	0.621	5.15	12.783	-1.68	21.697	0	-5.337	0
	1.242	10.792	14.292	-2.582	18.599	2.815	0	0
	1.863	14.257	11.405	-5.469	15.326	8.914	0	0
	2.484	15.38	8.752	-8.123	12.762	11.43	0	0
	3.105	16.209	7.505	-6.959	10.967	14.147	0	0
	3.726	15.718	5.871	-8.592	8.742	15.539	0	0
	4.347	14.972	6.104	-10.771	6.104	14.972	0	0
	4.968	11.926	3.121	-13.753	3.354	8.936	0	0
	5.589	6.143	0	-16.964	2.533	5.589	0	0
3	0	3.252	2.477	-0.664	24.096	0	-13.308	0
	0.621	7.008	12.828	-1.636	21.341	0	-4.047	0
	1.242	12.267	13.953	-2.921	18.285	3.679	0	0
	1.863	15.406	11.049	-5.825	15.069	9.374	0	0
	2.484	16.178	8.256	-6.208	12.459	12.146	0	0
	3.105	16.465	6.589	-7.874	10.6	14.73	0	0
	3.726	15.847	8.359	-8.515	8.359	15.847	0	0
	4.347	14.97	5.735	-11.139	5.735	14.97	0	0
	4.968	11.639	2.786	-14.088	2.786	11.639	0	0
	5.589	5.821	1.355	-13.108	1.583	1.1	0	0
4	0	2.083	1.583	-0.43	23.791	0	-12.819	0
	0.621	5.928	17.348	0	20.972	0	-4.018	0
	1.242	11.934	14.271	-2.603	17.9	3.641	0	0
	1.863	15.355	11.403	-5.471	14.727	9.229	0	0
	2.484	16.403	8.849	-8.025	12.497	11.806	0	0
	3.105	15.808	6.795	-7.669	10.478	14.605	0	0
	3.726	15.328	8.107	-8.768	8.107	15.328	0	0
	4.347	13.956	5.374	-11.5	5.383	13.624	0	0
	4.968	10.117	2.351	-14.523	2.576	8.644	0	0
	5.589	4.818	1.596	-12.867	1.715	1.277	0	0
5	0	2.342	1.715	-0.541	22.663	0	-11.609	0
	0.574	5.74	12.941	-1.523	19.956	0	-3.634	0
	1.148	11.327	14.43	-2.445	17.08	2.894	0	0

	1.722	14.65	11.533	-5.341	14.24	7.512	0	0
	2.296	15.733	8.984	-7.891	12.478	10.462	0	0
	2.87	15.066	6.819	-10.055	10.479	12.309	0	0
	3.444	13.183	5.05	-11.825	8.233	12.793	0	0
	4.018	11.673	5.611	-11.263	5.733	11.635	0	0
	4.592	8.569	2.994	-13.881	2.994	8.569	0	0
	5.166	4.77	1.833	-15.041	1.933	1.617	0	0
6	0	2.727	1.933	-0.888	19.144	0	-7.021	0
	0.307	4.864	15.114	-1.76	18.353	0	-4.086	0
	0.614	7.727	13.728	-3.146	17.337	0	-1.137	0
	0.921	10.047	12.199	-4.675	16.109	1.644	0	0
	1.228	11.651	10.549	-6.325	14.675	4.05	0	0
	1.535	12.395	8.799	-8.075	13.041	5.884	0	0
	1.842	12.159	6.973	-9.902	11.211	6.954	0	0
	2.149	10.853	5.09	-11.784	9.283	6.991	0	0
	2.456	8.412	3.174	-13.7	7.473	5.773	0	0
	2.763	4.798	1.247	-15.627	5.534	3.481	0	0
	3.07	0	3.461	-17.526	3.461	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.361	-1.2	-1.2	0	0	0
	0.617	-0.74	0	-1.2	-2.789	8.69	0	0
	1.234	-1.481	0	-1.2	-4.651	15.083	0	0
	1.851	-2.221	0	-1.2	-6.998	18.28	0	0
	2.468	-2.962	0	-1.2	-9.524	18.141	0	0
	3.085	-3.702	0	-1.2	-11.645	16.133	0	0
	3.702	-4.443	0	-1.2	-13.403	12.849	0	0
	4.319	-5.183	0	-1.2	-15.863	9.752	0	0
	4.936	-5.924	0	-1.2	-19.367	3.491	0	0
	5.553	-12.626	0	-11.809	-22.503	0	-5.051	0
2	0	-20.407	12.001	-19.367	-25.206	0	-14.996	0
	0.621	-13.118	11.172	0	-1.68	5.15	0	0
	1.242	-9.056	2.477	0	-2.724	9.184	0	0
	1.863	-8.458	0.956	0	-5.548	14.208	0	0
	2.484	-7.864	0.956	0	-8.214	15.266	0	0
	3.105	-7.274	0.948	0	-10.543	14.401	0	0
	3.726	-6.685	0.948	0	-12.555	12.061	0	0
	4.347	-6.096	0.948	0	-14.869	9.314	0	0
	4.968	-5.9	0	-1.585	-18.076	3.655	0	0
	5.589	-11.833	0	-10.795	-21.145	0	-4.072	0
3	0	-19.125	16.879	-12.555	-23.928	0	-13.307	0
	0.621	-11.648	10.96	0	-1.721	5.038	0	0
	1.242	-5.78	1.583	0	-2.979	11.032	0	0
	1.863	-5.687	0	-0.034	-5.825	15.406	0	0
	2.484	-5.716	0	-0.055	-8.402	16.13	0	0
	3.105	-5.75	0	-0.055	-10.599	14.911	0	0
	3.726	-5.785	0	-0.055	-12.424	12.27	0	0
	4.347	-5.819	0	-0.055	-15.249	9.559	0	0

	4.968	-5.97	0	-1.631	-18.437	3.788	0	0
	5.589	-11.452	0	-10.832	-21.452	0	-3.973	0
4	0	-19.24	12.464	-17.102	-24.161	0	-13.22	0
	0.621	-11.934	10.702	0	-1.665	4.99	0	0
	1.242	-6.177	1.715	0	-2.765	10.12	0	0
	1.863	-5.552	0.062	0	-5.471	15.355	0	0
	2.484	-5.513	0.062	0	-8.025	16.403	0	0
	3.105	-5.475	0.062	0	-10.216	15.505	0	0
	3.726	-5.436	0.062	0	-12.067	13.111	0	0
	4.347	-5.398	0.062	0	-15.005	9.94	0	0
	4.968	-5.516	0	-1.509	-18.139	4.547	0	0
	5.589	-9.902	0	-10.422	-21.112	0	-2.796	0
5	0	-18.237	12.097	-16.4	-23.792	0	-11.619	0
	0.574	-11.75	10.479	0	-1.523	5.74	0	0
	1.148	-6.151	1.933	0	-3.007	9.73	0	0
	1.722	-5.257	1.111	0	-5.341	14.65	0	0
	2.296	-4.63	1.022	0	-7.891	15.733	0	0
	2.87	-4.044	1.022	0	-10.055	15.066	0	0
	3.444	-3.458	1.022	0	-11.825	13.183	0	0
	4.018	-2.904	0.93	0	-13.733	10.803	0	0
	4.592	-2.832	0	-0.829	-16.478	7.406	0	0
	5.166	-8.019	0	-10.055	-19.414	1.312	0	0
6	0	-14.146	13.628	-11.026	-22.273	0	-7.03	0
	0.307	-10.286	7.473	0	-1.76	4.864	0	0
	0.614	-8.506	4.322	0	-3.146	7.727	0	0
	0.921	-7.438	3.461	0	-4.675	10.047	0	0
	1.228	-6.376	3.461	0	-6.325	11.651	0	0
	1.535	-5.313	3.461	0	-8.075	12.395	0	0
	1.842	-4.25	3.461	0	-9.902	12.159	0	0
	2.149	-3.188	3.461	0	-11.784	10.853	0	0
	2.456	-2.125	3.461	0	-13.7	8.412	0	0
	2.763	-1.063	3.461	0	-15.627	4.798	0	0
	3.07	0	3.461	-17.526	-17.526	0	0	0

Support    React. Pos    React. Negative

1	1.2	-21.398
2	1.905	-32.859
3	3.142	-31.203
4	2.013	-31.118
5	2.255	-29.701
6	2.822	-25.474
7	3.221	-17.545

Id Group 6, Ohio 3F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shez	Corr. Shez	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	25.878	-1.874	25.878	0	0	0
	0.617	13.304	21.562	0	21.562	13.304	0	0
	1.234	21.529	17.447	-3.044	17.447	21.529	0	0
	1.851	25.265	13.649	-6.841	13.649	25.265	0	0
	2.468	25.864	10.48	-10.01	10.48	25.864	0	0
	3.085	25.79	8.36	-12.13	8.36	25.79	0	0
	3.702	23.511	6.351	-14.139	6.351	23.511	0	0
	4.319	20.15	3.152	-17.338	3.418	14.761	0	0
	4.936	13.793	0	-21.581	2.18	10.762	0	0
	5.553	6.153	1.108	-13.355	1.108	6.153	0	0
2	0	3.073	0.498	-2.468	27.511	0	-7.678	0
	0.621	5.226	12.661	-1.802	23.779	4.185	0	0
	1.242	13.098	19.46	-1.03	19.853	13.096	0	0
	1.863	18.612	15.953	-4.537	17.408	10.077	0	0
	2.484	20.699	12.26	-8.23	14.769	15.618	0	0
	3.105	19.726	8.891	-11.599	11.906	19.538	0	0
	3.726	20.937	8.624	-11.866	8.624	20.937	0	0
	4.347	19.208	4.982	-15.508	4.982	19.208	0	0
	4.968	13.976	1.103	-19.387	3.571	8.951	0	0
	5.589	6.429	1.476	-12.988	3.008	2.081	0	0
3	0	3.949	3.008	-0.807	27.568	0	-8.138	0
	0.621	7.526	12.707	-1.757	23.859	3.6	0	0
	1.242	14.368	19.103	-1.387	19.932	12.512	0	0
	1.863	19.375	15.274	-5.216	17.13	10.913	0	0
	2.484	20.971	11.72	-8.771	14.65	15.883	0	0
	3.105	19.674	11.376	-9.114	11.876	19.51	0	0
	3.726	20.746	8.661	-11.829	8.661	20.746	0	0
	4.347	18.952	5.055	-15.435	5.055	18.952	0	0
	4.968	13.707	1.184	-19.306	2.805	10.419	0	0
	5.589	6.091	1.418	-13.045	2.473	1.72	0	0
4	0	3.256	2.473	-0.672	27.257	0	-7.757	0
	0.621	6.453	12.94	-1.523	23.447	3.846	0	0
	1.242	14.045	19.064	-1.426	19.492	12.502	0	0
	1.863	19.095	15.237	-5.254	17.1	10.771	0	0
	2.484	20.775	11.706	-8.784	14.671	15.938	0	0
	3.105	19.571	8.595	-11.895	11.754	19.293	0	0
	3.726	20.106	8.404	-12.086	8.404	20.106	0	0
	4.347	17.793	4.684	-15.806	4.684	17.793	0	0
	4.968	12.017	0.733	-19.757	2.603	0.322	0	0
	5.589	4.911	1.721	-12.743	2.603	1.938	0	0
5	0	3.554	2.603	-0.821	25.486	0	-5.29	0
	0.574	6.327	21.373	0	21.829	4.616	0	0
	1.148	13.417	17.628	-2.863	19.444	3.559	0	0

	1.722	17.513	14.111	-6.38	17.21	9.333	0	0
	2.296	18.911	11.003	-9.487	14.623	13.781	0	0
	2.87	18.192	8.352	-12.139	11.68	16.471	0	0
	3.444	17.189	8.129	-12.362	8.43	16.923	0	0
	4.018	14.886	4.529	-15.961	4.919	14.764	0	0
	4.592	9.772	1.222	-19.268	3.189	9.672	0	0
	5.166	5.646	2.052	-18.438	3.033	2.537	0	0
6	0	4.277	3.033	-1.393	23.198	0	-8.377	0
	0.307	5.538	18.486	-2.004	22.239	0	-4.833	0
	0.614	9.017	16.819	-3.671	21.009	0	-1.275	0
	0.921	11.85	14.976	-5.514	19.524	2.076	0	0
	1.228	13.829	12.983	-7.508	17.79	4.973	0	0
	1.535	14.774	10.865	-9.625	15.815	7.177	0	0
	1.842	14.54	8.65	-11.84	13.605	8.455	0	0
	2.149	13.011	6.363	-14.127	11.189	8.566	0	0
	2.456	10.107	4.03	-16.461	8.607	7.296	0	0
	2.763	5.776	1.676	-18.814	5.823	4.503	0	0
	3.07	0	4.235	-21.137	4.235	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	25.878	-1.874	-1.874	0	0	0
	0.617	-1.156	0	-1.874	-3.247	10.639	0	0
	1.234	-2.312	0	-1.874	-5.56	18.424	0	0
	1.851	-3.468	0	-1.874	-7.816	23.46	0	0
	2.468	-4.625	0	-1.874	-10.459	24.758	0	0
	3.085	-5.781	0	-1.874	-13.374	21.953	0	0
	3.702	-6.937	0	-1.874	-15.858	17.146	0	0
	4.319	-8.093	0	-1.874	-17.92	11.1	0	0
	4.936	-9.249	0	-1.874	-21.888	12.277	0	0
	5.553	-12.208	0	-15.858	-25.825	2.196	0	0
2	0	-22.355	17.408	-17.016	-29.35	0	-10.455	0
	0.621	-12.865	3.008	0	-2.468	1.54	0	0
	1.242	-10.996	3.008	0	-2.708	9.184	0	0
	1.863	-10.068	1.487	0	-4.885	18.397	0	0
	2.484	-9.145	1.487	0	-8.508	20.354	0	0
	3.105	-8.224	1.478	0	-11.793	19.364	0	0
	3.726	-8.103	0	-0.514	-14.706	15.982	0	0
	4.347	-8.422	0	-0.514	-17.186	10.937	0	0
	4.968	-9.187	0	-2.468	-19.79	12.475	0	0
	5.589	-11.432	0	-15.155	-23.693	3.671	0	0
3	0	-21.081	15.991	-17.186	-27.402	0	-7.951	0
	0.621	-11.419	14.886	0	-2.388	1.64	0	0
	1.242	-9.033	2.473	0	-3.105	11.49	0	0
	1.863	-8.358	0.941	0	-5.216	19.375	0	0
	2.484	-7.774	0.941	0	-8.771	20.971	0	0
	3.105	-7.19	0.941	0	-11.929	19.609	0	0
	3.726	-7.63	0	-0.811	-14.648	15.939	0	0
	4.347	-8.134	0	-0.811	-17.169	10.818	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	4.968	-8.742	0	-2.388	-20.148	12.415	0	0
	5.589	-11.351	0	-14.878	-24.04	3.4	0	0
4	0	-21.172	16.78	-16.449	-27.702	0	-8.368	0
	0.621	-11.395	14.671	0	-1.832	1.266	0	0
	1.242	-9.376	2.603	0	-2.976	10.877	0	0
	1.863	-8.062	1.15	0	-5.254	19.095	0	0
	2.484	-7.348	1.15	0	-8.784	20.775	0	0
	3.105	-6.634	1.15	0	-11.895	19.571	0	0
	3.726	-6.222	0	-0.263	-14.546	16.16	0	0
	4.347	-6.386	0	-0.263	-16.961	11.438	0	0
	4.968	-6.698	0	-1.832	-20.184	11.938	0	0
	5.589	-10.939	0	-14.546	-24.08	2.937	0	0
5	0	-20.304	17.21	-15.377	-27.73	0	-8.719	0
	0.574	-11.4	14.623	0	-1.674	6.308	0	0
	1.148	-9.649	3.033	0	-3.211	10.379	0	0
	1.722	-7.908	3.033	0	-6.38	17.513	0	0
	2.296	-6.167	3.033	0	-9.487	18.911	0	0
	2.87	-4.773	2.179	0	-12.139	18.192	0	0
	3.444	-3.851	0.848	0	-14.327	15.98	0	0
	4.018	-3.409	0.752	0	-16.158	12.956	0	0
	4.592	-3.439	0	-1.007	-19.726	9.652	0	0
	5.166	-9.679	0	-12.139	-23.467	1.681	0	0
6	0	-17.104	16.524	-13.337	-26.941	0	-8.388	0
	0.307	-12.428	13.605	0	-2.004	5.538	0	0
	0.614	-10.402	4.235	0	-3.671	9.017	0	0
	0.921	-9.101	4.235	0	-5.514	11.85	0	0
	1.228	-7.801	4.235	0	-7.508	13.829	0	0
	1.535	-6.501	4.235	0	-9.625	14.774	0	0
	1.842	-5.201	4.235	0	-11.84	14.54	0	0
	2.149	-3.901	4.235	0	-14.127	13.011	0	0
	2.456	-2.6	4.235	0	-16.461	10.107	0	0
	2.763	-1.3	4.235	0	-18.814	5.776	0	0
	3.07	0	4.235	-21.137	-21.137	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.874	-25.922
2	2.966	-34.512
3	3.815	-33.219
4	3.146	-33.261
5	3.424	-32.597
6	4.426	-30.808
7	4.235	-21.16

Id Group 5 Ohio 2F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	24.075	-1.922	24.075	0	0	0
	0.617	12.993	21.058	-3.048	21.058	12.993	0	0
	1.234	22.272	18.048	-6.058	18.048	22.272	0	0
	1.851	27.98	15.116	-8.99	15.116	27.98	0	0
	2.468	30.408	12.321	-11.785	12.321	30.408	0	0
	3.085	30.164	9.778	-14.328	9.778	30.164	0	0
	3.702	27.334	7.383	-16.723	7.383	27.334	0	0
	4.319	22.387	5.183	-18.923	5.183	22.387	0	0
	4.936	15.906	3.222	-20.884	3.222	15.906	0	0
	5.553	8.584	1.546	-22.56	1.546	8.584	0	0
2	0	3.174	0.514	-2.549	24.09	0	-0.07	0
	0.621	8.46	21.504	-2.602	22.243	7.998	0	0
	1.242	15.306	19.52	-4.586	19.988	15.305	0	0
	1.863	21.072	17.443	-6.663	17.443	21.072	0	0
	2.484	24.73	14.729	-9.377	14.729	24.73	0	0
	3.105	26.193	12.066	-12.04	12.066	26.193	0	0
	3.726	25.135	9.357	-14.749	9.357	25.135	0	0
	4.347	21.629	6.712	-17.394	6.72	20.422	0	0
	4.968	16.025	4.24	-19.866	4.627	14.825	0	0
	5.589	8.946	2.053	-22.053	3.116	2.155	0	0
3	0	4.089	3.116	-0.836	23.733	1.677	0	0
	0.621	9.379	21.918	-2.188	21.918	9.379	0	0
	1.242	16.348	19.699	-4.407	19.699	16.348	0	0
	1.863	21.78	17.202	-6.904	17.398	20.474	0	0
	2.484	25.08	14.541	-9.565	14.886	24.32	0	0
	3.105	25.928	11.828	-12.278	12.201	25.87	0	0
	3.726	24.884	9.455	-14.651	9.455	24.884	0	0
	4.347	21.412	6.765	-17.341	6.765	21.412	0	0
	4.968	15.795	4.246	-19.86	4.458	14.787	0	0
	5.589	8.663	2.016	-22.09	2.638	1.834	0	0
4	0	3.472	2.638	-0.717	23.81	1.285	0	0
	0.621	9.044	21.972	-2.134	21.972	9.044	0	0
	1.242	16.074	19.717	-4.389	19.854	14.803	0	0
	1.863	21.542	17.179	-6.927	17.505	20.493	0	0
	2.484	24.838	14.476	-9.63	14.868	24.257	0	0
	3.105	25.647	11.727	-12.379	12.057	25.572	0	0
	3.726	24.235	9.201	-14.905	9.201	24.235	0	0
	4.347	20.359	6.427	-17.679	6.561	20.018	0	0
	4.968	14.412	4.343	-19.763	4.343	14.412	0	0
	5.589	7.889	2.471	-21.635	2.642	1.967	0	0
5	0	3.607	2.642	-0.833	24.089	0	-0.065	0
	0.574	8.74	21.788	-2.318	22.168	7.313	0	0
	1.148	15.259	19.395	-4.711	19.808	13.947	0	0



	1.722	20.142	16.734	-7.372	17.145	19.07	0	0
	2.296	22.871	13.929	-10.177	14.298	22.122	0	0
	2.87	23.218	11.11	-12.996	11.385	22.816	0	0
	3.444	21.25	8.403	-15.703	8.527	21.141	0	0
	4.018	17.353	5.84	-18.266	5.935	17.324	0	0
	4.592	12.083	3.816	-20.29	3.816	12.083	0	0
	5.166	6.409	2.135	-21.971	3.106	2.598	0	0
6	0	4.381	3.106	-1.427	24.091	0	-0.028	0
	0.307	5.926	21.961	-2.145	22.48	4.494	0	0
	0.614	10.021	20.026	-4.08	20.605	8.597	0	0
	0.921	13.382	17.879	-6.227	18.511	12.023	0	0
	1.228	15.758	15.551	-8.555	16.225	14.518	0	0
	1.535	16.938	13.071	-11.035	13.773	15.862	0	0
	1.842	16.745	10.47	-13.636	11.183	15.869	0	0
	2.149	15.039	7.777	-16.329	8.484	14.388	0	0
	2.456	11.718	5.021	-19.085	5.702	11.3	0	0
	2.763	6.715	2.233	-21.873	4.822	0	-1.48	0
	3.07	0	4.822	-24.637	4.822	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	24.075	-1.922	-1.922	0	0	0
	0.617	-1.186	0	-1.922	-3.595	12.656	0	0
	1.234	-2.371	0	-1.922	-6.4	21.849	0	0
	1.851	-3.557	0	-1.922	-9.135	27.711	0	0
	2.468	-4.743	0	-1.922	-11.806	30.356	0	0
	3.085	-5.928	0	-1.922	-14.468	29.733	0	0
	3.702	-7.114	0	-1.922	-16.937	26.541	0	0
	4.319	-8.3	0	-1.922	-19.173	21.305	0	0
	4.936	-9.486	0	-1.922	-21.139	14.643	0	0
	5.553	-10.671	0	-1.922	-22.797	7.271	0	0
2	0	-15.258	3.116	-16.937	-24.095	0	-0.079	0
	0.621	-13.323	3.116	0	-2.602	8.46	0	0
	1.242	-11.407	2.098	0	-4.586	15.306	0	0
	1.863	-10.109	2.055	0	-6.867	20.946	0	0
	2.484	-8.833	2.055	0	-9.397	24.705	0	0
	3.105	-7.556	2.055	0	-12.22	25.858	0	0
	3.726	-7.857	0	-1.035	-15.029	24.439	0	0
	4.347	-8.557	0	-1.333	-17.394	21.629	0	0
	4.968	-9.49	0	-2.549	-19.866	16.025	0	0
	5.589	-11.073	0	-2.549	-22.053	8.946	0	0
3	0	-12.91	2.638	-15.491	-23.831	1.215	0	0
	0.621	-11.272	2.638	0	-2.585	1.775	0	0
	1.242	-9.634	2.638	0	-4.45	14.849	0	0
	1.863	-8.576	1.57	0	-6.904	21.78	0	0
	2.484	-7.627	1.321	0	-9.565	25.08	0	0
	3.105	-6.806	1.321	0	-12.278	25.928	0	0
	3.726	-7.527	0	-1.232	-14.93	24.288	0	0
	4.347	-8.372	0	-1.475	-17.414	20.405	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	4.968	-9.464	0	-2.585	-19.86	15.795	0	0
	5.589	-11.069	0	-2.585	-22.09	8.663	0	0
4	0	-12.798	2.642	-14.93	-23.899	0.864	0	0
	0.621	-11.157	2.642	0	-2.266	7.965	0	0
	1.242	-9.517	2.642	0	-4.389	16.074	0	0
	1.863	-8.387	1.675	0	-6.927	21.542	0	0
	2.484	-7.407	1.541	0	-9.63	24.838	0	0
	3.105	-6.45	1.541	0	-12.379	25.647	0	0
	3.726	-6.691	0	-0.91	-15.055	23.948	0	0
	4.347	-7.256	0	-0.91	-17.679	20.359	0	0
	4.968	-7.991	0	-2.186	-20.243	14.375	0	0
	5.589	-9.349	0	-2.186	-22.403	7.317	0	0
5	0	-13.448	3.106	-15.055	-24.092	0	-0.079	0
	0.574	-11.665	3.106	0	-2.318	8.74	0	0
	1.148	-9.882	3.106	0	-4.711	15.259	0	0
	1.722	-8.377	2.586	0	-7.372	20.142	0	0
	2.296	-6.901	2.565	0	-10.177	22.871	0	0
	2.87	-5.435	2.474	0	-12.996	23.218	0	0
	3.444	-4.014	2.474	0	-15.703	21.25	0	0
	4.018	-3.822	0.281	0	-18.266	17.353	0	0
	4.592	-4.046	0	-1.185	-20.662	11.986	0	0
	5.166	-6.62	0	-12.996	-22.648	5.842	0	0
6	0	-14.804	4.822	-15.703	-24.094	0	-0.086	0
	0.307	-13.324	4.822	0	-2.145	5.926	0	0
	0.614	-11.843	4.822	0	-4.08	10.021	0	0
	0.921	-10.363	4.822	0	-6.227	13.382	0	0
	1.228	-8.882	4.822	0	-8.555	15.758	0	0
	1.535	-7.402	4.822	0	-11.035	16.938	0	0
	1.842	-5.922	4.822	0	-13.636	16.745	0	0
	2.149	-4.441	4.822	0	-16.329	15.039	0	0
	2.456	-2.961	4.822	0	-19.085	11.718	0	0
	2.763	-1.48	4.822	0	-21.873	6.715	0	0
	3.07	0	4.822	-24.637	-24.637	0	0	0

Support    Reac. Pos   Reac. Negative

1	1.922	-24.106
2	3.064	-24.184
3	3.951	-22.865
4	3.355	-23.233
5	3.475	-24.11
6	4.533	-24.98
7	4.822	-24.665

Id Group 3, HS-20 Truck Operating: 1.3\*1.0\*(Truck+IM)\*DF  
 Type Combination

Maximum table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	39.288	-3.225	39.288	0	0	0
	0.617	21.3	34.522	-4.048	34.522	21.3	0	0
	1.234	36.625	29.68	-8.89	29.68	36.625	0	0
	1.851	46.077	24.893	-13.677	24.893	46.077	0	0
	2.468	49.961	20.244	-18.326	20.244	49.961	0	0
	3.085	48.793	15.816	-22.753	15.816	48.793	0	0
	3.702	43.283	11.692	-26.878	11.692	43.283	0	0
	4.319	34.348	7.953	-30.617	7.953	34.348	0	0
	4.936	23.428	4.746	-33.823	4.746	23.428	0	0
	5.553	11.634	2.095	-36.475	2.095	11.634	0	0
2	0	5.25	0.851	-4.216	39.529	0	-1.339	0
	0.621	12.797	35.589	-2.981	36.667	12.124	0	0
	1.242	24.487	31.981	-6.588	33.031	24.484	0	0
	1.863	34.289	28.837	-9.733	28.837	34.289	0	0
	2.484	40.446	24.275	-14.294	24.275	40.446	0	0
	3.105	42.338	19.537	-19.033	19.537	42.338	0	0
	3.726	39.82	14.812	-23.757	14.812	39.82	0	0
	4.347	33.222	10.292	-28.277	10.292	33.222	0	0
	4.968	23.639	6.247	-32.323	6.247	23.639	0	0
	5.589	12.16	2.788	-35.781	4.985	3.448	0	0
3	0	6.792	3.513	-3.05	39.437	0	-1.285	0
	0.621	12.244	35.716	-2.854	36.656	11.598	0	0
	1.242	23.711	32.188	-6.382	33.059	23.653	0	0
	1.863	33.451	28.198	-10.372	28.874	33.336	0	0
	2.484	40.18	23.437	-15.132	24.304	39.485	0	0
	3.105	42.453	18.536	-20.033	19.553	41.449	0	0
	3.726	40.111	13.694	-24.876	14.824	39.079	0	0
	4.347	33.516	9.118	-29.451	10.321	32.732	0	0
	4.968	23.501	5.004	-33.565	6.23	23.208	0	0
	5.589	11.641	2.707	-35.862	4.215	2.93	0	0
4	0	6.205	3.426	-2.57	38.972	0	-0.957	0
	0.621	12.126	35.838	-2.732	35.953	11.237	0	0
	1.242	23.661	32.119	-6.451	32.214	23.318	0	0
	1.863	33.084	27.95	-10.62	28.042	32.808	0	0
	2.484	39.391	23.309	-15.26	23.633	38.628	0	0
	3.105	41.502	18.495	-20.074	19.065	40.51	0	0
	3.726	39.179	13.711	-24.858	14.516	38.279	0	0
	4.347	32.694	9.162	-29.407	10.159	32.198	0	0
	4.968	22.963	6.17	-32.399	6.17	22.963	0	0
	5.589	11.708	2.725	-35.844	4.508	3.357	0	0
5	0	6.805	4.099	-2.607	38.869	0	-1.518	0
	0.574	11.702	35.468	-3.101	35.721	10.751	0	0
	1.148	22.316	31.692	-6.877	31.822	21.903	0	0

	1.722	30.642	27.382	-11.188	27.432	30.512	0	0
	2.296	35.969	22.594	-15.975	22.877	35.394	0	0
	2.87	37.298	17.674	-20.895	18.217	36.506	0	0
	3.444	34.539	12.836	-25.734	13.642	33.825	0	0
	4.018	28.092	8.295	-30.274	9.344	27.765	0	0
	4.592	19.177	5.51	-33.059	5.51	19.177	0	0
	5.166	9.347	2.332	-36.237	5.225	4.37	0	0
6	0	7.37	5.225	-2.401	39.161	0	-1.934	0
	0.307	7.19	35.967	-2.602	36.557	5.56	0	0
	0.614	13.756	32.969	-5.601	33.513	12.419	0	0
	0.921	19.237	29.618	-8.952	30.095	18.211	0	0
	1.228	23.228	25.959	-12.61	26.346	22.517	0	0
	1.535	25.379	22.036	-16.533	22.306	24.965	0	0
	1.842	25.391	17.893	-20.676	18.019	25.236	0	0
	2.149	23.075	13.515	-25.055	13.574	23.021	0	0
	2.456	18.24	8.864	-29.706	9.123	18.08	0	0
	2.763	10.581	4.103	-34.467	7.995	0	-2.455	0
	3.07	0	7.995	-39.237	7.995	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	39.288	-3.225	-3.225	0	0	0
	0.617	-1.99	0	-3.225	-4.877	20.788	0	0
	1.234	-3.98	0	-3.225	-9.692	35.635	0	0
	1.851	-5.97	0	-3.225	-14.384	44.768	0	0
	2.468	-7.96	0	-3.225	-18.89	48.569	0	0
	3.085	-9.95	0	-3.225	-23.149	47.573	0	0
	3.702	-11.941	0	-3.225	-27.098	42.466	0	0
	4.319	-13.931	0	-3.225	-30.677	34.087	0	0
	4.936	-15.921	0	-3.225	-33.889	23.102	0	0
	5.553	-17.911	0	-3.225	-36.624	10.801	0	0
2	0	-24.413	4.985	-27.098	-38.75	0	-1.351	0
	0.621	-21.317	4.985	0	-4.216	2.632	0	0
	1.242	-18.238	3.569	0	-6.588	24.487	0	0
	1.863	-16.062	3.382	0	-10.661	33.715	0	0
	2.484	-14.211	2.428	0	-15.036	39.527	0	0
	3.105	-13.03	0.682	0	-19.552	41.373	0	0
	3.726	-12.925	0	-0.877	-24.046	39.103	0	0
	4.347	-13.712	0	-2.322	-28.357	32.973	0	0
	4.968	-15.719	0	-3.907	-32.403	23.343	0	0
	5.589	-18.314	0	-4.216	-35.963	11.372	0	0
3	0	-20.932	24.651	-4.216	-38.78	0	-1.283	0
	0.621	-18.01	4.215	0	-4.095	2.812	0	0
	1.242	-15.393	4.215	0	-6.382	23.711	0	0
	1.863	-13.384	3.118	0	-10.552	33.351	0	0
	2.484	-11.838	1.981	0	-15.262	40.027	0	0
	3.105	-11.089	0	-0.264	-20.109	42.317	0	0
	3.726	-11.67	0	-1.713	-24.902	40.046	0	0
	4.347	-13.097	0	-2.905	-29.46	33.49	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	4.968	-14.99	0	-4.095	-33.592	23.403	0	0
	5.589	-17.533	0	-4.095	-37.084	11.118	0	0
4	0	-21.84	4.508	-27.596	-39.728	0	-1.761	0
	0.621	-19.04	4.508	0	-3.497	2.417	0	0
	1.242	-16.241	4.508	0	-6.451	23.661	0	0
	1.863	-13.478	4.402	0	-10.62	33.084	0	0
	2.484	-10.751	2.861	0	-15.26	39.391	0	0
	3.105	-9.374	0.821	0	-20.074	41.502	0	0
	3.726	-9.704	0	-1.605	-24.858	39.179	0	0
	4.347	-11.06	0	-2.602	-29.407	32.694	0	0
	4.968	-12.813	0	-3.32	-33.518	22.825	0	0
	5.589	-14.958	0	-3.497	-36.986	10.857	0	0
5	0	-22.623	5.225	-27.376	-39.585	0	-1.545	0
	0.574	-19.623	5.225	0	-3.101	11.702	0	0
	1.148	-16.624	5.225	0	-6.877	22.316	0	0
	1.722	-13.625	5.225	0	-11.188	30.642	0	0
	2.296	-10.626	5.225	0	-15.975	35.969	0	0
	2.87	-7.626	5.225	0	-20.895	37.298	0	0
	3.444	-4.627	5.225	0	-25.734	34.539	0	0
	4.018	-5.385	0	-1.896	-30.274	28.092	0	0
	4.592	-6.694	0	-2.737	-34.295	18.853	0	0
	5.166	-10.678	0	-20.895	-37.579	8.225	0	0
6	0	-24.545	7.995	-25.734	-39.891	0	-2.027	0
	0.307	-22.091	7.995	0	-2.602	7.19	0	0
	0.614	-19.636	7.995	0	-5.601	13.756	0	0
	0.921	-17.182	7.995	0	-8.952	19.237	0	0
	1.228	-14.727	7.995	0	-12.61	23.228	0	0
	1.535	-12.273	7.995	0	-16.533	25.379	0	0
	1.842	-9.818	7.995	0	-20.676	25.391	0	0
	2.149	-7.364	7.995	0	-25.055	23.075	0	0
	2.456	-4.909	7.995	0	-29.706	18.24	0	0
	2.763	-2.455	7.995	0	-34.467	10.581	0	0
	3.07	0	7.995	-39.237	-39.237	0	0	0

Support	Reac. Pos	Reac. Negative
---------	-----------	----------------

1	3.225	-39.335
2	5.067	-39.85
3	6.562	-39.695
4	5.995	-40.177
5	6.706	-40.107
6	7.626	-41.927
7	7.995	-39.285

Id Group I, HS-20 Truck Inventory: 1.3\*1.67\*(truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	65.612	-5.387	65.612	0	0	0
	0.617	35.572	57.653	-6.76	57.653	35.572	0	0
	1.234	61.166	49.567	-14.846	49.567	61.166	0	0
	1.851	76.95	41.572	-22.841	41.572	76.95	0	0
	2.468	83.437	33.807	-30.605	33.807	83.437	0	0.01
	3.085	81.486	26.414	-37.999	26.414	81.486	0	0.01
	3.702	72.284	19.526	-44.887	19.526	72.284	0	0
	4.319	57.363	13.282	-51.131	13.282	57.363	0	0
	4.936	39.126	7.927	-56.486	7.927	39.126	0	0
	5.553	19.428	3.499	-60.914	3.499	19.428	0	0
2	0	8.767	1.421	-7.041	66.016	0	-2.237	0
	0.621	21.371	59.435	-4.978	61.235	20.247	0	0
	1.242	40.895	53.41	-11.002	55.163	40.889	0	0
	1.863	57.263	48.159	-16.254	48.159	57.263	0	0
	2.484	67.546	40.54	-23.872	40.54	67.546	0	0
	3.105	70.705	32.627	-31.786	32.627	70.705	0	0
	3.726	66.5	24.737	-39.676	24.737	66.5	0	0
	4.347	55.481	17.189	-47.224	17.189	55.481	0	0
	4.968	39.478	10.432	-53.981	10.432	39.478	0	0
	5.589	20.308	4.657	-59.756	8.325	5.758	0	0
3	0	11.343	5.866	-5.093	65.861	0	-2.146	0
	0.621	20.447	59.647	-4.766	61.216	19.37	0	0
	1.242	39.598	53.755	-10.658	55.21	39.502	0	0
	1.863	55.864	47.091	-17.322	48.221	55.672	0	0
	2.484	67.102	39.141	-25.272	40.589	65.942	0	0
	3.105	70.898	30.956	-33.456	32.654	69.221	0	0
	3.726	66.987	22.869	-41.543	24.757	65.263	0	0
	4.347	55.974	15.228	-49.185	17.237	54.664	0	0
	4.968	39.248	8.357	-56.056	10.405	38.759	0	0
	5.589	19.442	4.521	-59.892	7.039	4.894	0	0
4	0	10.363	5.721	-4.291	65.085	0	-1.598	0
	0.621	20.251	59.851	-4.562	60.043	18.767	0	0
	1.242	39.514	53.639	-10.774	53.798	38.941	0	0
	1.863	55.251	46.678	-17.735	46.832	54.791	0	0
	2.484	65.785	38.928	-25.485	39.468	64.511	0	0
	3.105	69.31	30.888	-33.525	31.84	67.653	0	0
	3.726	65.43	22.899	-41.514	24.242	63.928	0	0
	4.347	54.6	15.301	-49.112	16.965	53.772	0	0
	4.968	38.349	10.304	-54.108	10.304	38.349	0	0
	5.589	19.552	4.552	-59.861	7.529	5.606	0	0
5	0	11.365	6.846	-4.354	64.913	0	-2.536	0
	0.574	19.542	59.233	-5.179	59.656	17.955	0	0
	1.148	37.268	52.927	-11.485	53.144	36.579	0	0

	1.722	51.173	45.729	-18.684	45.812	50.955	0	0
	2.296	60.069	37.733	-26.68	38.205	59.11	0	0
	2.87	62.29	29.517	-34.896	30.423	60.967	0	0
	3.444	57.682	21.436	-42.976	22.783	56.489	0	0
	4.018	46.914	13.854	-50.559	15.604	46.369	0	0
	4.592	32.026	9.202	-55.211	9.202	32.026	0	0
	5.166	15.611	3.895	-60.518	8.726	7.299	0	0
6	0	12.308	8.726	-4.009	65.4	0	-3.229	0
	0.307	12.008	60.067	-4.346	61.052	9.286	0	0
	0.614	22.973	55.059	-9.354	55.968	20.739	0	0
	0.921	32.126	49.463	-14.949	50.26	30.414	0	0
	1.228	38.792	43.353	-21.06	43.998	37.604	0	0
	1.535	42.384	36.801	-27.611	37.252	41.692	0	0
	1.842	42.404	29.882	-34.531	30.092	42.146	0	0
	2.149	38.537	22.571	-41.842	22.669	38.446	0	0
	2.456	30.461	14.802	-49.61	15.235	30.195	0	0
	2.763	17.671	6.852	-57.561	13.352	0	-4.099	0
	3.07	0	13.352	-65.527	13.352	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	65.612	-5.387	-5.387	0	0	0
	0.617	-3.324	0	-5.387	-8.145	34.717	0	0
	1.234	-6.647	0	-5.387	-16.186	59.511	0	0
	1.851	-9.971	0	-5.387	-24.022	74.764	0	0
	2.468	-13.294	0	-5.387	-31.547	81.113	0	0
	3.085	-16.618	0	-5.387	-38.659	79.449	0	0
	3.702	-19.941	0	-5.387	-45.256	70.92	0	0
	4.319	-23.265	0	-5.387	-51.232	56.927	0	0
	4.936	-26.588	0	-5.387	-56.596	38.582	0	0
	5.553	-29.912	0	-5.387	-61.164	18.039	0	0
2	0	-40.77	8.325	-45.256	-64.714	0	-2.256	0
	0.621	-35.601	8.325	0	-7.041	4.395	0	0
	1.242	-30.458	5.961	0	-11.002	40.895	0	0
	1.863	-26.824	5.648	0	-17.804	56.306	0	0
	2.484	-23.733	4.055	0	-25.11	66.012	0	0
	3.105	-21.76	1.138	0	-32.652	69.094	0	0
	3.726	-21.585	0	-1.464	-40.158	65.304	0	0
	4.347	-22.9	0	-3.878	-47.358	55.066	0	0
	4.968	-26.251	0	-6.525	-54.114	38.984	0	0
	5.589	-30.584	0	-7.041	-60.059	18.992	0	0
3	0	-34.957	41.169	-7.041	-64.764	0	-2.143	0
	0.621	-30.078	7.039	0	-6.839	4.696	0	0
	1.242	-25.707	7.039	0	-10.658	39.598	0	0
	1.863	-22.352	5.208	0	-17.622	55.698	0	0
	2.484	-19.77	3.309	0	-25.488	66.847	0	0
	3.105	-18.52	0	-0.441	-33.583	70.671	0	0
	3.726	-19.489	0	-2.861	-41.588	66.879	0	0
	4.347	-21.873	0	-4.851	-49.2	55.929	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	4.968	-25.033	0	-6.839	-56.1	39.084	0	0
	5.589	-29.28	0	-6.839	-61.932	18.568	0	0
4	0	-36.474	7.529	-46.086	-66.347	0	-2.941	0
	0.621	-31.798	7.529	0	-5.841	4.036	0	0
	1.242	-27.123	7.529	0	-10.774	39.514	0	0
	1.863	-22.51	7.352	0	-17.735	55.251	0	0
	2.484	-17.954	4.778	0	-25.485	65.785	0	0
	3.105	-15.654	1.371	0	-33.525	69.31	0	0
	3.726	-16.205	0	-2.681	-41.514	65.43	0	0
	4.347	-18.47	0	-4.346	-49.112	54.6	0	0
	4.968	-21.399	0	-5.545	-55.976	38.118	0	0
	5.589	-24.981	0	-5.841	-61.768	18.132	0	0
5	0	-37.781	8.726	-45.719	-66.109	0	-2.58	0
	0.574	-32.772	8.726	0	-5.179	19.542	0	0
	1.148	-27.763	8.726	0	-11.485	37.268	0	0
	1.722	-22.754	8.726	0	-18.684	51.173	0	0
	2.296	-17.745	8.726	0	-26.68	60.069	0	0
	2.87	-12.737	8.726	0	-34.896	62.29	0	0
	3.444	-7.728	8.726	0	-42.976	57.682	0	0
	4.018	-8.993	0	-3.166	-50.559	46.914	0	0
	4.592	-11.179	0	-4.571	-57.275	31.485	0	0
	5.166	-17.832	0	-34.896	-62.759	13.736	0	0
6	0	-40.992	13.352	-42.976	-66.62	0	-3.385	0
	0.307	-36.892	13.352	0	-4.346	12.008	0	0
	0.614	-32.793	13.352	0	-9.354	22.973	0	0
	0.921	-28.694	13.352	0	-14.949	32.126	0	0
	1.228	-24.595	13.352	0	-21.06	38.792	0	0
	1.535	-20.496	13.352	0	-27.611	42.384	0	0
	1.842	-16.397	13.352	0	-34.531	42.404	0	0
	2.149	-12.297	13.352	0	-41.842	38.537	0	0
	2.456	-8.198	13.352	0	-49.61	30.461	0	0
	2.763	-4.099	13.352	0	-57.561	17.671	0	0
	3.07	0	13.352	-65.527	-65.527	0	0	0

Support    React. Pos    React. Negative

1	5.387	-65.691
2	8.462	-66.551
3	10.96	-66.293
4	10.012	-67.098
5	11.2	-66.98
6	12.735	-70.019
7	13.352	-65.608



Id Group 4, HS-20 Lane Operating: 1.3\*1.0(Lane+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kn	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	33.427	-2.747	33.427	0	0	0
	0.617	12.86	20.605	-1.091	29.058	17.929	0	0
	1.234	22.084	17.42	-4.275	24.76	30.554	0	0
	1.851	27.801	14.305	-7.39	20.621	38.169	0	0
	2.468	30.225	11.295	-10.401	16.689	41.189	0	0
	3.085	29.657	8.423	-13.272	13.013	40.144	0	0
	3.702	26.482	5.726	-15.97	9.638	35.679	0	0
	4.319	21.174	3.237	-18.459	6.611	28.553	0	0
	4.936	14.295	1.111	-20.584	3.977	19.633	0	0
	5.553	7.069	0.823	-20.872	1.781	9.893	0	0
2	0	3.264	0.529	-2.622	34.241	0	-3.207	0
	0.621	7.607	20.462	-1.234	31.312	8.417	-1.98	0
	1.242	14.663	19.199	-2.496	27.961	19.038	-0.858	0
	1.863	20.635	16.718	-4.977	24.28	27.28	-0.114	0
	2.484	24.39	13.779	-7.916	20.405	32.437	0	0
	3.105	25.615	10.76	-10.936	16.472	34.143	0	0
	3.726	24.228	7.753	-13.943	12.612	32.36	0	0
	4.347	20.373	4.849	-16.847	8.956	27.382	0	0
	4.968	14.448	2.616	-19.079	5.632	19.818	0	0
	5.589	7.656	1.269	-20.426	4.551	3.515	0	0
3	0	4.625	3.289	-1.18	34.588	0	-2.403	0
	0.621	7.742	20.443	-1.252	31.343	8.207	-1.741	0
	1.242	14.567	19.044	-2.652	28.054	18.608	-0.656	0
	1.863	20.445	16.751	-4.945	24.402	26.811	0	0
	2.484	24.204	13.814	-7.881	20.529	32.031	0	0
	3.105	25.467	10.784	-10.912	16.576	33.841	0	0
	3.726	24.118	7.755	-13.94	12.683	32.161	0	0
	4.347	20.28	4.823	-16.872	8.984	27.252	0	0
	4.968	14.347	2.591	-19.104	5.615	19.711	0	0
	5.589	7.523	1.202	-20.493	3.835	2.963	0	0
4	0	3.875	2.764	-0.98	34.461	0	-2.635	0
	0.621	7.602	20.517	-1.179	31.284	8.132	-1.806	0
	1.242	14.459	19.08	-2.616	27.963	18.482	-0.742	0
	1.863	20.272	16.643	-5.052	24.277	26.602	-0.055	0
	2.484	23.937	13.684	-8.012	20.373	31.707	0	0
	3.105	25.089	10.635	-11.06	16.397	33.383	0	0
	3.726	23.63	7.597	-14.098	12.492	31.572	0	0
	4.347	19.708	4.667	-17.028	8.799	26.573	0	0
	4.968	13.778	2.568	-19.128	5.458	19.029	0	0
	5.589	7.084	1.498	-20.197	3.816	2.963	0	0
5	0	3.814	2.746	-0.936	34.233	0	-2.499	0
	0.574	7.217	20.472	-1.224	30.936	7.787	-1.72	0
	1.148	13.644	18.877	-2.818	27.482	17.317	-0.814	0

	1.722	18.775	16.122	-5.573	23.68	24.564	-0.226	0
	2.296	21.792	13.117	-8.578	19.69	28.864	0	0
	2.87	22.433	10.053	-11.642	15.668	29.914	0	0
	3.444	20.687	7.037	-14.658	11.769	27.771	0	0
	4.018	16.785	4.177	-17.518	8.145	22.843	0	0
	4.592	11.392	2.431	-19.264	4.945	15.885	0	0
	5.166	5.704	1.337	-20.358	4.453	3.764	0	0
6	0	4.515	3.201	-1.471	33.624	0	-1.636	0
	0.307	4.636	20.61	-1.086	30.889	4.186	-1.656	0
	0.614	8.507	19.179	-2.516	28.24	9.934	-1.243	0
	0.921	11.748	17.057	-4.638	25.326	14.701	-0.929	0
	1.228	14.079	14.762	-6.933	22.182	18.173	-0.7	0
	1.535	15.302	12.319	-9.376	18.847	20.082	-0.538	0
	1.842	15.249	9.752	-11.944	15.358	20.205	-0.425	0
	2.149	13.783	7.085	-14.61	11.752	18.366	-0.339	0
	2.456	10.799	4.345	-17.351	8.066	14.434	-0.256	0
	2.763	6.22	1.555	-20.141	6.807	0	-2.053	0
	3.07	0	6.792	-32.561	6.792	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	33.427	-2.747	-2.747	0	0	0
	0.617	-1.297	0	-2.102	-4.247	16.862	-0.028	0
	1.234	-2.594	0	-2.102	-8.249	29.079	0	0
	1.851	-3.891	0	-2.102	-12.21	36.728	0	0
	2.468	-5.188	0	-2.102	-16.076	40.014	0	0
	3.085	-6.486	0	-2.102	-19.796	39.276	0	0
	3.702	-7.783	0	-2.102	-23.316	34.983	0	0
	4.319	-9.081	0	-2.102	-26.581	27.741	0	0
	4.936	-10.383	0	-2.223	-29.535	18.295	-0.74	0
	5.553	-17.052	0	-14.405	-32.124	7.53	-1.923	0
2	0	-27.911	18.895	-19.916	-34.607	0	-3.218	0
	0.621	-17.467	12.576	0	-3.657	2.348	0	0
	1.242	-11.716	3.811	0	-5.762	20.18	0	0
	1.863	-11.343	0.583	0	-9.177	27.758	0	0
	2.484	-10.981	0.583	0	-12.891	32.572	0	0
	3.105	-10.619	0.583	0	-16.775	34.095	0	0
	3.726	-10.257	0.583	0	-20.698	32.122	0	0
	4.347	-9.895	0.583	0	-24.526	26.773	-0.017	0
	4.968	-10.279	0	-2.837	-28.126	18.506	-0.7	0
	5.589	-15.855	0	-14.773	-31.359	8.117	-1.763	0
3	0	-26.22	18.531	-18.56	-34.495	0	-2.402	0
	0.621	-15.864	14.725	0	-3.772	3.036	0	0
	1.242	-9.936	4.427	0	-5.687	19.95	0	0
	1.863	-9.635	0.074	0	-9.067	27.459	0	0
	2.484	-9.589	0.074	0	-12.774	32.313	0	0
	3.105	-9.543	0.074	0	-16.67	33.925	0	0
	3.726	-9.497	0.074	0	-20.622	32.046	0	0
	4.347	-9.451	0.074	0	-24.488	26.767	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	4.968	-9.867	0	-2.874	-28.13	18.528	-0.647	0
	5.589	-15.707	0	-14.736	-31.403	8.123	-1.758	0
4	0	-26.077	18.411	-18.542	-34.479	0	-2.636	0
	0.621	-15.78	14.589	0	-3.194	2.582	0	0
	1.242	-10.565	3.015	0	-5.651	19.833	0	0
	1.863	-9.351	0.514	0	-9.068	27.334	0	0
	2.484	-9.032	0.514	0	-12.809	32.144	0	0
	3.105	-8.713	0.514	0	-16.734	33.688	0	0
	3.726	-8.394	0.514	0	-20.701	31.737	0	0
	4.347	-8.075	0.514	0	-24.567	26.421	0	0
	4.968	-8.325	0	-6.111	-28.186	18.227	-0.431	0
	5.589	-14.466	0	-14.8	-31.409	8.013	-1.5	0
5	0	-24.702	18.197	-18.242	-34.256	0	-2.517	0
	0.574	-15.298	11.856	0	-2.725	10.038	0	0
	1.148	-10.831	3.417	0	-5.849	18.728	0	0
	1.722	-8.969	2.059	0	-9.414	25.515	0	0
	2.296	-7.787	2.059	0	-13.269	29.614	0	0
	2.87	-6.605	2.059	0	-17.262	30.579	0	0
	3.444	-5.423	2.059	0	-21.239	28.319	0	0
	4.018	-4.242	2.059	0	-25.043	23.099	0	0
	4.592	-4.794	0	-7.849	-28.515	15.548	-0.034	0
	5.166	-10.988	0	-14.17	-31.496	6.663	-0.932	0
6	0	-20.213	20.783	-17.567	-33.995	0	-1.711	0
	0.307	-14.721	15.444	0	-2.311	6.386	0	0
	0.614	-12.845	5.23	0	-4.772	11.721	0	0
	0.921	-11.24	5.23	0	-7.539	16.202	0	0
	1.228	-9.634	5.23	0	-10.578	19.485	0	0
	1.535	-8.028	5.23	0	-13.855	21.268	0	0
	1.842	-6.423	5.23	0	-17.335	21.288	0	0
	2.149	-4.817	5.23	0	-20.985	19.327	0	0
	2.456	-3.211	5.23	0	-24.769	15.208	0	0
	2.763	-1.606	5.23	0	-28.652	8.796	0	0
	3.07	0	6.792	-32.561	-32.561	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.747	-33.467
2	4.374	-37.249
3	6.049	-36.873
4	5.084	-36.915
5	5.068	-36.635
6	6.481	-36.852
7	6.792	-32.561

Id Group 2, HS-20 Lane Inventory: 1.3\*1.67\*(Lane+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	55.824	-4.587	55.824	0	0	0
	0.617	21.477	34.411	-1.822	48.528	29.942	0	0
	1.234	36.881	29.093	-7.139	41.35	51.026	0	0
	1.851	46.429	23.891	-12.341	34.437	63.744	0	0
	2.468	50.477	18.863	-17.369	27.871	68.787	0	0
	3.085	49.528	14.067	-22.165	21.731	67.042	0	0
	3.702	44.227	9.562	-26.67	16.096	59.586	0	0
	4.319	35.362	5.405	-30.827	11.041	47.685	0	0
	4.936	23.873	1.856	-34.376	6.642	32.787	0	0
	5.553	11.805	1.375	-34.857	2.975	16.521	0	0
2	0	5.452	0.884	-4.378	57.184	0	-5.356	0
	0.621	12.705	34.172	-2.061	52.293	14.058	-3.307	0
	1.242	24.488	32.064	-4.168	46.696	31.794	-1.433	0
	1.863	34.461	27.92	-8.312	40.548	45.559	-0.19	0
	2.484	40.732	23.011	-13.221	34.078	54.172	0	0
	3.105	42.778	17.969	-18.263	27.509	57.02	0	0
	3.726	40.462	12.947	-23.285	21.062	54.043	0	0
	4.347	34.023	8.097	-28.135	14.956	45.729	0	0
	4.968	24.129	4.369	-31.863	9.405	33.097	0	0
	5.589	12.786	2.119	-34.113	7.601	5.87	0	0
3	0	7.724	5.493	-1.971	57.763	0	-4.013	0
	0.621	12.93	34.141	-2.092	52.343	13.706	-2.907	0
	1.242	24.327	31.804	-4.428	46.851	31.077	-1.096	0
	1.863	34.143	27.974	-8.258	40.752	44.775	0	0
	2.484	40.422	23.07	-13.162	34.284	53.493	0	0
	3.105	42.531	18.009	-18.223	27.683	56.516	0	0
	3.726	40.278	12.951	-23.281	21.18	53.711	0	0
	4.347	33.869	8.055	-28.177	15.004	45.512	0	0
	4.968	23.96	4.328	-31.904	9.378	32.918	0	0
	5.589	12.563	2.008	-34.224	6.404	4.948	0	0
4	0	6.471	4.616	-1.636	57.552	0	-4.401	0
	0.621	12.695	34.264	-1.969	52.245	13.58	-3.016	0
	1.242	24.147	31.864	-4.369	46.7	30.866	-1.24	0
	1.863	33.855	27.795	-8.438	40.544	44.426	-0.092	0
	2.484	39.975	22.852	-13.38	34.024	52.952	0	0
	3.105	41.899	17.762	-18.471	27.384	55.75	0	0
	3.726	39.463	12.687	-23.545	20.862	52.727	0	0
	4.347	32.913	7.795	-28.438	14.695	44.378	0	0
	4.968	23.01	4.288	-31.944	9.114	31.779	0	0
	5.589	11.831	2.502	-33.73	6.373	4.948	0	0
5	0	6.369	4.585	-1.563	57.171	0	-4.174	0
	0.574	12.053	34.189	-2.043	51.664	13.005	-2.873	0
	1.148	22.785	31.526	-4.706	45.896	28.92	-1.36	0

	1.722	31.356	26.925	-9.308	39.547	41.024	-0.378	0
	2.296	36.394	21.906	-14.326	32.884	48.204	0	0
	2.87	37.465	16.789	-19.443	26.167	49.957	0	0
	3.444	34.548	11.753	-24.48	19.655	46.378	0	0
	4.018	28.032	6.976	-29.257	13.602	38.149	0	0
	4.592	19.025	4.06	-32.172	8.259	26.529	0	0
	5.166	9.525	2.234	-33.999	7.437	6.287	0	0
6	0	7.54	5.346	-2.456	56.154	0	-2.733	0
	0.307	7.742	34.419	-1.813	51.585	6.99	-2.766	0
	0.614	14.207	32.03	-4.203	47.163	16.589	-2.076	0
	0.921	19.62	28.487	-7.746	42.295	24.552	-1.551	0
	1.228	23.513	24.654	-11.578	37.045	30.35	-1.168	0
	1.535	25.554	20.573	-15.659	31.476	33.538	-0.899	0
	1.842	25.466	16.286	-19.947	25.649	33.742	-0.711	0
	2.149	23.018	11.833	-24.4	19.627	30.671	-0.566	0
	2.456	18.034	7.256	-28.976	13.47	24.106	-0.427	0
	2.763	10.387	2.596	-33.636	11.367	0	-3.429	0
	3.07	0	11.344	-54.378	11.344	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	55.824	-4.587	-4.587	0	0	0
	0.617	-2.166	0	-3.511	-7.092	28.16	-0.048	0
	1.234	-4.332	0	-3.511	-13.776	48.563	0	0
	1.851	-6.499	0	-3.511	-20.391	61.337	0	0
	2.468	-8.665	0	-3.511	-26.848	66.826	0	0
	3.085	-10.831	0	-3.511	-33.061	65.593	0	0
	3.702	-12.998	0	-3.511	-38.938	58.423	0	0
	4.319	-15.165	0	-3.511	-44.391	46.329	0	0
	4.936	-17.341	0	-3.712	-49.325	30.554	-1.236	0
	5.553	-28.477	0	-24.058	-53.648	12.575	-3.211	0
2	0	-46.612	31.555	-33.26	-57.795	0	-5.375	0
	0.621	-29.17	21.003	0	-6.107	3.921	0	0
	1.242	-19.565	6.365	0	-9.622	33.701	0	0
	1.863	-18.944	0.973	0	-15.326	46.356	0	0
	2.484	-18.339	0.973	0	-21.529	54.397	0	0
	3.105	-17.735	0.973	0	-28.015	56.94	0	0
	3.726	-17.13	0.973	0	-34.566	53.644	0	0
	4.347	-16.526	0.973	0	-40.96	44.712	-0.029	0
	4.968	-17.166	0	-4.738	-46.971	30.906	-1.17	0
	5.589	-26.478	0	-24.672	-52.371	13.557	-2.944	0
3	0	-43.788	30.948	-30.996	-57.609	0	-4.012	0
	0.621	-26.494	24.591	0	-6.299	5.07	0	0
	1.242	-16.593	7.394	0	-9.497	33.317	0	0
	1.863	-16.09	0.124	0	-15.143	45.858	0	0
	2.484	-16.014	0.124	0	-21.332	53.964	0	0
	3.105	-15.937	0.124	0	-27.84	56.657	0	0
	3.726	-15.86	0.124	0	-34.439	53.519	0	0
	4.347	-15.783	0.124	0	-40.896	44.702	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	4.968	-16.478	0	-4.799	-46.978	30.942	-1.081	0
	5.589	-26.231	0	-24.61	-52.445	13.565	-2.936	0
4	0	-43.549	30.748	-30.965	-57.582	0	-4.402	0
	0.621	-26.354	24.365	0	-5.334	4.311	0	0
	1.242	-17.644	5.035	0	-9.438	33.121	0	0
	1.863	-15.617	0.858	0	-15.144	45.649	0	0
	2.484	-15.085	0.858	0	-21.391	53.682	0	0
	3.105	-14.552	0.858	0	-27.946	56.26	0	0
	3.726	-14.019	0.858	0	-34.572	53.003	0	0
	4.347	-13.486	0.858	0	-41.028	44.123	0	0
	4.968	-13.903	0	-10.205	-47.072	30.439	-0.72	0
	5.589	-24.159	0	-24.716	-52.455	13.381	-2.505	0
5	0	-41.253	30.389	-30.464	-57.208	0	-4.204	0
	0.574	-25.548	19.799	0	-4.55	16.765	0	0
	1.148	-18.088	5.706	0	-9.769	31.276	0	0
	1.722	-14.978	3.438	0	-15.722	42.612	0	0
	2.296	-13.004	3.438	0	-22.16	49.456	0	0
	2.87	-11.031	3.438	0	-28.828	51.068	0	0
	3.444	-9.057	3.438	0	-35.47	47.294	0	0
	4.018	-7.084	3.438	0	-41.823	38.576	0	0
	4.592	-8.006	0	-13.109	-47.622	25.965	-0.056	0
	5.166	-18.35	0	-23.664	-52.6	11.127	-1.556	0
6	0	-33.756	34.708	-29.338	-56.774	0	-2.858	0
	0.307	-24.585	25.792	0	-3.86	10.665	0	0
	0.614	-21.452	8.735	0	-7.97	19.575	0	0
	0.921	-18.771	8.735	0	-12.591	27.059	0	0
	1.228	-16.089	8.735	0	-17.666	32.541	0	0
	1.535	-13.408	8.735	0	-23.139	35.518	0	0
	1.842	-10.726	8.734	0	-28.951	35.552	0	0
	2.149	-8.044	8.734	0	-35.046	32.277	0	0
	2.456	-5.363	8.734	0	-41.365	25.398	0	0
	2.763	-2.681	8.734	0	-47.849	14.69	0	0
	3.07	0	11.344	-54.378	-54.378	0	0	0

Support    React. Pos    React. Negative

1	4.587	-55.891
2	7.304	-62.207
3	10.103	-61.579
4	8.49	-61.649
5	8.465	-61.182
6	10.824	-61.544
7	11.344	-54.378

Id Group 9, HS-15 Truck Fatigue: (truck+IM)\*DF  
 Type Combination

Maximum table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	19.756	-1.585	19.756	0	0	0
	0.617	10.674	17.3	-2.384	17.3	10.674	0	0
	1.234	18.312	14.84	-4.845	14.84	18.312	0	0
	1.851	23.015	12.434	-7.251	12.434	23.015	0	0
	2.468	24.966	10.116	-9.569	10.116	24.966	0	0
	3.085	24.436	7.921	-11.764	7.921	24.436	0	0
	3.702	21.778	5.883	-13.802	5.883	21.778	0	0
	4.319	17.43	4.036	-15.649	4.036	17.43	0	0
	4.936	11.957	2.422	-17.262	2.422	11.957	0	0
	5.553	5.937	1.069	-18.616	1.069	5.937	0	0
2	0	2.612	0.423	-2.098	19.797	0	-0.213	0
	0.621	6.531	18.164	-1.521	18.301	6.445	0	0
	1.242	12.498	16.322	-3.362	16.456	12.497	0	0
	1.863	17.28	14.362	-5.322	14.362	17.28	0	0
	2.484	20.291	12.106	-7.579	12.106	20.291	0	0
	3.105	21.239	9.772	-9.912	9.772	21.239	0	0
	3.726	20.049	7.449	-12.236	7.449	20.049	0	0
	4.347	16.86	5.222	-14.463	5.222	16.86	0	0
	4.968	12.064	3.188	-16.497	3.188	12.064	0	0
	5.589	6.206	1.423	-18.262	2.55	1.763	0	0
3	0	3.347	2.55	-0.684	19.786	0	-0.209	0
	0.621	6.249	18.228	-1.456	18.348	6.166	0	0
	1.242	12.101	16.428	-3.257	16.539	12.094	0	0
	1.863	16.863	14.352	-5.333	14.461	16.861	0	0
	2.484	19.988	12.079	-7.606	12.206	19.919	0	0
	3.105	21.057	9.724	-9.961	9.863	20.946	0	0
	3.726	19.969	7.377	-12.308	7.525	19.846	0	0
	4.347	16.847	5.128	-14.557	5.286	16.76	0	0
	4.968	12.045	3.234	-16.45	3.234	12.045	0	0
	5.589	6.206	1.444	-18.241	2.151	1.496	0	0
4	0	2.832	2.151	-0.584	19.717	0	-0.119	0
	0.621	6.242	18.213	-1.472	18.242	6.119	0	0
	1.242	12.076	16.392	-3.292	16.405	12.032	0	0
	1.863	16.78	14.3	-5.385	14.312	16.744	0	0
	2.484	19.812	12.02	-7.665	12.061	19.715	0	0
	3.105	20.802	9.658	-10.027	9.73	20.675	0	0
	3.726	19.651	7.306	-12.379	7.408	19.537	0	0
	4.347	16.496	5.058	-14.627	5.185	16.433	0	0
	4.968	11.72	3.149	-16.536	3.149	11.72	0	0
	5.589	5.975	1.391	-18.294	2.189	1.63	0	0
5	0	2.989	2.189	-0.69	19.713	0	-0.234	0
	0.574	5.972	18.102	-1.583	18.134	5.851	0	0
	1.148	11.389	16.175	-3.51	16.191	11.337	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	1.722	15.589	13.994	-5.691	14	15.572	0	0
	2.296	18.138	11.64	-8.045	11.676	18.064	0	0
	2.87	18.733	9.228	-10.457	9.297	18.632	0	0
	3.444	17.354	6.86	-12.825	6.963	17.263	0	0
	4.018	14.212	4.636	-15.049	4.769	14.17	0	0
	4.592	9.787	2.812	-16.873	2.812	9.787	0	0
	5.166	4.771	1.19	-18.494	2.563	2.144	0	0
6	0	3.615	2.563	-1.178	19.75	0	-0.259	0
	0.307	3.67	18.357	-1.328	18.43	3.466	0	0
	0.614	7.021	16.826	-2.858	16.894	6.854	0	0
	0.921	9.818	15.116	-4.569	15.175	9.691	0	0
	1.228	11.855	13.249	-6.436	13.296	11.767	0	0
	1.535	12.953	11.247	-8.438	11.279	12.902	0	0
	1.842	12.959	9.132	-10.553	9.155	12.931	0	0
	2.149	11.756	6.92	-12.765	6.952	11.727	0	0
	2.456	9.248	4.623	-15.062	4.682	9.212	0	0
	2.763	5.344	2.278	-17.407	3.938	0	-1.209	0
	3.07	0	3.938	-19.752	3.938	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.756	-1.585	-1.585	0	0	0
	0.617	-0.978	0	-1.585	-2.49	10.61	0	0
	1.234	-1.956	0	-1.585	-4.949	18.184	0	0
	1.851	-2.934	0	-1.585	-7.344	22.842	0	0
	2.468	-3.912	0	-1.585	-9.644	24.782	0	0
	3.085	-4.89	0	-1.585	-11.816	24.276	0	0
	3.702	-5.868	0	-1.585	-13.83	21.674	0	0
	4.319	-6.846	0	-1.585	-15.657	17.397	0	0
	4.936	-7.824	0	-1.585	-17.271	11.916	0	0
	5.553	-8.801	0	-1.585	-18.635	5.831	0	0
2	0	-12.486	2.55	-13.531	-19.701	0	-0.221	0
	0.621	-10.903	2.55	0	-2.098	1.31	0	0
	1.242	-9.319	2.55	0	-3.362	12.498	0	0
	1.863	-7.822	2.334	0	-5.441	17.207	0	0
	2.484	-6.373	2.334	0	-7.674	20.174	0	0
	3.105	-4.923	2.334	0	-9.979	21.115	0	0
	3.726	-5.42	0	-1.85	-12.273	19.957	0	0
	4.347	-6.569	0	-1.85	-14.473	16.828	0	0
	4.968	-7.81	0	-2.098	-16.507	12.027	0	0
	5.589	-9.113	0	-2.098	-18.285	6.106	0	0
3	0	-10.528	2.151	-12.273	-19.702	0	-0.21	0
	0.621	-9.192	2.151	0	-2.09	1.435	0	0
	1.242	-7.856	2.151	0	-3.257	12.101	0	0
	1.863	-6.598	2.011	0	-5.333	16.863	0	0
	2.484	-5.349	2.011	0	-7.606	19.988	0	0
	3.105	-4.118	1.901	0	-9.961	21.057	0	0
	3.726	-5.232	0	-1.938	-12.308	19.969	0	0
	4.347	-6.435	0	-1.938	-14.557	16.847	0	0



## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	4.968	-7.65	0	-2.09	-16.621	12.032	0	0
	5.589	-8.948	0	-2.09	-18.409	6.09	0	0
4	0	-10.603	2.189	-12.308	-19.82	0	-0.256	0
	0.621	-9.244	2.189	0	-1.785	1.233	0	0
	1.242	-7.885	2.189	0	-3.292	12.076	0	0
	1.863	-6.525	2.189	0	-5.385	16.78	0	0
	2.484	-5.166	2.189	0	-7.665	19.812	0	0
	3.105	-3.844	2.067	0	-10.027	20.802	0	0
	3.726	-4.437	0	-1.671	-12.379	19.651	0	0
	4.347	-5.487	0	-1.694	-14.627	16.496	0	0
	4.968	-6.54	0	-1.694	-16.678	11.702	0	0
	5.589	-7.634	0	-1.785	-18.439	5.867	0	0
5	0	-11.098	2.563	-12.379	-19.806	0	-0.245	0
	0.574	-9.627	2.563	0	-1.583	5.972	0	0
	1.148	-8.156	2.563	0	-3.51	11.389	0	0
	1.722	-6.684	2.563	0	-5.691	15.589	0	0
	2.296	-5.213	2.563	0	-8.045	18.138	0	0
	2.87	-3.741	2.563	0	-10.457	18.733	0	0
	3.444	-2.27	2.563	0	-12.825	17.354	0	0
	4.018	-2.748	0	-0.968	-15.049	14.212	0	0
	4.592	-3.331	0	-1.071	-17.028	9.746	0	0
	5.166	-5.279	0	-10.255	-18.663	4.63	0	0
6	0	-12.091	3.938	-12.825	-19.843	0	-0.306	0
	0.307	-10.882	3.938	0	-1.328	3.67	0	0
	0.614	-9.673	3.938	0	-2.858	7.021	0	0
	0.921	-8.464	3.938	0	-4.569	9.818	0	0
	1.228	-7.255	3.938	0	-6.436	11.855	0	0
	1.535	-6.046	3.938	0	-8.438	12.953	0	0
	1.842	-4.836	3.938	0	-10.553	12.959	0	0
	2.149	-3.627	3.938	0	-12.765	11.756	0	0
	2.456	-2.418	3.938	0	-15.062	9.248	0	0
	2.763	-1.209	3.938	0	-17.407	5.344	0	0
	3.07	0	3.938	-19.752	-19.752	0	0	0

Support    Reac. Pos    Reac. Negative

1	1.585	-19.781
2	2.521	-19.937
3	3.234	-19.828
4	2.736	-19.873
5	2.879	-19.914
6	3.741	-20.644
7	3.938	-19.776

Id Group 3, HS-20 Truck Operating: 1.3\*1.0\*(Truck+IM)\*DF  
 Type Combination

Maximum table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	35.852	-4.049	35.852	0	0	0
	0.492	15.485	31.474	-3.425	31.474	15.485	0	0
	0.984	26.629	27.062	-7.837	27.062	26.629	0	0
	1.476	33.544	22.726	-12.173	22.726	33.544	0	0
	1.968	36.468	18.53	-16.369	18.53	36.468	0	0
	2.46	35.764	14.538	-20.361	14.538	35.764	0	0
	2.952	31.92	10.813	-24.086	10.813	31.92	0	0
	3.444	25.748	7.476	-27.423	7.476	25.748	0	0
	3.936	17.967	4.565	-30.334	4.565	17.967	0	0
	4.428	9.104	2.056	-32.843	2.056	9.104	0	0
2	0	5.342	1.086	-4.004	35.872	0	-1.437	0
	0.614	10.61	32.401	-2.498	33.457	9.85	0	0
	1.228	20.734	29.265	-5.635	30.273	20.627	0	0
	1.842	29.442	26.524	-8.375	26.524	29.442	0	0
	2.456	35.18	22.392	-12.507	22.392	35.18	0	0
	3.07	37.176	18.063	-16.837	18.063	37.176	0	0
	3.684	35.223	13.721	-21.179	13.721	35.223	0	0
	4.298	29.549	9.545	-25.354	9.545	29.549	0	0
	4.912	21.175	5.814	-29.085	5.814	21.175	0	0
	5.526	10.941	2.599	-32.3	3.277	3.191	0	0
3	0	6.14	2.853	-3.141	35.833	0	-1.353	0
	0.615	10.9	32.339	-2.56	33.375	10.187	0	0
	1.23	21.153	29.164	-5.735	30.172	21.079	0	0
	1.845	29.916	26.42	-8.479	26.42	29.916	0	0
	2.46	35.621	22.299	-12.6	22.299	35.621	0	0
	3.075	37.583	17.971	-16.928	17.986	37.555	0	0
	3.69	35.618	13.577	-21.322	13.661	35.519	0	0
	4.305	29.897	8.861	-26.038	9.502	29.752	0	0
	4.92	21.2	5.008	-29.892	5.685	20.927	0	0
	5.535	10.385	1.716	-33.183	3.71	2.522	0	0
4	0	5.939	2.567	-3.192	35.986	0	-1.77	0
	0.621	10.207	32.526	-2.373	33.581	9.967	0	0
	1.242	21.251	30.381	-4.518	30.406	21.161	0	0
	1.863	30.348	26.651	-8.248	26.661	30.318	0	0
	2.484	36.372	22.49	-12.409	22.546	36.236	0	0
	3.105	38.496	18.101	-16.798	18.21	38.301	0	0
	3.726	36.429	13.663	-21.236	13.824	36.24	0	0
	4.347	30.359	8.64	-26.259	9.561	30.209	0	0
	4.968	21.456	5.776	-29.123	5.776	21.456	0	0
	5.589	11.08	2.583	-32.316	3.809	2.615	0	0
5	0	6.208	2.641	-3.357	35.117	0	-1.298	0
	0.621	11.002	32.377	-2.522	32.563	10.196	0	0
	1.242	21.388	29.25	-5.649	29.338	21.06	0	0

	1.863	30.019	25.604	-9.295	25.663	29.836	0	0
	2.484	36.006	21.514	-13.386	21.763	35.387	0	0
	3.105	38.3	17.238	-17.662	17.697	37.445	0	0
	3.726	36.602	12.949	-21.95	13.611	35.78	0	0
	4.347	31.04	8.819	-26.08	9.652	30.524	0	0
	4.968	22.175	5.966	-28.933	5.966	22.175	0	0
	5.589	11.592	2.7	-32.199	3.85	2.397	0	0
6	0	4.787	3.85	-0.773	35.063	0	-1.233	0
	0.619	10.547	33.006	-1.893	33.143	9.782	0	0
	1.238	21.247	30.609	-4.291	30.67	20.945	0	0
	1.857	31.163	27.707	-7.192	27.763	30.922	0	0
	2.476	39.274	24.325	-10.575	24.525	38.529	0	0
	3.095	44.278	20.593	-14.306	20.951	43.169	0	0
	3.714	45.345	16.585	-18.314	17.097	44.078	0	0
	4.333	41.822	12.378	-22.521	13.019	40.632	0	0
	4.952	33.244	8.046	-26.853	8.773	32.345	0	0
	5.571	19.333	3.666	-31.233	4.414	18.87	0	0
	6.19	0	2.898	-35.544	2.898	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	35.852	-4.049	-4.049	0	0	0
	0.492	-1.992	0	-4.049	-4.32	15.045	0	0
	0.984	-3.984	0	-4.049	-8.59	25.888	0	0
	1.476	-5.977	0	-4.049	-12.759	32.679	0	0
	1.968	-7.969	0	-4.049	-16.777	35.664	0	0
	2.46	-9.961	0	-4.049	-20.594	35.191	0	0
	2.952	-11.953	0	-4.049	-24.16	31.704	0	0
	3.444	-13.945	0	-4.049	-27.487	25.528	0	0
	3.936	-15.938	0	-4.049	-30.496	17.329	0	0
	4.428	-17.93	0	-4.049	-33.072	8.089	0	0
2	0	-19.922	23.598	-4.049	-35.15	0	-1.405	0
	0.614	-13.834	3.271	0	-4.004	2.883	0	0
	1.228	-11.826	3.271	0	-5.635	20.734	0	0
	1.842	-10.084	2.552	0	-9.253	28.996	0	0
	2.456	-8.614	1.957	0	-13.197	34.405	0	0
	3.07	-7.874	0.165	0	-17.309	36.355	0	0
	3.684	-9.41	0	-4.004	-21.433	34.626	0	0
	4.298	-11.869	0	-4.004	-25.41	29.382	0	0
	4.912	-14.327	0	-4.004	-29.182	20.829	0	0
	5.526	-16.786	0	-4.004	-32.5	10.104	0	0
3	0	-19.244	24.839	-4.004	-35.135	0	-1.348	0
	0.615	-15.731	3.71	0	-4.086	2.812	0	0
	1.23	-13.461	3.543	0	-5.735	21.153	0	0
	1.845	-11.676	2.773	0	-9.372	29.432	0	0
	2.46	-10.297	1.714	0	-13.317	34.791	0	0
	3.075	-9.766	0	-0.02	-17.481	36.77	0	0
	3.69	-10.549	0	-1.969	-21.861	35.235	0	0
	4.305	-12.395	0	-3.935	-26.058	29.838	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	4.92	-14.815	0	-3.935	-29.914	21.12	0	0
	5.535	-17.292	0	-4.086	-33.235	10.164	0	0
4	0	-19.805	24.903	-4.086	-35.801	0	-1.556	0
	0.621	-16.309	3.809	0	-3.816	2.657	0	0
	1.242	-13.943	3.809	0	-5.632	20.982	0	0
	1.863	-11.864	2.668	0	-9.406	29.821	0	0
	2.484	-10.521	1.591	0	-13.537	35.66	0	0
	3.105	-9.98	0	-0.536	-17.849	37.788	0	0
	3.726	-10.67	0	-1.833	-22.161	35.929	0	0
	4.347	-12.089	0	-2.869	-26.293	30.257	0	0
	4.968	-13.933	0	-3.816	-30.065	21.394	0	0
	5.589	-16.303	0	-3.816	-33.298	10.406	0	0
5	0	-19.119	3.85	-22.161	-35.789	0	-1.301	0
	0.621	-16.728	3.85	0	-4.532	3.135	0	0
	1.242	-14.386	3.576	0	-5.649	21.388	0	0
	1.863	-12.51	1.726	0	-9.295	30.019	0	0
	2.484	-11.763	0.389	0	-13.386	36.006	0	0
	3.105	-11.887	0	-1.003	-17.662	38.3	0	0
	3.726	-12.932	0	-2.286	-21.95	36.602	0	0
	4.347	-14.605	0	-3.085	-26.08	31.04	0	0
	4.968	-16.566	0	-4.532	-29.881	22.173	0	0
	5.589	-19.38	0	-4.532	-33.179	10.982	0	0
6	0	-22.195	24.525	-4.532	-35.777	0	-1.221	0
	0.619	-16.144	2.898	0	-1.893	10.547	0	0
	1.238	-14.35	2.898	0	-4.291	21.247	0	0
	1.857	-12.556	2.898	0	-7.192	31.163	0	0
	2.476	-10.763	2.898	0	-10.575	39.274	0	0
	3.095	-8.969	2.898	0	-14.306	44.278	0	0
	3.714	-7.175	2.898	0	-18.314	45.345	0	0
	4.333	-5.381	2.898	0	-22.521	41.822	0	0
	4.952	-3.588	2.898	0	-26.853	33.244	0	0
	5.571	-1.794	2.898	0	-31.233	19.333	0	0
	6.19	0	2.898	-35.544	-35.544	0	0	0

Support	Reac. Pos	Reac. Negative
1	4.049	-35.896
2	5.09	-36.182
3	5.995	-36.114
4	5.76	-36.507
5	5.998	-36.051
6	4.623	-36.078
7	2.898	-35.587

Id Group I, HS-20 Truck Inventory: 1.3\*1.67\*(truck+IM)\*DF  
 Type Combination

Maximum table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	59.87	-6.762	59.87	0	0	0
	0.492	25.859	52.558	-5.72	52.558	25.859	0	0
	0.984	44.469	45.192	-13.087	45.192	44.469	0	0
	1.476	56.015	37.95	-20.328	37.95	56.015	0	0
	1.968	60.898	30.944	-27.334	30.944	60.898	0	0
	2.46	59.723	24.278	-34.001	24.278	59.723	0	0
	2.952	53.303	18.057	-40.222	18.057	53.303	0	0
	3.444	42.997	12.485	-45.794	12.485	42.997	0	0
	3.936	30.004	7.623	-50.656	7.623	30.004	0	0
	4.428	15.203	3.433	-54.845	3.433	15.203	0	0
	2	0	8.92	1.813	-6.687	59.903	0	-2.4
0.614		17.717	54.107	-4.171	55.87	16.448	0	0
1.228		34.624	48.869	-9.409	50.554	34.445	0	0
1.842		49.166	44.293	-13.986	44.293	49.166	0	0
2.456		58.747	37.393	-20.886	37.393	58.747	0	0
3.07		62.08	30.163	-28.116	30.163	62.08	0	0
3.684		58.819	22.912	-35.366	22.912	58.819	0	0
4.298		49.344	15.94	-42.339	15.94	49.344	0	0
4.912		35.36	9.709	-48.569	9.709	35.36	0	0
5.526		18.27	4.34	-53.939	5.472	5.329	0	0
3		0	10.253	4.764	-5.246	59.837	0	-2.259
	0.615	18.203	54.003	-4.275	55.734	17.012	0	0
	1.23	35.323	48.701	-9.577	50.384	35.2	0	0
	1.845	49.957	44.119	-14.16	44.119	49.957	0	0
	2.46	59.483	37.237	-21.042	37.237	59.483	0	0
	3.075	62.76	30.01	-28.269	30.036	62.714	0	0
	3.69	59.479	22.672	-35.607	22.813	59.314	0	0
	4.305	49.925	14.797	-43.481	15.867	49.683	0	0
	4.92	35.403	8.362	-49.916	9.494	34.947	0	0
	5.535	17.342	2.866	-55.412	6.195	4.211	0	0
	4	0	9.917	4.287	-5.33	60.093	0	-2.957
0.621		17.044	54.315	-3.963	56.077	16.644	0	0
1.242		35.487	50.734	-7.544	50.775	35.337	0	0
1.863		50.679	44.505	-13.774	44.521	50.629	0	0
2.484		60.737	37.556	-20.722	37.65	60.51	0	0
3.105		64.285	30.227	-28.052	30.408	63.959	0	0
3.726		60.833	22.816	-35.462	23.084	60.518	0	0
4.347		50.697	14.428	-43.851	15.966	50.445	0	0
4.968		35.829	9.646	-48.633	9.646	35.829	0	0
5.589		18.502	4.313	-53.965	6.361	4.367	0	0
5		0	10.367	4.411	-5.606	58.642	0	-2.168
	0.621	18.372	54.067	-4.211	54.377	17.026	0	0
	1.242	35.716	48.844	-9.434	48.992	35.168	0	0

	1.863	50.128	42.756	-15.522	42.854	49.824	0	0
	2.484	60.127	35.926	-22.353	36.342	59.093	0	0
	3.105	63.958	28.785	-29.493	29.552	62.53	0	0
	3.726	61.122	21.623	-36.655	22.729	59.75	0	0
	4.347	51.834	14.727	-43.551	16.118	50.973	0	0
	4.968	37.03	9.963	-48.315	9.963	37.03	0	0
	5.589	19.357	4.509	-53.77	6.429	4.002	0	0
6	0	7.995	6.429	-1.292	58.553	0	-2.058	0
	0.619	17.613	55.117	-3.161	55.346	16.335	0	0
	1.238	35.481	51.113	-7.165	51.215	34.976	0	0
	1.857	52.039	46.269	-12.01	46.361	51.636	0	0
	2.476	65.584	40.62	-17.659	40.955	64.34	0	0
	3.095	73.94	34.388	-23.89	34.986	72.089	0	0
	3.714	75.721	27.696	-30.582	28.55	73.606	0	0
	4.333	69.839	20.67	-37.608	21.74	67.851	0	0
	4.952	55.514	13.437	-44.842	14.649	54.013	0	0
	5.571	32.285	6.122	-52.157	7.372	31.511	0	0
	6.19	0	4.839	-59.355	4.839	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	59.87	-6.762	-6.762	0	0	0
	0.492	-3.327	0	-6.762	-7.214	25.124	0	0
	0.984	-6.654	0	-6.762	-14.344	43.231	0	0
	1.476	-9.98	0	-6.762	-21.306	54.571	0	0
	1.968	-13.307	0	-6.762	-28.016	59.556	0	0
	2.46	-16.634	0	-6.762	-34.39	58.765	0	0
	2.952	-19.961	0	-6.762	-40.344	52.942	0	0
	3.444	-23.288	0	-6.762	-45.901	42.629	0	0
	3.936	-26.614	0	-6.762	-50.926	28.939	0	0
	4.428	-29.941	0	-6.762	-55.228	13.508	0	0
2	0	-33.268	39.407	-6.762	-58.697	0	-2.347	0
	0.614	-23.102	5.462	0	-6.687	4.815	0	0
	1.228	-19.748	5.462	0	-9.409	34.624	0	0
	1.842	-16.84	4.262	0	-15.452	48.421	0	0
	2.456	-14.385	3.267	0	-22.038	57.453	0	0
	3.07	-13.149	0.276	0	-28.905	60.71	0	0
	3.684	-15.714	0	-6.687	-35.79	57.822	0	0
	4.298	-19.819	0	-6.687	-42.433	49.065	0	0
	4.912	-23.925	0	-6.687	-48.731	34.782	0	0
	5.526	-28.031	0	-6.687	-54.272	16.873	0	0
3	0	-32.136	41.479	-6.687	-58.672	0	-2.251	0
	0.615	-26.27	6.195	0	-6.823	4.695	0	0
	1.23	-22.479	5.917	0	-9.577	35.323	0	0
	1.845	-19.497	4.63	0	-15.65	49.149	0	0
	2.46	-17.195	2.862	0	-22.239	58.098	0	0
	3.075	-16.308	0	-0.033	-29.192	61.402	0	0
	3.69	-17.616	0	-3.287	-36.506	58.839	0	0
	4.305	-20.699	0	-6.57	-43.514	49.827	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	4.92	-24.74	0	-6.57	-49.953	35.268	0	0
	5.535	-28.876	0	-6.823	-55.499	16.973	0	0
4	0	-33.072	41.586	-6.823	-59.784	0	-2.598	0
	0.621	-27.234	6.361	0	-6.373	4.437	0	0
	1.242	-23.284	6.361	0	-9.405	35.038	0	0
	1.863	-19.812	4.456	0	-15.707	49.799	0	0
	2.484	-17.569	2.656	0	-22.606	59.55	0	0
	3.105	-16.666	0	-0.896	-29.806	63.102	0	0
	3.726	-17.818	0	-3.061	-37.007	59.998	0	0
	4.347	-20.188	0	-4.791	-43.907	50.527	0	0
	4.968	-23.266	0	-6.373	-50.206	35.726	0	0
	5.589	-27.224	0	-6.373	-55.604	17.377	0	0
5	0	-31.927	6.429	-37.007	-59.765	0	-2.172	0
	0.621	-27.934	6.429	0	-7.568	5.235	0	0
	1.242	-24.023	5.972	0	-9.434	35.716	0	0
	1.863	-20.891	2.881	0	-15.522	50.128	0	0
	2.484	-19.644	0.65	0	-22.353	60.127	0	0
	3.105	-19.849	0	-1.674	-29.493	63.958	0	0
	3.726	-21.595	0	-3.818	-36.655	61.122	0	0
	4.347	-24.39	0	-5.152	-43.551	51.834	0	0
	4.968	-27.664	0	-7.568	-49.898	37.027	0	0
	5.589	-32.363	0	-7.568	-55.405	18.339	0	0
6	0	-37.063	40.955	-7.568	-59.744	0	-2.039	0
	0.619	-26.959	4.839	0	-3.161	17.613	0	0
	1.238	-23.963	4.839	0	-7.165	35.481	0	0
	1.857	-20.968	4.839	0	-12.01	52.039	0	0
	2.476	-17.972	4.839	0	-17.659	65.584	0	0
	3.095	-14.977	4.839	0	-23.89	73.94	0	0
	3.714	-11.982	4.839	0	-30.582	75.721	0	0
	4.333	-8.986	4.839	0	-37.608	69.839	0	0
	4.952	-5.991	4.839	0	-44.842	55.514	0	0
	5.571	-2.995	4.839	0	-52.157	32.285	0	0
	6.19	0	4.839	-59.355	-59.355	0	0	0

Support	Reac. Pos	Reac. Negative
1	6.762	-59.943
2	8.5	-60.42
3	10.01	-60.307
4	9.618	-60.963
5	10.017	-60.202
6	7.72	-60.246
7	4.839	-59.427

Id Group 4, HS-20 Lane Operating: 1.3\*1.0(Lane+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kn	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	29.916	-3.437	29.916	0	0	0
	0.492	9.163	18.453	-1.178	26.119	12.851	0	0
	0.984	15.794	15.708	-3.923	22.37	22.012	0	0
	1.476	19.977	13.019	-6.611	18.744	27.667	0	0
	1.968	21.85	10.416	-9.215	15.282	30.074	0	0
	2.46	21.608	7.925	-11.705	12.021	29.572	0	0
	2.952	19.503	5.576	-14.054	9.001	26.571	0	0
	3.444	15.84	3.397	-16.234	6.26	21.56	0	0
	3.936	10.981	1.416	-18.215	3.836	15.098	0	0
	4.428	5.606	0.656	-18.975	1.765	7.816	0	0
2	0	3.275	0.666	-2.455	30.874	0	-2.248	0
	0.614	6.335	18.277	-1.354	28.363	7.356	-1.264	0
	1.228	12.376	17.287	-2.343	25.436	16.521	-0.326	0
	1.842	17.694	15.382	-4.249	22.158	23.838	0	0
	2.456	21.192	12.735	-6.896	18.662	28.559	0	0
	3.07	22.481	9.993	-9.638	15.08	30.261	0	0
	3.684	21.437	7.245	-12.386	11.539	28.839	0	0
	4.298	18.154	4.579	-15.052	8.167	24.503	0	0
	4.912	12.957	2.357	-17.274	5.087	17.771	0	0
	5.526	6.819	1.061	-18.569	2.97	2.386	0	0
3	0	3.49	0.879	-2.525	31.147	0	-2.277	0
	0.615	6.744	18.513	-1.117	28.374	7.325	-1.531	0
	1.23	12.841	17.253	-2.378	25.415	16.628	-0.558	0
	1.845	18.143	15.245	-4.386	22.124	23.993	0	0
	2.46	21.57	12.596	-7.035	18.628	28.708	0	0
	3.075	22.769	9.86	-9.771	15.055	30.378	0	0
	3.69	21.63	7.122	-12.508	11.531	28.92	0	0
	4.305	18.257	4.469	-15.161	8.179	24.558	0	0
	4.92	12.987	2.392	-17.239	5.121	17.816	0	0
	5.535	6.862	1.117	-18.514	3.393	2.646	0	0
4	0	3.584	0.947	-2.518	31.267	0	-2.351	0
	0.621	6.867	18.529	-1.102	28.425	7.308	-1.625	0
	1.242	13.029	17.273	-2.358	25.464	16.726	-0.615	0
	1.863	18.389	15.255	-4.376	22.17	24.187	0	0
	2.484	21.854	12.602	-7.029	18.671	28.971	0	0
	3.105	23.068	9.862	-9.769	15.096	30.679	0	0
	3.726	21.919	7.119	-12.511	11.569	29.228	0	0
	4.347	18.51	4.462	-15.169	8.215	24.844	0	0
	4.968	13.185	2.409	-17.222	5.155	18.056	0	0
	5.589	7.015	1.142	-18.489	3.411	2.748	0	0
5	0	4.215	1.079	-2.993	31.225	0	-2.18	0
	0.621	6.937	18.478	-1.152	28.38	7.327	-1.612	0
	1.242	13.08	17.261	-2.37	25.456	16.73	-0.648	0



	1.863	18.441	15.244	-4.386	22.2	24.214	-0.028	0
	2.484	21.931	12.617	-7.013	18.736	29.059	0	0
	3.105	23.188	9.897	-9.734	15.188	30.851	0	0
	3.726	22.08	7.165	-12.466	11.674	29.479	0	0
	4.347	18.684	4.505	-15.126	8.313	25.128	0	0
	4.968	13.279	2.076	-17.555	5.221	18.274	0	0
	5.589	6.893	1.122	-18.509	3.311	2.12	0	0
6	0	2.953	2.374	-0.477	31.325	0	-2.921	0
	0.619	6.412	18.888	-0.743	29.075	6.826	-1.744	0
	1.238	12.968	18.497	-1.134	26.732	16.596	-0.667	0
	1.857	19.214	16.709	-2.922	24.059	25.171	0	0
	2.476	24.036	14.455	-5.176	21.104	31.747	0	0
	3.095	26.92	12.013	-7.618	17.918	35.647	0	0
	3.714	27.439	9.413	-10.218	14.551	36.32	0	0
	4.333	25.24	6.687	-12.944	11.051	33.338	0	0
	4.952	20.051	3.866	-15.764	7.466	26.397	0	0
	5.571	11.677	0.983	-18.648	3.843	15.307	-0.025	0
	6.19	0	2.473	-30.252	2.473	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	29.916	-3.437	-3.437	0	0	0
	0.492	-1.296	0	-2.635	-3.849	12.142	-0.082	0
	0.984	-2.593	0	-2.635	-7.381	20.977	-0.058	0
	1.476	-3.89	0	-2.635	-10.874	26.563	0	0
	1.968	-5.186	0	-2.635	-14.284	29.044	0	0
	2.46	-6.483	0	-2.635	-17.569	28.646	0	0
	2.952	-7.78	0	-2.635	-20.687	25.68	-0.079	0
	3.444	-9.076	0	-2.635	-23.592	20.544	-0.376	0
	3.936	-10.373	0	-2.635	-26.242	13.725	-0.874	0
	4.428	-14.387	0	-12.909	-28.592	5.796	-1.601	0
2	0	-22.116	16.494	-17.987	-30.895	0	-2.224	0
	0.614	-12.976	13.392	0	-3.422	2.515	0	0
	1.228	-7.561	5.563	0	-4.955	17.113	0	0
	1.842	-7.399	0	-0.406	-7.987	23.877	0	0
	2.456	-7.648	0	-0.406	-11.329	28.337	0	0
	3.07	-7.897	0	-0.406	-14.857	29.932	0	0
	3.684	-8.146	0	-0.406	-18.445	28.409	0	0
	4.298	-8.396	0	-0.406	-21.965	23.826	-0.047	0
	4.912	-9.353	0	-2.677	-25.286	16.56	-0.644	0
	5.526	-14.108	0	-13.197	-28.276	7.314	-1.575	0
3	0	-23.306	16.735	-16.638	-31.16	0	-2.276	0
	0.615	-14.038	13.302	0	-3.495	2.657	0	0
	1.23	-8.68	3.968	0	-5.103	17.653	0	0
	1.845	-8.472	0	-0.1	-8.151	24.395	0	0
	2.46	-8.534	0	-0.1	-11.496	28.777	0	0
	3.075	-8.595	0	-0.1	-15.017	30.267	0	0
	3.69	-8.656	0	-0.1	-18.591	28.63	0	0
	4.305	-8.718	0	-0.1	-22.092	23.94	-0.043	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	4.92	-9.61	0	-2.776	-25.393	16.579	-0.686	0
	5.535	-14.328	0	-13.339	-28.365	7.252	-1.664	0
4	0	-23.612	16.781	-16.771	-31.23	0	-2.349	0
	0.621	-14.225	13.338	0	-3.487	2.75	0	0
	1.242	-9.178	2.669	0	-5.093	17.881	0	0
	1.863	-8.552	0	-0.068	-8.141	24.695	0	0
	2.484	-8.594	0	-0.068	-11.487	29.129	0	0
	3.105	-8.636	0	-0.068	-15.011	30.643	0	0
	3.726	-8.678	0	-0.068	-18.587	28.998	0	0
	4.347	-8.721	0	-0.068	-22.092	24.267	0	0
	4.968	-8.994	0	-4.021	-25.397	16.837	-0.595	0
	5.589	-14.366	0	-13.338	-28.374	7.417	-1.586	0
5	0	-23.745	16.8	-16.782	-31.316	0	-2.179	0
	0.621	-14.363	13.374	0	-4.141	3.205	0	0
	1.242	-9.386	2.589	0	-5.099	17.94	0	0
	1.863	-8.973	0	-0.54	-8.105	24.782	0	0
	2.484	-9.308	0	-0.54	-11.413	29.287	0	0
	3.105	-9.644	0	-0.54	-14.904	30.901	0	0
	3.726	-9.979	0	-0.54	-18.463	29.359	0	0
	4.347	-10.314	0	-0.54	-21.969	24.692	-0.109	0
	4.968	-10.654	0	-3.461	-25.301	17.232	-0.786	0
	5.589	-15.857	0	-11.394	-28.335	7.615	-1.803	0
6	0	-25.311	18.023	-17.11	-30.988	0	-2.912	0
	0.619	-15.45	13.034	0	-1.61	8.972	0	0
	1.238	-9.38	2.002	0	-3.596	17.808	0	0
	1.857	-8.203	1.893	0	-5.979	25.905	0	0
	2.476	-7.031	1.893	0	-8.717	32.376	0	0
	3.095	-5.859	1.893	0	-11.771	36.432	0	0
	3.714	-4.687	1.893	0	-15.099	37.385	0	0
	4.333	-3.515	1.893	0	-18.658	34.648	0	0
	4.952	-2.343	1.893	0	-22.405	27.738	0	0
	5.571	-1.171	1.892	0	-26.297	16.278	0	0
	6.19	0	2.473	-30.252	-30.252	0	0	0

Support    Reac. Pos    Reac. Negative

1	3.437	-29.951
2	4.331	-33.048
3	4.618	-33.313
4	4.678	-33.443
5	5.509	-33.383
6	3.957	-33.726
7	2.473	-30.252

Id Group 2, HS-20 Lane Inventory: 1.3\*1.67\*(Lane+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	49.957	-5.74	49.957	0	0	0
	0.492	15.302	30.815	-1.967	43.616	21.459	0	0
	0.984	26.375	26.231	-6.551	37.356	36.758	0	0
	1.476	33.36	21.741	-11.04	31.301	46.201	0	0
	1.968	36.487	17.393	-15.388	25.519	50.221	0	0
	2.46	36.084	13.235	-19.547	20.074	49.382	0	0
	2.952	32.568	9.312	-23.47	15.031	44.372	0	0
	3.444	26.451	5.673	-27.109	10.454	36.003	0	0
	3.936	18.337	2.365	-30.417	6.405	25.212	0	0
	4.428	9.362	1.095	-31.687	2.948	13.052	0	0
2	0	5.47	1.112	-4.1	51.557	0	-3.755	0
	0.614	10.579	30.521	-2.261	47.364	12.284	-2.111	0
	1.228	20.667	28.868	-3.913	42.475	27.588	-0.544	0
	1.842	29.548	25.686	-7.096	37.001	39.807	0	0
	2.456	35.389	21.266	-11.516	31.164	47.691	0	0
	3.07	37.541	16.688	-16.094	25.182	50.532	0	0
	3.684	35.798	12.099	-20.683	19.269	48.158	0	0
	4.298	30.315	7.647	-25.135	13.637	40.918	0	0
	4.912	21.636	3.936	-28.846	8.495	29.676	0	0
	5.526	11.386	1.772	-31.009	4.959	3.985	0	0
3	0	5.827	1.468	-4.217	52.012	0	-3.802	0
	0.615	11.261	30.916	-1.866	47.381	12.232	-2.557	0
	1.23	21.443	28.811	-3.971	42.441	27.768	-0.932	0
	1.845	30.297	25.457	-7.324	36.944	40.067	0	0
	2.46	36.02	21.034	-11.747	31.107	47.94	0	0
	3.075	38.022	16.465	-16.317	25.141	50.728	0	0
	3.69	36.121	11.894	-20.888	19.256	48.293	0	0
	4.305	30.488	7.464	-25.318	13.659	41.009	0	0
	4.92	21.688	3.994	-28.787	8.552	29.751	0	0
	5.535	11.459	1.865	-30.917	5.666	4.419	0	0
4	0	5.985	1.581	-4.204	52.213	0	-3.925	0
	0.621	11.467	30.941	-1.84	47.467	12.204	-2.714	0
	1.242	21.758	28.844	-3.937	42.523	27.931	-1.027	0
	1.863	30.708	25.475	-7.307	37.022	40.39	0	0
	2.484	36.495	21.045	-11.737	31.179	48.379	0	0
	3.105	38.521	16.468	-16.314	25.209	51.232	0	0
	3.726	36.602	11.889	-20.893	19.32	48.809	0	0
	4.347	30.909	7.451	-25.331	13.719	41.487	0	0
	4.968	22.017	4.023	-28.759	8.609	30.151	0	0
	5.589	11.714	1.907	-30.874	5.697	4.589	0	0
5	0	7.038	1.803	-4.998	52.143	0	-3.64	0
	0.621	11.584	30.857	-1.924	47.392	12.235	-2.692	0
	1.242	21.843	28.824	-3.958	42.508	27.937	-1.082	0

	1.863	30.795	25.457	-7.325	37.072	40.436	-0.046	0
	2.484	36.623	21.07	-11.712	31.288	48.526	0	0
	3.105	38.721	16.527	-16.255	25.362	51.519	0	0
	3.726	36.872	11.965	-20.817	19.494	49.228	0	0
	4.347	31.201	7.523	-25.259	13.881	41.962	0	0
	4.968	22.175	3.467	-29.315	8.719	30.515	0	0
	5.589	11.511	1.874	-30.908	5.529	3.541	0	0
6	0	4.931	3.965	-0.797	52.309	0	-4.878	0
	0.619	10.708	31.541	-1.241	48.552	11.398	-2.912	0
	1.238	21.655	30.889	-1.893	44.641	27.714	-1.115	0
	1.857	32.086	27.902	-4.88	40.176	42.033	0	0
	2.476	40.137	24.139	-8.643	35.241	53.014	0	0
	3.095	44.955	20.06	-12.721	29.922	59.527	0	0
	3.714	45.82	15.719	-17.063	24.299	60.651	0	0
	4.333	42.149	11.167	-21.615	18.454	55.672	0	0
	4.952	33.484	6.456	-26.325	12.467	44.08	0	0
	5.571	19.499	1.641	-31.14	6.417	25.561	-0.042	0
	6.19	0	4.13	-50.518	4.13	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	49.957	-5.74	-5.74	0	0	0
	0.492	-2.165	0	-4.4	-6.427	20.276	-0.137	0
	0.984	-4.33	0	-4.401	-12.326	35.029	-0.096	0
	1.476	-6.495	0	-4.401	-18.158	44.359	0	0
	1.968	-8.661	0	-4.401	-23.853	48.502	0	0
	2.46	-10.826	0	-4.401	-29.339	47.836	0	0
	2.952	-12.991	0	-4.401	-34.545	42.883	-0.132	0
	3.444	-15.157	0	-4.401	-39.397	34.307	-0.628	0
	3.936	-17.322	0	-4.401	-43.822	22.919	-1.459	0
	4.428	-24.024	0	-21.556	-47.746	9.68	-2.673	0
2	0	-36.931	27.543	-30.037	-51.591	0	-3.714	0
	0.614	-21.669	22.363	0	-5.714	4.2	0	0
	1.228	-12.626	9.29	0	-8.275	28.577	0	0
	1.842	-12.355	0	-0.678	-13.337	39.872	0	0
	2.456	-12.771	0	-0.678	-18.918	47.319	0	0
	3.07	-13.187	0	-0.678	-24.81	49.984	0	0
	3.684	-13.604	0	-0.678	-30.802	47.44	0	0
	4.298	-14.02	0	-0.678	-36.679	39.787	-0.079	0
	4.912	-15.619	0	-4.471	-42.225	27.654	-1.076	0
	5.526	-23.56	0	-22.038	-47.218	12.214	-2.63	0
3	0	-38.919	27.945	-27.784	-52.034	0	-3.801	0
	0.615	-23.442	22.213	0	-5.836	4.437	0	0
	1.23	-14.495	6.626	0	-8.522	29.478	0	0
	1.845	-14.148	0	-0.166	-13.611	40.737	0	0
	2.46	-14.25	0	-0.166	-19.197	48.055	0	0
	3.075	-14.353	0	-0.166	-25.077	50.543	0	0
	3.69	-14.455	0	-0.166	-31.045	47.81	0	0
	4.305	-14.557	0	-0.166	-36.891	39.977	-0.072	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	4.92	-16.048	0	-4.635	-42.404	27.686	-1.146	0
	5.535	-23.926	0	-22.274	-47.367	12.109	-2.779	0
4	0	-39.43	28.023	-28.006	-52.151	0	-3.922	0
	0.621	-23.755	22.272	0	-5.823	4.593	0	0
	1.242	-15.326	4.457	0	-8.505	29.859	0	0
	1.863	-14.28	0	-0.114	-13.595	41.238	0	0
	2.484	-14.351	0	-0.114	-19.183	48.643	0	0
	3.105	-14.422	0	-0.114	-25.066	51.17	0	0
	3.726	-14.492	0	-0.114	-31.039	48.424	0	0
	4.347	-14.563	0	-0.114	-36.892	40.524	0	0
	4.968	-15.019	0	-6.715	-42.411	28.117	-0.994	0
	5.589	-23.99	0	-22.273	-47.382	12.385	-2.648	0
5	0	-39.652	28.054	-28.024	-52.295	0	-3.639	0
	0.621	-23.985	22.333	0	-6.915	5.352	0	0
	1.242	-15.675	4.323	0	-8.515	29.958	0	0
	1.863	-14.984	0	-0.902	-13.535	41.384	0	0
	2.484	-15.544	0	-0.902	-19.058	48.907	0	0
	3.105	-16.104	0	-0.902	-24.889	51.601	0	0
	3.726	-16.664	0	-0.902	-30.832	49.026	0	0
	4.347	-17.224	0	-0.902	-36.687	41.233	-0.182	0
	4.968	-17.792	0	-5.78	-42.25	28.775	-1.312	0
	5.589	-26.48	0	-19.027	-47.316	12.716	-3.011	0
6	0	-42.267	30.097	-28.572	-51.746	0	-4.863	0
	0.619	-25.801	21.766	0	-2.689	14.982	0	0
	1.238	-15.663	3.343	0	-6.005	29.738	0	0
	1.857	-13.697	3.161	0	-9.984	43.259	0	0
	2.476	-11.74	3.161	0	-14.557	54.065	0	0
	3.095	-9.784	3.161	0	-19.657	60.839	0	0
	3.714	-7.827	3.161	0	-25.214	62.43	0	0
	4.333	-5.87	3.161	0	-31.157	57.859	0	0
	4.952	-3.913	3.161	0	-37.414	46.319	0	0
	5.571	-1.956	3.16	0	-43.913	27.182	0	0
	6.19	0	4.13	-50.518	-50.518	0	0	0

Support	Reac. Pos	Reac. Negative
1	5.74	-50.016
2	7.232	-55.188
3	7.711	-55.63
4	7.812	-55.847
5	9.2	-55.747
6	6.607	-56.319
7	4.13	-50.518

Id Group 9, HS-15 Truck Fatigue: (truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	17.914	-1.984	17.914	0	0	0
	0.492	7.734	15.719	-2.091	15.719	7.734	0	0
	0.984	13.306	13.522	-4.288	13.522	13.306	0	0
	1.476	16.788	11.374	-6.437	11.374	16.788	0	0
	1.968	18.303	9.3	-8.51	9.3	18.303	0	0
	2.46	18.032	7.33	-10.48	7.33	18.032	0	0
	2.952	16.207	5.49	-12.32	5.49	16.207	0	0
	3.444	13.14	3.815	-13.995	3.815	13.14	0	0
	3.936	9.169	2.33	-15.481	2.33	9.169	0	0
	4.428	4.646	1.049	-16.761	1.049	4.646	0	0
2	0	2.625	0.534	-1.968	17.924	0	-0.222	0
	0.614	5.415	16.536	-1.275	16.668	5.319	0	0
	1.228	10.581	14.935	-2.876	15.062	10.568	0	0
	1.842	14.854	13.199	-4.612	13.199	14.854	0	0
	2.456	17.656	11.163	-6.648	11.163	17.656	0	0
	3.07	18.658	9.037	-8.773	9.037	18.658	0	0
	3.684	17.747	6.905	-10.905	6.905	17.747	0	0
	4.298	15.016	4.85	-12.961	4.85	15.016	0	0
	4.912	10.806	2.967	-14.843	2.967	10.806	0	0
	5.526	5.583	1.326	-16.484	1.714	1.326	0	0
3	0	2.582	0.537	-1.982	17.921	0	-0.214	0
	0.615	5.563	16.504	-1.306	16.636	5.472	0	0
	1.23	10.795	14.884	-2.927	15.012	10.786	0	0
	1.845	15.082	13.141	-4.669	13.141	15.082	0	0
	2.46	17.861	11.105	-6.705	11.105	17.861	0	0
	3.075	18.823	8.986	-8.825	8.986	18.823	0	0
	3.69	17.867	6.863	-10.947	6.863	17.867	0	0
	4.305	15.105	4.735	-13.075	4.819	15.094	0	0
	4.92	10.845	2.947	-14.863	2.947	10.845	0	0
	5.535	5.6	1.318	-16.493	1.893	1.287	0	0
4	0	2.566	0.529	-1.948	17.933	0	-0.232	0
	0.621	5.611	16.505	-1.305	16.658	5.505	0	0
	1.242	10.892	14.886	-2.925	15.041	10.88	0	0
	1.863	15.237	13.174	-4.636	13.174	15.237	0	0
	2.484	18.064	11.139	-6.671	11.139	18.064	0	0
	3.105	19.051	9.016	-8.795	9.016	19.051	0	0
	3.726	18.086	6.885	-10.925	6.885	18.086	0	0
	4.347	15.267	4.706	-13.104	4.828	15.261	0	0
	4.968	10.95	2.948	-14.863	2.948	10.95	0	0
	5.589	5.654	1.318	-16.492	1.9	1.304	0	0
5	0	3.177	0.734	-2.336	17.83	0	-0.207	0
	0.621	5.615	16.523	-1.287	16.547	5.512	0	0
	1.242	10.915	14.927	-2.883	14.939	10.873	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	1.863	15.25	13.089	-4.721	13.097	15.227	0	0
	2.484	18.138	11.075	-6.736	11.107	18.059	0	0
	3.105	19.219	8.973	-8.838	9.031	19.11	0	0
	3.726	18.365	6.862	-10.949	6.946	18.26	0	0
	4.347	15.644	4.82	-12.991	4.926	15.578	0	0
	4.968	11.317	3.045	-14.766	3.045	11.317	0	0
	5.589	5.916	1.378	-16.432	1.9	1.183	0	0
6	0	2.363	1.9	-0.382	17.825	0	-0.2	0
	0.619	5.383	16.844	-0.966	16.861	5.287	0	0
	1.238	10.843	15.621	-2.19	15.628	10.807	0	0
	1.857	15.811	14.161	-3.649	14.173	15.761	0	0
	2.476	19.758	12.491	-5.32	12.522	19.642	0	0
	3.095	22.172	10.646	-7.164	10.698	22.012	0	0
	3.714	22.656	8.66	-9.15	8.731	22.48	0	0
	4.333	20.887	6.563	-11.248	6.649	20.727	0	0
	4.952	16.62	4.385	-13.425	4.479	16.504	0	0
	5.571	9.688	2.159	-15.652	2.253	9.63	0	0
	6.19	0	1.427	-17.874	1.427	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	17.914	-1.984	-1.984	0	0	0
	0.492	-0.976	0	-1.984	-2.212	7.674	0	0
	0.984	-1.952	0	-1.984	-4.394	13.202	0	0
	1.476	-2.928	0	-1.984	-6.523	16.66	0	0
	1.968	-3.904	0	-1.984	-8.574	18.177	0	0
	2.46	-4.88	0	-1.984	-10.522	17.929	0	0
	2.952	-5.856	0	-1.984	-12.341	16.145	0	0
	3.444	-6.832	0	-1.984	-14.006	13.104	0	0
	3.936	-7.808	0	-1.984	-15.501	9.091	0	0
	4.428	-8.784	0	-1.984	-16.79	4.52	0	0
2	0	-9.759	11.163	-1.984	-17.835	0	-0.207	0
	0.614	-7.091	1.714	0	-1.968	1.417	0	0
	1.228	-6.04	1.713	0	-2.876	10.581	0	0
	1.842	-5.028	1.635	0	-4.722	14.798	0	0
	2.456	-4.05	1.567	0	-6.735	17.558	0	0
	3.07	-3.416	0	-1.968	-8.834	18.553	0	0
	3.684	-4.625	0	-1.968	-10.938	17.671	0	0
	4.298	-5.833	0	-1.968	-12.968	14.995	0	0
	4.912	-7.042	0	-1.968	-14.856	10.762	0	0
	5.526	-8.25	0	-1.968	-16.51	5.477	0	0
3	0	-9.458	11.105	-1.968	-17.832	0	-0.213	0
	0.615	-8.028	1.893	0	-1.982	1.364	0	0
	1.23	-6.87	1.808	0	-2.927	10.795	0	0
	1.845	-5.764	1.774	0	-4.783	15.02	0	0
	2.46	-4.673	1.774	0	-6.796	17.755	0	0
	3.075	-3.646	0	-1.84	-8.897	18.723	0	0
	3.69	-4.777	0	-1.84	-11.027	17.831	0	0
	4.305	-5.949	0	-1.982	-13.075	15.105	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	4.92	-7.168	0	-1.982	-14.961	10.838	0	0
	5.535	-8.386	0	-1.982	-16.603	5.525	0	0
4	0	-9.605	11.139	-1.982	-17.908	0	-0.195	0
	0.621	-8.134	1.9	0	-1.948	1.356	0	0
	1.242	-6.954	1.9	0	-2.925	10.892	0	0
	1.863	-5.801	1.751	0	-4.785	15.174	0	0
	2.484	-4.714	1.751	0	-6.822	17.991	0	0
	3.105	-3.712	0	-1.708	-8.943	18.985	0	0
	3.726	-4.834	0	-1.827	-11.064	18.047	0	0
	4.347	-5.968	0	-1.827	-13.104	15.267	0	0
	4.968	-7.11	0	-1.948	-14.983	10.942	0	0
	5.589	-8.32	0	-1.948	-16.617	5.569	0	0
5	0	-9.529	11.107	-1.948	-17.915	0	-0.207	0
	0.621	-8.256	1.9	0	-2.341	1.722	0	0
	1.242	-7.076	1.9	0	-2.883	10.915	0	0
	1.863	-5.945	1.668	0	-4.721	15.25	0	0
	2.484	-4.909	1.668	0	-6.736	18.138	0	0
	3.105	-4.476	0	-2.124	-8.838	19.219	0	0
	3.726	-5.795	0	-2.124	-10.949	18.365	0	0
	4.347	-7.113	0	-2.124	-12.991	15.644	0	0
	4.968	-8.454	0	-2.341	-14.886	11.316	0	0
	5.589	-9.908	0	-2.341	-16.556	5.839	0	0
6	0	-11.362	12.522	-2.341	-17.912	0	-0.192	0
	0.619	-7.948	1.427	0	-0.966	5.383	0	0
	1.238	-7.065	1.427	0	-2.19	10.843	0	0
	1.857	-6.182	1.427	0	-3.649	15.811	0	0
	2.476	-5.299	1.427	0	-5.32	19.758	0	0
	3.095	-4.416	1.427	0	-7.164	22.172	0	0
	3.714	-3.533	1.427	0	-9.15	22.656	0	0
	4.333	-2.649	1.427	0	-11.248	20.887	0	0
	4.952	-1.766	1.427	0	-13.425	16.62	0	0
	5.571	-0.883	1.427	0	-15.652	9.688	0	0
	6.19	0	1.427	-17.874	-17.874	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.984	-17.936
2	2.502	-17.969
3	2.519	-17.966
4	2.477	-17.981
5	3.07	-17.957
6	2.282	-18.042
7	1.427	-17.897



Id Group 8, Ohio 5C1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shez	Corr. Shez	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	20.89	-2.258	20.89	0	0	0
	0.492	8.494	17.265	-1.276	17.265	8.494	0	0
	0.984	14.125	14.355	-4.185	14.355	14.125	0	0
	1.476	17.933	12.15	-6.391	12.15	17.933	0	0
	1.968	19.678	9.999	-8.541	9.999	19.678	0	0
	2.46	19.521	7.935	-10.605	7.935	19.521	0	0
	2.952	17.683	5.99	-12.55	5.99	17.683	0	0
	3.444	14.449	4.195	-14.345	4.195	14.449	0	0
	3.936	10.165	2.583	-15.958	2.583	10.165	0	0
	4.428	4.333	0	-19.354	0.771	3.414	0	0
2	0	2.997	0.609	-2.246	24.868	0	-7.478	0
	0.614	3.979	12.151	-0.937	21.462	2.957	0	0
	1.228	10.866	17.721	-0.819	17.877	10.849	0	0
	1.842	15.762	14.323	-4.217	15.714	10.36	0	0
	2.456	17.656	10.975	-7.565	13.559	14.789	0	0
	3.07	17.746	10.981	-7.559	10.981	17.746	0	0
	3.684	18.584	8.021	-10.519	8.021	18.584	0	0
	4.298	16.757	4.721	-13.819	4.721	16.757	0	0
	4.912	11.894	1.189	-17.352	2.312	8.411	0	0
	5.526	4.197	0.997	-12.09	1.772	1.328	0	0
3	0	2.999	0.624	-2.301	24.86	0	-7.284	0
	0.615	4.088	12.127	-0.96	21.434	3.24	0	0
	1.23	11.341	17.621	-0.919	17.84	11.147	0	0
	1.845	16.439	14.045	-4.496	15.871	9.899	0	0
	2.46	18.422	10.681	-7.859	13.636	14.651	0	0
	3.075	17.793	10.998	-7.543	10.998	17.793	0	0
	3.69	18.712	7.993	-10.547	7.993	18.712	0	0
	4.305	16.892	4.665	-13.875	4.665	16.892	0	0
	4.92	11.991	1.117	-17.423	2.289	8.416	0	0
	5.535	4.145	0.975	-12.112	2.135	1.451	0	0
4	0	2.95	0.609	-2.24	25.085	0	-7.603	0
	0.621	4.3	12.087	-1	21.651	3.138	0	0
	1.242	11.92	17.6	-0.94	18.031	11.24	0	0
	1.863	16.959	14.029	-4.511	15.894	10.044	0	0
	2.484	18.866	10.665	-7.875	13.668	14.912	0	0
	3.105	18.167	11.031	-7.51	11.031	18.167	0	0
	3.726	19.169	8.018	-10.522	8.018	19.169	0	0
	4.347	17.372	4.67	-13.87	4.67	17.372	0	0
	4.968	12.411	1.096	-17.444	2.581	9.56	0	0
	5.589	5.308	1.239	-11.849	2.133	1.465	0	0
5	0	3.606	0.737	-2.747	24.798	0	-7.199	0
	0.621	4.247	12.114	-0.974	21.442	3.319	0	0
	1.242	11.993	17.721	-0.819	17.911	11.287	0	0

	1.863	17.092	14.129	-4.411	15.671	9.526	0	0
	2.484	18.995	10.719	-7.821	13.383	14.277	0	0
	3.105	17.983	7.603	-10.937	10.716	17.446	0	0
	3.726	18.435	7.693	-10.847	7.701	18.425	0	0
	4.347	16.704	4.347	-14.194	4.423	16.656	0	0
	4.968	11.864	0.936	-17.604	2.237	8.316	0	0
	5.589	4.347	1.012	-12.075	2.191	1.364	0	0
6	0	2.725	2.191	-0.44	26.605	0	-9.546	0
	0.619	4.105	12.35	-0.737	23.418	1.954	0	0
	1.238	11.862	19.709	0	19.857	11.129	0	0
	1.857	18.007	15.809	-2.731	16.279	9.799	0	0
	2.476	21.389	12.781	-5.759	14.398	15.385	0	0
	3.095	23.781	10.856	-7.684	12.121	19.866	0	0
	3.714	24.097	8.808	-9.732	9.45	22.508	0	0
	4.333	22.64	6.348	-12.192	6.923	21.574	0	0
	4.952	19.387	2.88	-15.66	4.666	17.176	0	0
	5.571	12.033	0	-19.439	2.35	10.022	0	0
	6.19	0	1.647	-23.42	1.647	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	20.89	-2.258	-2.258	0	0	0
	0.492	-1.111	0	-2.258	-2.309	7.986	0	0
	0.984	-2.221	0	-2.258	-4.686	13.632	0	0
	1.476	-3.332	0	-2.258	-7.727	15.96	0	0
	1.968	-4.443	0	-2.258	-10.462	15.898	0	0
	2.46	-5.554	0	-2.258	-12.87	13.95	0	0
	2.952	-6.664	0	-2.258	-14.951	10.596	0	0
	3.444	-7.775	0	-2.258	-16.708	6.31	0	0
	3.936	-8.886	0	-2.258	-18.143	1.564	0	0
	4.428	-11.606	0	-14.186	-19.448	3.918	0	0
2	0	-18.858	14.678	-15.413	-22.779	0	-3.979	0
	0.614	-10.189	13.294	0	-2.246	1.617	0	0
	1.228	-6.286	1.772	0	-2.246	0.238	0	0
	1.842	-5.795	0.606	0	-4.292	15.724	0	0
	2.456	-5.441	0.458	0	-7.57	17.651	0	0
	3.07	-5.16	0.458	0	-10.603	16.87	0	0
	3.684	-5.65	0	-1.557	-13.297	13.905	0	0
	4.298	-6.701	0	-1.81	-15.617	9.333	0	0
	4.912	-8.038	0	-2.246	-17.55	11.184	0	0
	5.526	-10.609	0	-13.532	-21.059	3.52	0	0
3	0	-19.433	14.787	-15.617	-24.424	0	-6.69	0
	0.615	-10.508	13.636	0	-2.301	1.583	0	0
	1.23	-7.741	2.135	0	-2.301	0.168	0	0
	1.845	-6.882	1.266	0	-4.496	16.439	0	0
	2.46	-6.126	1.046	0	-7.859	18.422	0	0
	3.075	-5.576	0	-0.946	-10.903	17.619	0	0
	3.69	-6.28	0	-1.367	-13.585	14.538	0	0
	4.305	-7.128	0	-1.39	-15.864	9.789	0	0

	4.92	-8.324	0	-2.301	-17.7	4.08	0	0
	5.535	-10.707	0	-13.82	-21.249	3.429	0	0
4	0	-19.621	14.901	-15.666	-24.706	0	-7.038	0
	0.621	-10.561	13.302	0	-2.24	1.559	0	0
	1.242	-7.809	2.133	0	-2.285	8.503	0	0
	1.863	-6.962	1.257	0	-4.511	16.959	0	0
	2.484	-6.215	1.004	0	-7.875	18.866	0	0
	3.105	-5.672	0	-0.971	-10.92	17.966	0	0
	3.726	-6.387	0	-1.338	-13.6	14.776	0	0
	4.347	-7.233	0	-1.4	-15.875	9.915	0	0
	4.968	-8.177	0	-2.24	-17.883	11.332	0	0
	5.589	-10.561	0	-13.6	-21.491	3.325	0	0
5	0	-19.67	15.671	-14.924	-24.933	0	-7.348	0
	0.621	-10.686	13.669	0	-2.747	1.9	0	0
	1.242	-8.16	2.191	0	-2.747	0.194	0	0
	1.863	-7.34	0.943	0	-4.411	17.092	0	0
	2.484	-6.796	0.861	0	-7.821	18.995	0	0
	3.105	-6.751	0	-0.988	-10.937	17.983	0	0
	3.726	-7.611	0	-1.894	-13.706	14.545	0	0
	4.347	-8.792	0	-2.011	-16.077	9.298	0	0
	4.968	-10.042	0	-2.747	-18.003	2.979	0	0
	5.589	-11.748	0	-2.747	-21.379	3.884	0	0
6	0	-20.654	15.476	-16.077	-24.855	0	-6.892	0
	0.619	-11.352	14.398	0	-0.737	4.105	0	0
	1.238	-8.154	1.647	0	-1.715	8.491	0	0
	1.857	-7.135	1.647	0	-2.866	12.419	0	0
	2.476	-6.116	1.647	0	-5.759	21.389	0	0
	3.095	-5.096	1.647	0	-7.684	23.781	0	0
	3.714	-4.077	1.647	0	-9.732	24.097	0	0
	4.333	-3.058	1.647	0	-12.192	22.64	0	0
	4.952	-2.039	1.647	0	-15.66	19.387	0	0
	5.571	-1.019	1.647	0	-19.439	12.033	0	0
	6.19	0	1.647	-23.42	-23.42	0	0	0

Support    React. Pos    React. Negative

1	2.258	-20.928
2	2.855	-30.091
3	2.925	-30.403
4	2.848	-30.566
5	3.484	-30.595
6	2.631	-31.603
7	1.647	-23.462

Id Group 7, Ohio 4F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	17.452	-1.507	17.452	0	0	0
	0.492	7.125	14.482	-0.786	14.482	7.125	0	0
	0.984	11.503	11.69	-3.578	11.69	11.503	0	0
	1.476	14.499	9.823	-5.445	9.823	14.499	0	0
	1.968	16.107	8.184	-7.084	8.184	16.107	0	0
	2.46	16.218	6.593	-8.676	6.593	16.218	0	0
	2.952	14.981	5.075	-10.193	5.075	14.981	0	0
	3.444	12.6	3.659	-11.61	3.659	12.6	0	0
	3.936	9.331	2.371	-12.898	2.371	9.331	0	0
	4.428	4.734	0	-15.675	1.031	4.566	0	0
2	0	1.984	0.403	-1.487	21.267	0	-9.583	0
	0.614	4.317	11.681	-1.407	18.917	0	-2.14	0
	1.228	9.119	12.983	-2.285	16.283	4.147	0	0
	1.842	12.281	10.418	-4.851	13.492	8.814	0	0
	2.456	13.414	8.035	-7.234	10.906	11.887	0	0
	3.07	14.466	8.958	-6.31	8.958	14.466	0	0
	3.684	14.905	7.108	-8.16	7.108	14.905	0	0
	4.298	13.784	4.908	-10.36	4.908	13.784	0	0
	4.912	10.672	2.396	-12.872	2.515	9.138	0	0
	5.526	5.331	0	-15.595	1.431	0.977	0	0
3	0	2.024	0.421	-1.553	21.699	0	-11.616	0
	0.615	5.358	11.828	-1.259	19.24	0	-3.42	0
	1.23	10.432	12.674	-2.594	16.515	3.419	0	0
	1.845	13.424	10.024	-5.245	13.646	8.467	0	0
	2.46	14.224	7.666	-7.603	11.229	11.068	0	0
	3.075	14.321	6.879	-6.208	9.571	13.368	0	0
	3.69	14.374	7.584	-7.685	7.584	14.374	0	0
	4.305	13.636	5.26	-10.008	5.26	13.636	0	0
	4.92	10.748	2.644	-12.624	2.644	10.748	0	0
	5.535	5.507	0	-15.433	1.475	1.002	0	0
4	0	1.909	1.475	-0.389	21.851	0	-11.906	0
	0.621	5.432	11.823	-1.265	19.404	0	-3.561	0
	1.242	10.725	12.694	-2.574	16.68	3.449	0	0
	1.863	13.677	10.035	-5.233	13.798	8.662	0	0
	2.484	14.42	7.67	-7.599	11.264	10.963	0	0
	3.105	14.904	7.131	-5.956	9.573	13.524	0	0
	3.726	14.65	5.624	-7.463	7.59	14.613	0	0
	4.347	13.95	5.263	-10.005	5.263	13.95	0	0
	4.968	11.107	2.639	-12.63	2.699	9.991	0	0
	5.589	6.355	1.484	-11.604	1.484	6.355	0	0
5	0	2.97	0.607	-2.262	21.663	0	-12.093	0
	0.621	5.553	15.346	0	19.143	0	-3.719	0
	1.242	10.785	12.438	-2.83	16.364	3.285	0	0

	1.863	13.538	9.736	-5.532	13.455	8.429	0	0
	2.484	14.164	7.801	-5.286	11.377	10.876	0	0
	3.105	14.631	6.32	-6.767	9.555	13.009	0	0
	3.726	13.922	7.351	-7.917	7.446	13.804	0	0
	4.347	12.907	4.95	-10.318	5.031	12.857	0	0
	4.968	9.773	2.345	-12.923	2.476	8.316	0	0
	5.589	4.668	1.529	-11.558	1.529	4.668	0	0
6	0	1.792	1.441	-0.289	22.841	0	-13.628	0
	0.619	5.11	12.17	-0.917	20.398	0	-4.589	0
	1.238	10.534	16.076	0	17.561	3.185	0	0
	1.857	15.276	12.916	-2.352	14.39	8.892	0	0
	2.476	17.712	10.499	-4.769	12.124	11.68	0	0
	3.095	19.348	9.017	-6.251	10.53	14.666	0	0
	3.714	19.333	7.46	-7.808	8.607	16.495	0	0
	4.333	18.994	5.04	-10.228	6.316	16.625	0	0
	4.952	16.177	2.202	-13.067	4.214	13.685	0	0
	5.571	9.99	0	-16.138	2.528	7.886	0	0
	6.19	0	1.077	-19.353	1.077	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	17.452	-1.507	-1.507	0	0	0
	0.492	-0.742	0	-1.507	-2.588	6.239	0	0
	0.984	-1.483	0	-1.507	-5.102	10.004	0	0
	1.476	-2.225	0	-1.507	-7.314	11.74	0	0
	1.968	-2.967	0	-1.507	-9.246	11.852	0	0
	2.46	-3.708	0	-1.507	-10.92	10.696	0	0
	2.952	-4.45	0	-1.507	-12.362	8.58	0	0
	3.444	-5.192	0	-1.507	-13.695	5.419	0	0
	3.936	-6.424	0	-8.204	-14.914	1.394	0	0
	4.428	-10.984	0	-9.887	-17.508	0	-3.383	0
2	0	-16.168	14.878	-10.92	-20.036	0	-9.561	0
	0.614	-8.219	10.709	0	-1.487	1.071	0	0
	1.228	-5.174	1.431	0	-2.3	7.795	0	0
	1.842	-5.002	0.055	0	-4.939	12.236	0	0
	2.456	-4.974	0.043	0	-7.337	13.299	0	0
	3.07	-4.948	0.043	0	-9.444	12.658	0	0
	3.684	-4.921	0.043	0	-11.277	10.683	0	0
	4.298	-4.965	0	-0.1	-13.269	8.201	0	0
	4.912	-5.322	0	-1.487	-16.118	3.254	0	0
	5.526	-10.536	0	-9.444	-18.868	0	-3.495	0
3	0	-17.027	15.43	-11.056	-21.384	0	-11.614	0
	0.615	-10.205	9.845	0	-1.553	1.069	0	0
	1.23	-5.346	1.475	0	-2.594	10.432	0	0
	1.845	-5.215	0.042	0	-5.245	13.424	0	0
	2.46	-5.189	0.042	0	-7.603	14.224	0	0
	3.075	-5.164	0.042	0	-9.621	13.242	0	0
	3.69	-5.139	0.038	0	-11.368	10.584	0	0
	4.305	-5.116	0.038	0	-13.545	8.328	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	4.92	-5.619	0	-1.553	-16.447	3.305	0	0
	5.535	-10.833	0	-9.671	-19.208	0	-3.549	0
4	0	-17.388	15.426	-11.299	-21.701	0	-11.8	0
	0.621	-10.471	9.514	0	-1.433	0.998	0	0
	1.242	-5.276	1.441	0	-2.574	10.725	0	0
	1.863	-4.969	0	-0.052	-5.233	13.677	0	0
	2.484	-5.001	0	-0.052	-7.599	14.42	0	0
	3.105	-5.033	0	-0.052	-9.618	13.373	0	0
	3.726	-5.066	0	-0.052	-11.294	11.013	0	0
	4.347	-5.098	0	-0.052	-13.698	8.516	0	0
	4.968	-5.232	0	-1.433	-16.602	3.324	0	0
	5.589	-10.56	0	-10	-19.359	0	-3.696	0
5	0	-17.395	11.141	-15.734	-21.842	0	-12.094	0
	0.621	-10.768	9.784	0	-2.307	5.067	0	0
	1.242	-5.365	1.441	0	-3.051	8.086	0	0
	1.863	-5.527	0	-0.88	-5.532	13.538	0	0
	2.484	-6.074	0	-0.88	-7.923	14.042	0	0
	3.105	-6.62	0	-0.88	-9.939	12.771	0	0
	3.726	-7.167	0	-0.886	-11.567	10.296	0	0
	4.347	-7.717	0	-0.886	-13.869	8.05	0	0
	4.968	-8.27	0	-2.262	-16.834	2.522	0	0
	5.589	-11.942	0	-10.142	-19.641	0	-4.869	0
6	0	-18.555	17.561	-10.887	-22.157	0	-13.626	0
	0.619	-11.427	10.706	0	-0.917	5.11	0	0
	1.238	-5.334	1.077	0	-1.856	9.19	0	0
	1.857	-4.667	1.077	0	-2.949	12.778	0	0
	2.476	-4	1.077	0	-4.769	17.712	0	0
	3.095	-3.334	1.077	0	-6.251	19.348	0	0
	3.714	-2.667	1.077	0	-7.808	19.333	0	0
	4.333	-2	1.077	0	-10.228	18.994	0	0
	4.952	-1.333	1.077	0	-13.067	16.177	0	0
	5.571	-0.667	1.077	0	-16.138	9.99	0	0
	6.19	0	1.077	-19.353	-19.353	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.507	-17.482
2	1.891	-26.473
3	1.975	-27.863
4	1.864	-28.119
5	2.869	-28.284
6	1.73	-29.778
7	1.077	-19.386

Id Group 6, Ohio 3F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.112	-2.316	21.112	0	0	0
	0.492	8.617	17.514	-1.026	17.514	8.617	0	0
	0.984	13.909	14.135	-4.405	14.135	13.909	0	0
	1.476	17.562	11.899	-6.642	11.899	17.562	0	0
	1.968	19.45	9.883	-8.657	9.883	19.45	0	0
	2.46	19.517	7.934	-10.607	7.934	19.517	0	0
	2.952	17.954	6.082	-12.458	6.082	17.954	0	0
	3.444	15.014	4.36	-14.181	4.36	15.014	0	0
	3.936	11.015	2.799	-15.742	2.799	11.015	0	0
	4.428	5.427	0	-19.107	1.132	5.014	0	0
2	0	3.072	0.624	-2.303	24.924	0	-7.552	0
	0.614	4.378	11.595	-1.492	21.613	2.848	0	0
	1.228	10.866	17.721	-0.819	18.093	10.826	0	0
	1.842	15.889	14.574	-3.966	15.364	10.182	0	0
	2.456	17.94	11.228	-7.312	13.23	14.42	0	0
	3.07	17.481	10.829	-7.711	10.829	17.481	0	0
	3.684	18.566	8.013	-10.527	8.013	18.566	0	0
	4.298	17.069	4.827	-13.714	4.827	17.069	0	0
	4.912	12.564	1.376	-17.164	2.675	9.711	0	0
	5.526	5.756	1.369	-11.718	1.738	1.186	0	0
3	0	3.071	0.639	-2.357	24.899	0	-7.334	0
	0.615	5.63	11.764	-1.324	21.573	3.144	0	0
	1.23	12.286	17.36	-1.18	18.049	11.132	0	0
	1.845	16.97	13.868	-4.672	15.529	9.714	0	0
	2.46	18.565	10.622	-7.918	13.287	14.246	0	0
	3.075	17.488	10.826	-7.714	10.826	17.488	0	0
	3.69	18.653	7.969	-10.571	7.969	18.653	0	0
	4.305	17.167	4.757	-13.783	4.757	17.167	0	0
	4.92	12.633	1.295	-17.245	2.668	9.785	0	0
	5.535	5.803	1.367	-11.72	2.135	1.451	0	0
4	0	2.95	0.609	-2.24	25.069	0	-7.582	0
	0.621	5.712	11.757	-1.33	21.757	3.065	0	0
	1.242	12.592	17.417	-1.123	18.236	11.225	0	0
	1.863	17.278	13.924	-4.616	15.504	9.883	0	0
	2.484	18.852	10.67	-7.87	13.252	14.427	0	0
	3.105	17.805	8.252	-10.288	10.795	17.745	0	0
	3.726	18.977	7.938	-10.602	7.938	18.977	0	0
	4.347	17.535	4.724	-13.816	4.724	17.535	0	0
	4.968	13.009	1.26	-17.28	2.813	10.408	0	0
	5.589	6.827	1.594	-11.493	2.21	1.517	0	0
5	0	3.606	0.737	-2.747	24.798	0	-7.199	0
	0.621	5.754	11.767	-1.32	21.442	3.319	0	0
	1.242	12.64	17.548	-0.993	17.911	11.287	0	0

	1.863	17.378	14.037	-4.503	15.557	9.881	0	0
	2.484	18.945	10.739	-7.801	13.308	14.464	0	0
	3.105	17.846	10.501	-8.039	10.673	17.525	0	0
	3.726	18.733	7.453	-11.087	7.701	18.425	0	0
	4.347	16.85	4.111	-14.429	4.423	16.656	0	0
	4.968	11.864	0.936	-17.604	2.455	8.316	0	0
	5.589	4.733	1.633	-11.454	2.245	1.398	0	0
6	0	2.792	2.245	-0.451	26.605	0	-9.546	0
	0.619	5.574	12.087	-1.001	23.418	1.954	0	0
	1.238	12.498	19.581	0	19.857	11.129	0	0
	1.857	18.298	15.742	-2.798	16.21	10.099	0	0
	2.476	21.325	12.799	-5.742	14.343	15.59	0	0
	3.095	23.395	10.981	-7.559	12.092	19.957	0	0
	3.714	23.465	9.063	-9.477	9.45	22.508	0	0
	4.333	22.969	6.172	-12.369	7.078	21.285	0	0
	4.952	19.572	2.731	-15.809	5.036	16.718	0	0
	5.571	12.093	0	-19.537	2.942	9.655	0	0
	6.19	0	1.687	-23.446	1.687	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.112	-2.316	-2.316	0	0	0
	0.492	-1.139	0	-2.316	-2.534	7.875	0	0
	0.984	-2.279	0	-2.316	-4.686	13.632	0	0
	1.476	-3.418	0	-2.316	-7.702	15.997	0	0
	1.968	-4.557	0	-2.316	-10.402	16.017	0	0
	2.46	-5.696	0	-2.316	-12.785	14.159	0	0
	2.952	-6.836	0	-2.316	-14.851	10.889	0	0
	3.444	-7.975	0	-2.316	-16.625	6.597	0	0
	3.936	-9.114	0	-2.316	-18.098	1.742	0	0
	4.428	-11.186	0	-14.091	-19.445	3.927	0	0
2	0	-18.339	14.728	-14.851	-22.779	0	-3.979	0
	0.614	-9.968	12.986	0	-2.303	1.658	0	0
	1.228	-6.282	1.738	0	-2.303	0.244	0	0
	1.842	-5.924	0.362	0	-4.292	15.724	0	0
	2.456	-5.706	0.35	0	-7.57	17.651	0	0
	3.07	-5.96	0	-0.975	-10.555	16.953	0	0
	3.684	-6.565	0	-1.005	-13.215	14.098	0	0
	4.298	-7.182	0	-1.005	-15.516	9.631	0	0
	4.912	-8.24	0	-2.303	-17.55	11.184	0	0
	5.526	-10.243	0	-13.215	-21.059	3.52	0	0
3	0	-18.95	14.416	-15.516	-24.424	0	-6.69	0
	0.615	-10.268	13.287	0	-2.357	1.622	0	0
	1.23	-7.741	2.135	0	-2.591	9.529	0	0
	1.845	-7.215	0.707	0	-4.672	16.97	0	0
	2.46	-6.78	0.707	0	-7.918	18.565	0	0
	3.075	-6.438	0	-0.845	-10.813	17.459	0	0
	3.69	-6.958	0	-0.845	-13.313	14.221	0	0
	4.305	-7.477	0	-0.845	-15.524	9.706	0	0



## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	4.92	-8.525	0	-2.357	-17.921	11.211	0	0
	5.535	-10.341	0	-13.313	-21.472	3.278	0	0
4	0	-19	15.504	-14.454	-24.83	0	-7.199	0
	0.621	-10.262	13.252	0	-2.24	1.559	0	0
	1.242	-8.089	2.21	0	-2.613	9.701	0	0
	1.863	-7.276	0.706	0	-4.616	17.278	0	0
	2.484	-6.838	0.706	0	-7.87	18.852	0	0
	3.105	-6.498	0	-0.858	-10.771	17.699	0	0
	3.726	-7.031	0	-0.858	-13.276	14.395	0	0
	4.347	-7.563	0	-0.858	-15.495	9.885	0	0
	4.968	-8.177	0	-2.24	-18.09	11.319	0	0
	5.589	-10.338	0	-13.276	-21.635	3.226	0	0
5	0	-19.101	15.557	-14.488	-24.982	0	-7.411	0
	0.621	-10.346	13.637	0	-2.747	1.9	0	0
	1.242	-8.361	2.245	0	-3.25	8.101	0	0
	1.863	-7.623	0.456	0	-4.503	17.378	0	0
	2.484	-7.34	0.456	0	-7.801	18.945	0	0
	3.105	-7.488	0	-1.364	-10.773	17.678	0	0
	3.726	-8.337	0	-1.371	-13.366	14.124	0	0
	4.347	-9.188	0	-1.371	-15.758	9.1	0	0
	4.968	-10.042	0	-2.747	-17.958	11.864	0	0
	5.589	-11.748	0	-2.747	-21.511	3.802	0	0
6	0	-20.257	15.412	-15.758	-24.889	0	-6.934	0
	0.619	-11.044	14.343	0	-1.001	5.574	0	0
	1.238	-8.353	1.687	0	-1.97	9.755	0	0
	1.857	-7.309	1.687	0	-3.089	13.384	0	0
	2.476	-6.264	1.687	0	-5.742	21.325	0	0
	3.095	-5.22	1.687	0	-7.559	23.395	0	0
	3.714	-4.176	1.687	0	-9.477	23.465	0	0
	4.333	-3.132	1.687	0	-12.369	22.969	0	0
	4.952	-2.088	1.687	0	-15.809	19.572	0	0
	5.571	-1.044	1.687	0	-19.537	12.093	0	0
	6.19	0	1.687	-23.446	-23.446	0	0	0

Support    React. Pos    React. Negative

1	2.316	-21.149
2	2.927	-29.626
3	2.996	-29.933
4	2.848	-29.958
5	3.484	-30.045
6	2.696	-31.255
7	1.687	-23.486

Id Group 5 Ohio 2F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.785	-2.413	21.785	0	0	0
	0.492	9.403	19.112	-2.7	19.112	9.403	0	0
	0.984	16.18	16.443	-5.369	16.443	16.18	0	0
	1.476	20.592	13.952	-7.86	13.952	20.592	0	0
	1.968	22.71	11.54	-10.272	11.54	22.71	0	0
	2.46	22.679	9.219	-12.593	9.219	22.679	0	0
	2.952	20.741	7.026	-14.786	7.026	20.741	0	0
	3.444	17.206	4.996	-16.816	4.996	17.206	0	0
	3.936	12.455	3.164	-18.648	3.164	12.455	0	0
	4.428	6.94	1.567	-20.245	1.567	6.94	0	0
2	0	3.185	0.647	-2.388	21.799	0	-0.069	0
	0.614	7.1	19.6	-2.212	20.251	6.631	0	0
	1.228	13.001	17.895	-3.917	18.29	12.959	0	0
	1.842	18.123	16.029	-5.783	16.029	18.123	0	0
	2.456	21.558	13.612	-8.2	13.612	21.558	0	0
	3.07	23.052	11.184	-10.628	11.184	23.052	0	0
	3.684	22.292	8.694	-13.118	8.694	22.292	0	0
	4.298	19.307	6.249	-15.563	6.249	19.307	0	0
	4.912	14.384	3.955	-17.857	3.955	14.384	0	0
	5.526	8.072	1.919	-19.893	2.044	1.395	0	0
3	0	3.117	0.648	-2.392	21.651	0.645	0	0
	0.615	7.72	19.998	-1.814	19.998	7.72	0	0
	1.23	14.16	17.968	-3.844	17.968	14.16	0	0
	1.845	19.218	15.681	-6.131	15.778	18.3	0	0
	2.46	22.339	13.24	-8.572	13.518	21.779	0	0
	3.075	23.225	11.102	-10.71	11.102	23.225	0	0
	3.69	22.418	8.63	-13.182	8.63	22.418	0	0
	4.305	19.396	6.206	-15.606	6.206	19.396	0	0
	4.92	14.45	3.932	-17.88	3.988	13.306	0	0
	5.535	8.127	1.914	-19.898	2.319	1.576	0	0
4	0	3.146	0.649	-2.388	21.571	1.047	0	0
	0.621	8.053	19.938	-1.874	19.938	8.053	0	0
	1.242	14.45	17.927	-3.885	17.927	14.45	0	0
	1.863	19.481	15.656	-6.156	15.759	18.456	0	0
	2.484	22.581	13.23	-8.582	13.512	21.971	0	0
	3.105	23.458	11.112	-10.7	11.112	23.458	0	0
	3.726	22.693	8.658	-13.154	8.658	22.693	0	0
	4.347	19.711	6.25	-15.562	6.25	19.711	0	0
	4.968	14.799	3.991	-17.821	4.015	13.436	0	0
	5.589	8.496	1.982	-19.83	2.32	1.593	0	0
5	0	3.718	0.76	-2.832	21.566	1.088	0	0
	0.621	8.086	19.957	-1.855	19.957	8.086	0	0
	1.242	14.495	17.978	-3.834	17.978	14.495	0	0

	1.863	19.569	15.742	-6.07	15.742	19.569	0	0
	2.484	22.745	13.349	-8.463	13.602	22.117	0	0
	3.105	23.706	10.898	-10.914	11.061	23.403	0	0
	3.726	22.385	8.489	-13.323	8.507	22.363	0	0
	4.347	19.078	6.033	-15.779	6.217	18.964	0	0
	4.968	13.86	4.152	-17.66	4.152	13.86	0	0
	5.589	7.661	2.356	-19.456	2.356	7.661	0	0
6	0	2.872	2.31	-0.464	21.802	0	-0.072	0
	0.619	7.778	20.416	-1.396	20.629	6.592	0	0
	1.238	14.421	18.9	-2.912	19.13	13.28	0	0
	1.857	20.303	17.126	-4.686	17.352	19.326	0	0
	2.476	24.794	15.136	-6.676	15.328	24.081	0	0
	3.095	27.365	12.97	-8.842	13.094	26.981	0	0
	3.714	27.589	10.669	-11.143	10.686	27.549	0	0
	4.333	25.395	8.137	-13.675	8.271	25.145	0	0
	4.952	20.215	5.483	-16.329	5.796	19.828	0	0
	5.571	11.794	2.759	-19.053	3.256	11.486	0	0
	6.19	0	1.73	-21.784	1.73	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.785	-2.413	-2.413	0	0	0
	0.492	-1.187	0	-2.413	-2.899	9.305	0	0
	0.984	-2.375	0	-2.413	-5.393	16.157	0	0
	1.476	-3.562	0	-2.413	-7.974	20.424	0	0
	1.968	-4.75	0	-2.413	-10.486	22.29	0	0
	2.46	-5.937	0	-2.413	-12.871	21.994	0	0
	2.952	-7.124	0	-2.413	-15.1	19.815	0	0
	3.444	-8.312	0	-2.413	-17.139	16.093	0	0
	3.936	-9.499	0	-2.413	-18.959	11.23	0	0
	4.428	-10.687	0	-2.413	-20.527	5.69	0	0
2	0	-11.874	13.612	-2.413	-21.801	0	-0.051	0
	0.614	-8.646	2.044	0	-2.388	1.719	0	0
	1.228	-7.391	2.044	0	-3.917	13.001	0	0
	1.842	-6.729	0.899	0	-5.936	18.045	0	0
	2.456	-6.179	0.888	0	-8.248	21.503	0	0
	3.07	-5.829	0	-1.291	-10.818	22.722	0	0
	3.684	-6.704	0	-1.434	-13.395	21.641	0	0
	4.298	-7.584	0	-1.434	-15.881	18.364	0	0
	4.912	-8.544	0	-2.388	-18.178	13.234	0	0
	5.526	-10.01	0	-2.388	-19.948	7.001	0	0
3	0	-11.476	13.518	-2.388	-21.552	1.116	0	0
	0.615	-9.832	2.319	0	-2.392	1.646	0	0
	1.23	-8.406	2.319	0	-4.005	13.251	0	0
	1.845	-7.534	1.296	0	-6.131	19.218	0	0
	2.46	-6.806	1.133	0	-8.572	22.339	0	0
	3.075	-6.156	0	-1.226	-11.062	23.224	0	0
	3.69	-6.91	0	-1.226	-13.498	21.829	0	0
	4.305	-7.709	0	-1.394	-15.778	18.369	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 14 FB 1

	4.92	-8.651	0	-2.392	-17.88	14.45	0	0
	5.535	-10.121	0	-2.392	-19.898	8.127	0	0
4	0	-11.592	13.512	-2.392	-21.544	1.165	0	0
	0.621	-9.935	2.32	0	-2.388	1.663	0	0
	1.242	-8.494	2.32	0	-4.032	13.373	0	0
	1.863	-7.557	1.316	0	-6.156	19.481	0	0
	2.484	-6.794	1.107	0	-8.582	22.581	0	0
	3.105	-6.157	0	-1.209	-11.06	23.445	0	0
	3.726	-6.908	0	-1.209	-13.484	22.025	0	0
	4.347	-7.76	0	-1.424	-15.755	18.534	0	0
	4.968	-8.72	0	-2.388	-17.821	14.799	0	0
	5.589	-10.203	0	-2.388	-19.83	8.496	0	0
5	0	-11.686	13.94	-2.388	-21.472	1.53	0	0
	0.621	-10.036	2.31	0	-2.832	1.959	0	0
	1.242	-8.602	2.31	0	-4.197	13.415	0	0
	1.863	-7.743	1.202	0	-6.09	18.473	0	0
	2.484	-7.113	0.927	0	-8.463	22.745	0	0
	3.105	-6.856	0	-1.877	-10.914	23.706	0	0
	3.726	-8.021	0	-1.877	-13.323	22.385	0	0
	4.347	-9.187	0	-1.877	-15.779	19.078	0	0
	4.968	-10.371	0	-1.912	-18.083	13.859	0	0
	5.589	-12.113	0	-2.832	-20.125	7.245	0	0
6	0	-13.872	15.328	-2.832	-21.797	0	-0.063	0
	0.619	-9.639	1.73	0	-1.396	7.778	0	0
	1.238	-8.568	1.73	0	-2.912	14.421	0	0
	1.857	-7.497	1.73	0	-4.686	20.303	0	0
	2.476	-6.426	1.73	0	-6.676	24.794	0	0
	3.095	-5.355	1.73	0	-8.842	27.365	0	0
	3.714	-4.284	1.73	0	-11.143	27.589	0	0
	4.333	-3.213	1.73	0	-13.675	25.395	0	0
	4.952	-2.142	1.73	0	-16.329	20.215	0	0
	5.571	-1.071	1.73	0	-19.053	11.794	0	0
	6.19	0	1.73	-21.784	-21.784	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.413	-21.812
2	3.035	-21.813
3	3.04	-21.154
4	3.038	-20.728
5	3.592	-20.7
6	2.774	-21.89
7	1.73	-21.812

Id Group 8, Ohio 5C1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	23.515	-1.639	23.515	0	0	0
	0.619	12.08	19.516	0	19.516	12.08	0	0
	1.238	19.462	15.72	-2.9	15.72	19.462	0	0
	1.857	22.726	12.238	-6.382	12.238	22.726	0	0
	2.476	24.193	9.771	-8.849	9.771	24.193	0	0
	3.095	23.869	7.712	-10.908	7.712	23.869	0	0
	3.714	21.46	5.778	-12.842	5.778	21.46	0	0
	4.333	18.057	2.736	-15.884	2.871	12.438	0	0
	4.952	11.878	0	-19.801	1.715	8.491	0	0
	5.571	4.087	0.734	-12.41	0.734	4.087	0	0
2	0	2.705	0.437	-2.185	24.917	0	-6.853	0
	0.619	4.356	12.126	-1.018	21.429	3.917	0	0
	1.238	11.886	17.797	-0.978	18.098	2.952	0	0
	1.857	16.715	14.224	-4.396	16.163	9.283	0	0
	2.476	18.438	10.871	-7.749	13.782	14.538	0	0
	3.095	17.981	11.004	-7.617	11.004	17.981	0	0
	3.714	18.998	7.879	-10.741	7.879	18.998	0	0
	4.333	17.102	4.46	-14.16	4.46	17.102	0	0
	4.952	12.013	0.858	-17.762	2.781	0.228	0	0
	5.571	4.297	0.988	-12.156	2.781	1.949	0	0
3	0	3.672	2.777	-0.782	24.979	0	-7.293	0
	0.619	5.295	11.905	-1.239	21.523	3.361	0	0
	1.238	12.415	17.493	-1.127	17.903	11.345	0	0
	1.857	17.375	13.909	-4.711	15.935	9.914	0	0
	2.476	19.17	10.551	-8.07	13.654	14.76	0	0
	3.095	18.166	7.526	-11.094	10.966	17.936	0	0
	3.714	18.823	7.914	-10.706	7.914	18.823	0	0
	4.333	16.907	4.542	-14.078	4.542	16.907	0	0
	4.952	11.863	0.961	-17.66	2.239	0.161	0	0
	5.571	3.977	0.928	-12.216	2.239	1.547	0	0
4	0	2.933	2.239	-0.603	24.984	0	-7.326	0
	0.619	4.152	12.169	-0.975	21.509	3.335	0	0
	1.238	12.064	17.543	-1.077	17.864	11.31	0	0
	1.857	17.037	13.973	-4.647	15.982	9.994	0	0
	2.476	18.901	10.627	-7.993	13.69	14.829	0	0
	3.095	18.013	7.617	-11.003	10.992	17.983	0	0
	3.714	18.836	7.927	-10.693	7.927	18.836	0	0
	4.333	16.864	4.538	-14.082	4.538	16.864	0	0
	4.952	11.73	0.934	-17.686	2.375	8.794	0	0
	5.571	4.401	1.028	-12.115	2.28	1.621	0	0
5	0	3.087	0.673	-2.504	24.034	0	-5.915	0
	0.585	4.198	20.589	0	20.709	3.706	0	0
	1.17	11.587	17.048	-1.572	17.751	3.222	0	0

	1.755	16.091	13.563	-5.057	15.883	8.59	0	0
	2.34	17.689	10.285	-8.335	13.631	13.059	0	0
	2.925	16.676	7.292	-11.328	11.025	16.04	0	0
	3.51	17.022	8.08	-10.54	8.091	17.009	0	0
	4.095	15.505	4.859	-13.761	4.914	15.473	0	0
	4.68	11.17	1.53	-17.09	2.394	0.006	0	0
	5.265	4.105	1.009	-12.135	2.394	1.406	0	0
6	0	2.807	2.394	-0.482	25.814	0	-8.195	0
	0.582	3.744	12.429	-0.715	22.578	2.32	0	0
	1.164	11.083	18.863	0	18.982	10.531	0	0
	1.746	16.407	14.931	-3.689	16.379	9.13	0	0
	2.328	20.157	12.848	-5.772	14.568	14.151	0	0
	2.91	22.474	10.897	-7.723	12.377	18.168	0	0
	3.492	22.824	8.816	-9.804	9.798	20.539	0	0
	4.074	20.916	6.641	-11.979	6.952	20.372	0	0
	4.656	17.653	3.454	-15.166	4.688	16.216	0	0
	5.238	10.978	0	-18.863	2.365	9.46	0	0
	5.82	0	1.545	-22.804	1.545	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	23.515	-1.639	-1.639	0	0	0
	0.619	-1.015	0	-1.639	-2.365	10.062	0	0
	1.238	-2.029	0	-1.639	-4.69	17.245	0	0
	1.857	-3.044	0	-1.639	-6.956	21.659	0	0
	2.476	-4.059	0	-1.639	-9.492	22.6	0	0
	3.095	-5.074	0	-1.639	-12.176	19.944	0	0
	3.714	-6.088	0	-1.639	-14.46	15.452	0	0
	4.333	-7.103	0	-1.639	-16.346	9.854	0	0
	4.952	-8.118	0	-1.639	-19.948	11.152	0	0
	5.571	-11.399	0	-14.46	-23.522	1.946	0	0
2	0	-20.732	16.163	-15.523	-26.722	0	-9.601	0
	0.619	-11.822	2.781	0	-2.185	1.352	0	0
	1.238	-10.1	2.781	0	-2.249	8.331	0	0
	1.857	-8.833	2.048	0	-4.474	16.667	0	0
	2.476	-7.635	1.907	0	-7.758	18.427	0	0
	3.095	-6.775	1.007	0	-10.776	17.447	0	0
	3.714	-6.783	0	-0.675	-13.448	14.282	0	0
	4.333	-7.325	0	-0.932	-15.739	9.54	0	0
	4.952	-8.114	0	-2.185	-17.954	11.3	0	0
	5.571	-10.703	0	-13.552	-21.496	3.341	0	0
3	0	-19.694	14.964	-15.712	-24.863	0	-7.171	0
	0.619	-10.595	13.654	0	-2.212	1.513	0	0
	1.238	-8.156	2.239	0	-2.587	9.559	0	0
	1.857	-7.222	1.391	0	-4.711	17.375	0	0
	2.476	-6.383	1.335	0	-8.07	19.17	0	0
	3.095	-5.683	0.957	0	-11.094	18.166	0	0
	3.714	-6.302	0	-1.243	-13.743	14.903	0	0
	4.333	-7.081	0	-1.298	-15.982	10.017	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 13 FB 1

	4.952	-8.07	0	-2.212	-18.06	11.28	0	0
	5.571	-10.724	0	-13.395	-21.693	3.193	0	0
4	0	-19.716	15.7	-15.001	-25.143	0	-7.545	0
	0.619	-10.716	13.739	0	-1.911	1.316	0	0
	1.238	-8.257	2.28	0	-2.297	8.46	0	0
	1.857	-7.01	1.459	0	-4.647	17.037	0	0
	2.476	-6.12	1.365	0	-7.993	18.901	0	0
	3.095	-5.363	1.008	0	-11.003	18.013	0	0
	3.714	-5.581	0	-0.861	-13.638	14.909	0	0
	4.333	-6.202	0	-1.04	-15.859	10.219	0	0
	4.952	-6.963	0	-1.911	-18.019	11.11	0	0
	5.571	-10.417	0	-13.638	-21.635	3.074	0	0
5	0	-19.292	15.854	-14.547	-25.072	0	-7.569	0
	0.585	-10.863	13.631	0	-2.504	1.622	0	0
	1.17	-8.397	2.394	0	-2.504	0.157	0	0
	1.755	-7.303	1.497	0	-5.057	16.091	0	0
	2.34	-6.505	1.189	0	-8.335	17.689	0	0
	2.925	-6.407	0	-0.968	-11.328	16.676	0	0
	3.51	-6.973	0	-0.968	-13.99	13.496	0	0
	4.095	-7.616	0	-1.201	-16.272	8.703	0	0
	4.68	-8.633	0	-2.504	-18.126	2.963	0	0
	5.265	-11.073	0	-14.35	-20.766	3.937	0	0
6	0	-19.907	15.312	-15.755	-24.193	0	-5.915	0
	0.582	-11.284	14.568	0	-0.715	3.744	0	0
	1.164	-7.192	1.545	0	-1.669	7.771	0	0
	1.746	-6.293	1.545	0	-3.689	16.407	0	0
	2.328	-5.394	1.545	0	-5.772	20.157	0	0
	2.91	-4.495	1.545	0	-7.723	22.474	0	0
	3.492	-3.596	1.545	0	-9.804	22.824	0	0
	4.074	-2.697	1.545	0	-11.979	20.916	0	0
	4.656	-1.798	1.545	0	-15.166	17.653	0	0
	5.238	-0.899	1.545	0	-18.863	10.978	0	0
	5.82	0	1.545	-22.804	-22.804	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.639	-23.557
2	2.622	-31.737
3	3.559	-30.675
4	2.843	-30.701
5	3.178	-30.401
6	2.876	-31.13
7	1.545	-22.825

Id Group 7, Ohio 4F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kn	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	19.435	-1.08	19.435	0	0	0
	0.619	10.03	16.204	0	16.204	10.03	0	0
	1.238	16.241	13.118	-2.216	13.118	16.241	0	0
	1.857	19.066	10.267	-5.067	10.267	19.066	0	0
	2.476	19.423	7.845	-7.49	7.845	19.423	0	0
	3.095	19.434	6.279	-9.055	6.279	19.434	0	0
	3.714	17.785	4.789	-10.546	4.789	17.785	0	0
	4.333	15.33	2.359	-12.975	2.956	12.809	0	0
	4.952	10.559	0	-16.15	1.858	9.201	0	0
	5.571	5.101	0.916	-12.228	0.916	5.101	0	0
2	0	1.769	0.286	-1.429	22.229	0	-13.647	0
	0.619	4.664	11.629	-1.515	19.702	0	-4.887	0
	1.238	9.789	13.005	-2.379	16.887	2.5	0	0
	1.857	12.919	10.347	-4.987	13.915	8.022	0	0
	2.476	13.936	7.945	-7.389	11.634	10.306	0	0
	3.095	14.682	6.811	-6.333	10.001	12.781	0	0
	3.714	14.22	5.322	-7.821	7.98	14.053	0	0
	4.333	13.553	5.586	-9.748	5.586	13.553	0	0
	4.952	10.811	2.88	-12.455	3.056	8.095	0	0
	5.571	5.593	0	-15.367	2.312	5.069	0	0
3	0	2.986	2.283	-0.612	21.886	0	-12.036	0
	0.619	6.366	11.654	-1.49	19.393	0	-3.66	0
	1.238	11.128	12.644	-2.691	16.627	3.333	0	0
	1.857	13.96	10.011	-5.323	13.715	8.495	0	0
	2.476	14.677	7.497	-5.646	11.328	11.036	0	0
	3.095	14.941	5.98	-7.164	9.649	13.381	0	0
	3.714	14.412	7.627	-7.707	7.627	14.412	0	0
	4.333	13.653	5.258	-10.076	5.258	13.653	0	0
	4.952	10.686	2.595	-12.739	2.595	10.686	0	0
	5.571	5.31	0	-15.596	1.438	0.994	0	0
4	0	1.884	1.438	-0.388	21.908	0	-11.981	0
	0.619	5.439	15.642	0	19.407	0	-3.597	0
	1.238	10.816	12.826	-2.508	16.638	3.391	0	0
	1.857	13.828	10.204	-5.13	13.726	8.543	0	0
	2.476	14.68	7.876	-7.458	11.401	11.199	0	0
	3.095	14.746	7.048	-6.095	9.694	13.55	0	0
	3.714	14.564	7.654	-7.68	7.654	14.564	0	0
	4.333	13.784	5.276	-10.058	5.276	13.784	0	0
	4.952	10.797	2.607	-12.727	2.617	9.675	0	0
	5.571	5.878	1.375	-11.769	1.549	1.102	0	0
5	0	2.481	0.508	-2.049	21.147	0	-11.208	0
	0.585	5.784	14.73	-0.604	18.664	0	-3.536	0
	1.17	10.439	12.007	-3.327	15.962	2.8	0	0



	1.755	12.926	9.495	-5.84	13.164	7.423	0	0
	2.34	13.587	7.753	-5.39	11.52	10.067	0	0
	2.925	14.005	6.251	-6.892	9.753	12.029	0	0
	3.51	13.064	4.806	-8.338	7.734	12.758	0	0
	4.095	11.984	5.349	-9.986	5.447	11.927	0	0
	4.68	9.203	2.902	-12.432	2.902	9.203	0	0
	5.265	4.384	0.176	-15.158	1.572	0.923	0	0
6	0	1.843	1.572	-0.317	22.124	0	-11.789	0
	0.582	4.742	12.238	-0.905	19.669	0	-3.723	0
	1.164	10.033	15.34	0	16.843	3.037	0	0
	1.746	14.161	12.137	-3.197	13.684	7.857	0	0
	2.328	16.953	10.479	-4.855	12.064	11.418	0	0
	2.91	18.56	8.956	-6.378	10.521	14.007	0	0
	3.492	18.584	7.351	-7.983	8.685	15.48	0	0
	4.074	17.318	5.415	-9.919	6.518	15.393	0	0
	4.656	14.779	2.638	-12.697	4.017	13.174	0	0
	5.238	9.152	0	-15.726	2.321	7.574	0	0
	5.82	0	1.108	-18.918	1.108	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.435	-1.08	-1.08	0	0	0
	0.619	-0.669	0	-1.08	-2.531	7.925	0	0
	1.238	-1.337	0	-1.08	-4.226	13.752	0	0
	1.857	-2.006	0	-1.08	-6.338	16.706	0	0
	2.476	-2.674	0	-1.08	-8.637	16.583	0	0
	3.095	-3.343	0	-1.08	-10.567	14.756	0	0
	3.714	-4.012	0	-1.08	-12.166	11.766	0	0
	4.333	-4.68	0	-1.08	-14.449	8.943	0	0
	4.952	-5.349	0	-1.08	-17.634	3.208	0	0
	5.571	-11.425	0	-10.699	-20.482	0	-4.586	0
2	0	-18.623	10.929	-17.634	-22.934	0	-13.649	0
	0.619	-12.005	10.28	0	-1.515	4.664	0	0
	1.238	-8.318	2.283	0	-2.467	8.331	0	0
	1.857	-7.759	0.902	0	-5.066	12.871	0	0
	2.476	-7.201	0.902	0	-7.481	13.823	0	0
	3.095	-6.646	0.892	0	-9.59	13.039	0	0
	3.714	-6.094	0.892	0	-11.414	10.921	0	0
	4.333	-5.542	0.892	0	-13.492	8.419	0	0
	4.952	-5.306	0	-1.429	-16.403	3.299	0	0
	5.571	-10.735	0	-9.739	-19.188	0	-3.683	0
3	0	-17.341	15.293	-11.414	-21.713	0	-12.035	0
	0.619	-10.548	10.03	0	-1.532	4.542	0	0
	1.238	-5.239	1.438	0	-2.711	10.012	0	0
	1.857	-5.136	0	-0.006	-5.323	13.96	0	0
	2.476	-5.14	0	-0.006	-7.658	14.611	0	0
	3.095	-5.144	0	-0.006	-9.65	13.508	0	0
	3.714	-5.148	0	-0.006	-11.367	10.842	0	0
	4.333	-5.151	0	-0.006	-13.843	8.625	0	0

	4.952	-5.572	0	-1.527	-16.735	3.409	0	0
	5.571	-10.722	0	-9.678	-19.472	0	-3.61	0
4	0	-17.431	11.239	-15.641	-21.933	0	-11.978	0
	0.619	-10.806	9.674	0	-1.318	0.908	0	0
	1.238	-5.609	1.549	0	-2.508	10.816	0	0
	1.857	-4.967	0.093	0	-5.13	13.828	0	0
	2.476	-4.91	0.093	0	-7.458	14.68	0	0
	3.095	-4.852	0.093	0	-9.446	13.783	0	0
	3.714	-4.794	0.093	0	-11.103	11.586	0	0
	4.333	-4.737	0.093	0	-13.687	8.749	0	0
	4.952	-4.803	0	-1.318	-16.559	3.729	0	0
	5.571	-9.627	0	-9.724	-19.283	0	-3.073	0
5	0	-16.94	10.987	-15.471	-21.735	0	-11.215	0
	0.585	-10.792	9.753	0	-2.049	1.282	0	0
	1.17	-5.513	1.572	0	-3.327	10.439	0	0
	1.755	-5.465	0	-0.419	-5.84	12.926	0	0
	2.34	-5.71	0	-0.419	-8.047	13.478	0	0
	2.925	-6.052	0	-0.591	-9.915	12.519	0	0
	3.51	-6.398	0	-0.591	-11.434	10.524	0	0
	4.095	-6.748	0	-0.612	-13.571	7.267	0	0
	4.68	-7.11	0	-2.049	-16.391	2.465	0	0
	5.265	-10.682	0	-9.915	-19.086	0	-4.021	0
6	0	-16.795	11.014	-15.938	-21.532	0	-11.789	0
	0.582	-10.485	10.521	0	-0.905	4.742	0	0
	1.164	-5.158	1.108	0	-1.857	8.647	0	0
	1.746	-4.513	1.108	0	-3.197	14.161	0	0
	2.328	-3.869	1.108	0	-4.855	16.953	0	0
	2.91	-3.224	1.108	0	-6.378	18.56	0	0
	3.492	-2.579	1.108	0	-7.983	18.584	0	0
	4.074	-1.934	1.108	0	-9.919	17.318	0	0
	4.656	-1.29	1.108	0	-12.697	14.779	0	0
	5.238	-0.645	1.108	0	-15.726	9.152	0	0
	5.82	0	1.108	-18.918	-18.918	0	0	0

Support	Reac. Pos	Reac. Negative
---------	-----------	----------------

1	1.08	-19.468
2	1.714	-29.877
3	2.895	-28.313
4	1.826	-28.26
5	2.557	-27.625
6	1.888	-28.368
7	1.108	-18.951

Id Group 6, Ohio 3F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	23.545	-1.68	23.545	0	0	0
	0.619	12.143	19.617	0	19.617	12.143	0	0
	1.238	19.649	15.872	-2.748	15.872	19.649	0	0
	1.857	23.057	12.416	-6.204	12.416	23.057	0	0
	2.476	23.572	9.52	-9.1	9.52	23.572	0	0
	3.095	23.497	7.592	-11.028	7.592	23.497	0	0
	3.714	21.411	5.765	-12.855	5.765	21.411	0	0
	4.333	18.363	2.807	-15.813	3.095	13.412	0	0
	4.952	12.528	0	-19.67	1.971	9.762	0	0
	5.571	5.56	0.998	-12.146	0.998	5.56	0	0
2	0	2.778	0.449	-2.244	24.958	0	-6.903	0
	0.619	4.726	11.528	-1.615	21.565	3.833	0	0
	1.238	11.886	18	-0.978	18	11.886	0	0
	1.857	16.862	14.461	-4.159	15.836	9.08	0	0
	2.476	18.737	11.113	-7.507	13.447	14.124	0	0
	3.095	17.847	8.059	-10.561	10.844	17.684	0	0
	3.714	18.957	7.862	-10.758	7.862	18.957	0	0
	4.333	17.397	4.555	-14.065	4.555	17.397	0	0
	4.952	12.667	1.034	-17.586	3.254	8.109	0	0
	5.571	5.793	1.333	-11.81	2.772	1.91	0	0
3	0	3.626	2.772	-0.743	25.039	0	-7.373	0
	0.619	6.838	11.543	-1.601	21.678	3.255	0	0
	1.238	13.031	17.324	-1.296	18.12	11.331	0	0
	1.857	17.555	13.849	-4.771	15.571	9.876	0	0
	2.476	18.993	10.624	-7.996	13.335	14.386	0	0
	3.095	17.803	10.355	-8.265	10.826	17.684	0	0
	3.714	18.834	7.918	-10.702	7.918	18.834	0	0
	4.333	17.257	4.657	-13.963	4.657	17.257	0	0
	4.952	12.566	1.153	-17.467	2.57	9.516	0	0
	5.571	5.466	1.277	-11.867	2.239	1.547	0	0
4	0	2.933	2.239	-0.603	25.078	0	-7.449	0
	0.619	5.807	11.778	-1.365	21.706	3.199	0	0
	1.238	12.715	17.363	-1.257	18.141	11.291	0	0
	1.857	17.321	13.879	-4.742	15.561	9.855	0	0
	2.476	18.848	10.65	-7.971	13.416	14.509	0	0
	3.095	17.792	10.885	-7.735	10.885	17.792	0	0
	3.714	18.921	7.962	-10.658	7.962	18.921	0	0
	4.333	17.323	4.69	-13.93	4.69	17.323	0	0
	4.952	12.615	1.177	-17.443	2.719	10.048	0	0
	5.571	6.265	1.465	-11.678	2.337	1.662	0	0
5	0	3.109	2.337	-0.665	24.034	0	-5.915	0
	0.585	5.665	11.763	-1.38	20.709	3.706	0	0
	1.17	12.286	16.849	-1.771	17.682	3.465	0	0

	1.755	16.441	13.444	-5.176	15.776	8.9	0	0
	2.34	17.712	10.275	-8.345	13.541	13.269	0	0
	2.925	16.449	7.421	-11.199	10.966	16.143	0	0
	3.51	17.312	7.831	-10.789	8.08	17.022	0	0
	4.095	15.66	4.593	-14.027	4.914	15.473	0	0
	4.68	11.17	1.53	-17.09	2.453	0.006	0	0
	5.265	4.355	1.434	-11.71	2.453	1.441	0	0
6	0	2.876	2.453	-0.494	25.814	0	-8.195	0
	0.582	5.105	12.169	-0.975	22.577	2.324	0	0
	1.164	11.895	18.689	0	18.978	10.546	0	0
	1.746	16.93	14.803	-3.817	16.313	9.399	0	0
	2.328	20.367	12.788	-5.832	14.492	14.414	0	0
	2.91	22.384	10.928	-7.692	12.318	18.34	0	0
	3.492	22.488	8.96	-9.66	9.766	20.613	0	0
	4.074	20.951	6.621	-11.999	6.942	20.39	0	0
	4.656	17.881	3.258	-15.362	4.842	16.037	0	0
	5.238	11.077	0	-19.033	2.736	9.244	0	0
	5.82	0	1.595	-22.906	1.595	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	23.545	-1.68	-1.68	0	0	0
	0.619	-1.04	0	-1.68	-2.947	9.702	0	0
	1.238	-2.08	0	-1.68	-5.052	16.798	0	0
	1.857	-3.119	0	-1.68	-7.104	21.386	0	0
	2.476	-4.159	0	-1.68	-9.492	22.6	0	0
	3.095	-5.199	0	-1.68	-12.144	20.043	0	0
	3.714	-6.239	0	-1.68	-14.403	15.664	0	0
	4.333	-7.279	0	-1.68	-16.275	10.159	0	0
	4.952	-8.318	0	-1.68	-19.946	11.161	0	0
	5.571	-11.082	0	-14.403	-23.522	1.946	0	0
2	0	-20.327	15.836	-15.458	-26.722	0	-9.601	0
	0.619	-11.816	2.772	0	-2.244	1.389	0	0
	1.238	-10.1	2.772	0	-2.442	8.331	0	0
	1.857	-9.239	1.391	0	-4.474	16.667	0	0
	2.476	-8.378	1.391	0	-7.758	18.427	0	0
	3.095	-7.518	1.38	0	-10.735	17.524	0	0
	3.714	-7.343	0	-0.442	-13.374	14.463	0	0
	4.333	-7.617	0	-0.442	-15.626	9.889	0	0
	4.952	-8.333	0	-2.244	-17.954	11.3	0	0
	5.571	-10.386	0	-13.752	-21.496	3.341	0	0
3	0	-19.128	14.505	-15.626	-24.863	0	-7.171	0
	0.619	-10.377	13.664	0	-2.285	1.563	0	0
	1.238	-8.156	2.239	0	-2.826	10.432	0	0
	1.857	-7.556	0.837	0	-4.771	17.555	0	0
	2.476	-7.038	0.837	0	-7.996	18.993	0	0
	3.095	-6.521	0.837	0	-10.864	17.755	0	0
	3.714	-6.941	0	-0.748	-13.334	14.426	0	0
	4.333	-7.403	0	-0.748	-15.609	9.777	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 13 FB 1

	4.952	-8.338	0	-2.285	-18.272	11.265	0	0
	5.571	-10.336	0	-13.334	-21.806	3.115	0	0
4	0	-19.222	14.923	-15.264	-25.135	0	-7.534	0
	0.619	-10.404	13.416	0	-1.911	1.316	0	0
	1.238	-8.463	2.337	0	-2.675	9.829	0	0
	1.857	-7.363	0.893	0	-4.742	17.321	0	0
	2.476	-6.81	0.893	0	-7.971	18.848	0	0
	3.095	-6.257	0.893	0	-10.833	17.713	0	0
	3.714	-6.229	0	-0.486	-13.289	14.509	0	0
	4.333	-6.53	0	-0.486	-15.519	10.039	0	0
	4.952	-6.963	0	-1.911	-18.228	11.091	0	0
	5.571	-10.168	0	-13.289	-21.773	2.976	0	0
5	0	-18.787	15.776	-14.144	-25.109	0	-7.618	0
	0.585	-10.496	13.541	0	-2.488	1.556	0	0
	1.17	-8.605	2.453	0	-2.692	7.723	0	0
	1.755	-7.756	0.697	0	-5.176	16.441	0	0
	2.34	-7.358	0.641	0	-8.345	17.712	0	0
	2.925	-6.983	0.641	0	-11.199	16.449	0	0
	3.51	-7.405	0	-1.029	-13.69	13.146	0	0
	4.095	-8.015	0	-1.051	-15.891	8.481	0	0
	4.68	-8.633	0	-2.488	-17.818	2.964	0	0
	5.265	-10.881	0	-14.023	-20.954	3.826	0	0
6	0	-19.407	14.772	-15.891	-24.298	0	-6.038	0
	0.582	-10.889	14.492	0	-0.975	5.105	0	0
	1.164	-7.425	1.595	0	-1.96	9.125	0	0
	1.746	-6.497	1.595	0	-3.817	16.93	0	0
	2.328	-5.569	1.595	0	-5.832	20.367	0	0
	2.91	-4.641	1.595	0	-7.692	22.384	0	0
	3.492	-3.712	1.595	0	-9.66	22.488	0	0
	4.074	-2.784	1.595	0	-11.999	20.951	0	0
	4.656	-1.856	1.595	0	-15.362	17.881	0	0
	5.238	-0.928	1.595	0	-19.033	11.077	0	0
	5.82	0	1.595	-22.906	-22.906	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.68	-23.585
2	2.692	-31.381
3	3.515	-30.153
4	2.843	-30.21
5	3.105	-29.921
6	2.948	-30.681
7	1.595	-22.946

Id Group 5 Ohio 2F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.878	-1.731	21.878	0	0	0
	0.619	11.844	19.134	-2.772	19.134	11.844	0	0
	1.238	20.3	16.398	-5.508	16.398	20.3	0	0
	1.857	25.5	13.732	-8.174	13.732	25.5	0	0
	2.476	27.711	11.192	-10.714	11.192	27.711	0	0
	3.095	27.481	8.879	-13.027	8.879	27.481	0	0
	3.714	24.892	6.702	-15.204	6.702	24.892	0	0
	4.333	20.376	4.702	-17.204	4.702	20.376	0	0
	4.952	14.464	2.921	-18.985	2.921	14.464	0	0
	5.571	7.792	1.399	-20.507	1.399	7.792	0	0
2	0	2.87	0.464	-2.318	21.891	0	-0.063	0
	0.619	7.669	19.55	-2.356	20.209	7.261	0	0
	1.238	13.885	18.158	-4.16	18.158	13.885	0	0
	1.857	19.11	15.844	-6.062	15.844	19.11	0	0
	2.476	22.43	13.387	-8.519	13.387	22.43	0	0
	3.095	23.752	10.965	-10.941	10.965	23.752	0	0
	3.714	22.787	8.502	-13.404	8.502	22.787	0	0
	4.333	19.605	6.098	-15.808	6.108	18.499	0	0
	4.952	14.523	3.852	-18.054	4.208	13.43	0	0
	5.571	8.106	1.864	-20.042	2.858	1.97	0	0
3	0	3.739	2.858	-0.766	21.565	1.53	0	0
	0.619	8.508	19.916	-1.99	19.916	8.508	0	0
	1.238	14.823	17.899	-4.007	17.899	14.823	0	0
	1.857	19.747	15.631	-6.275	15.82	18.553	0	0
	2.476	22.739	13.212	-8.694	13.541	22.047	0	0
	3.095	23.51	10.746	-11.16	11.106	23.468	0	0
	3.714	22.6	8.617	-13.289	8.617	22.6	0	0
	4.333	19.488	6.178	-15.728	6.178	19.488	0	0
	4.952	14.434	3.893	-18.013	4.042	13.409	0	0
	5.571	8.003	1.869	-20.037	2.397	1.656	0	0
4	0	3.14	2.397	-0.646	21.642	1.148	0	0
	0.619	8.174	19.985	-1.921	19.985	8.174	0	0
	1.238	14.557	17.951	-3.955	17.982	13.413	0	0
	1.857	19.545	15.659	-6.247	15.914	18.567	0	0
	2.476	22.582	13.215	-8.691	13.605	22.082	0	0
	3.095	23.502	11.146	-10.76	11.146	23.502	0	0
	3.714	22.626	8.641	-13.265	8.641	22.626	0	0
	4.333	19.51	6.193	-15.713	6.193	19.51	0	0
	4.952	14.47	3.908	-17.998	3.992	13.267	0	0
	5.571	8.079	1.888	-20.018	2.383	1.695	0	0
5	0	3.408	0.698	-2.815	21.633	1.151	0	0
	0.585	7.897	19.983	-1.923	19.983	7.897	0	0
	1.17	14.01	17.971	-3.935	17.993	12.848	0	0

	1.755	18.806	15.708	-6.198	16.042	17.831	0	0
	2.34	21.775	13.294	-8.612	13.592	21.08	0	0
	2.925	22.631	10.825	-11.081	11.043	22.248	0	0
	3.51	21.318	8.399	-13.507	8.488	21.215	0	0
	4.095	18.067	6.015	-15.891	6.114	18.01	0	0
	4.68	13.107	4.049	-17.857	4.049	13.107	0	0
	5.265	7.187	2.268	-19.638	2.526	1.484	0	0
6	0	2.961	2.526	-0.509	21.896	0	-0.068	0
	0.582	7.344	20.504	-1.402	20.715	6.239	0	0
	1.164	13.685	18.967	-2.939	19.208	12.562	0	0
	1.746	19.308	17.167	-4.739	17.421	18.273	0	0
	2.328	23.611	15.144	-6.762	15.388	22.761	0	0
	2.91	26.09	12.941	-8.965	13.145	25.495	0	0
	3.492	26.331	10.595	-11.311	10.726	26.027	0	0
	4.074	24.019	8.149	-13.757	8.167	23.988	0	0
	4.656	19.093	5.503	-16.403	5.64	18.933	0	0
	5.238	11.138	2.769	-19.137	3.088	10.952	0	0
	5.82	0	1.768	-21.878	1.768	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.878	-1.731	-1.731	0	0	0
	0.619	-1.071	0	-1.731	-3.264	11.539	0	0
	1.238	-2.143	0	-1.731	-5.816	19.919	0	0
	1.857	-3.214	0	-1.731	-8.304	25.259	0	0
	2.476	-4.286	0	-1.731	-10.735	27.66	0	0
	3.095	-5.357	0	-1.731	-13.154	27.087	0	0
	3.714	-6.429	0	-1.731	-15.398	24.172	0	0
	4.333	-7.5	0	-1.731	-17.43	19.396	0	0
	4.952	-8.572	0	-1.731	-19.215	13.324	0	0
	5.571	-9.643	0	-1.731	-20.719	6.612	0	0
2	0	-13.952	2.858	-15.398	-21.896	0	-0.073	0
	0.619	-12.183	2.858	0	-2.356	7.669	0	0
	1.238	-10.436	1.934	0	-4.16	13.885	0	0
	1.857	-9.245	1.888	0	-6.235	19.002	0	0
	2.476	-8.076	1.888	0	-8.547	22.396	0	0
	3.095	-6.91	1.592	0	-11.111	23.436	0	0
	3.714	-7.151	0	-0.933	-13.663	22.145	0	0
	4.333	-7.768	0	-1.188	-15.808	19.605	0	0
	4.952	-8.609	0	-2.318	-18.054	14.523	0	0
	5.571	-10.044	0	-2.318	-20.042	8.106	0	0
3	0	-11.7	2.397	-14.052	-21.656	1.1	0	0
	0.619	-10.216	2.397	0	-2.375	1.625	0	0
	1.238	-8.732	2.397	0	-4.038	13.452	0	0
	1.857	-7.783	1.41	0	-6.275	19.747	0	0
	2.476	-6.945	1.204	0	-8.694	22.739	0	0
	3.095	-6.199	1.204	0	-11.16	23.51	0	0
	3.714	-6.874	0	-1.142	-13.572	22.026	0	0
	4.333	-7.643	0	-1.343	-15.832	18.506	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 13 FB 1

	4.952	-8.665	0	-2.375	-18.013	14.434	0	0
	5.571	-10.135	0	-2.375	-20.037	8.003	0	0
4	0	-11.604	13.605	-2.375	-21.683	0.952	0	0
	0.619	-10.104	2.383	0	-2.197	1.513	0	0
	1.238	-8.629	2.383	0	-3.955	14.557	0	0
	1.857	-7.648	1.43	0	-6.247	19.545	0	0
	2.476	-6.833	1.291	0	-8.691	22.582	0	0
	3.095	-6.033	1.291	0	-11.181	23.375	0	0
	3.714	-6.535	0	-1.024	-13.612	21.891	0	0
	4.333	-7.196	0	-1.151	-15.882	18.361	0	0
	4.952	-8.005	0	-2.197	-17.998	14.47	0	0
	5.571	-9.365	0	-2.197	-20.018	8.079	0	0
5	0	-11.814	2.526	-13.612	-21.652	1.103	0	0
	0.585	-10.336	2.526	0	-2.815	1.761	0	0
	1.17	-8.859	2.526	0	-3.935	14.01	0	0
	1.755	-8.082	1.213	0	-6.198	18.806	0	0
	2.34	-7.373	1.213	0	-8.612	21.775	0	0
	2.925	-6.95	0	-1.596	-11.081	22.631	0	0
	3.51	-7.885	0	-1.607	-13.507	21.318	0	0
	4.095	-8.825	0	-1.607	-15.891	18.067	0	0
	4.68	-9.768	0	-2.815	-18.19	13.106	0	0
	5.265	-11.415	0	-2.815	-20.225	6.842	0	0
6	0	-13.062	15.388	-2.815	-21.891	0	-0.06	0
	0.582	-9.259	1.768	0	-1.402	7.344	0	0
	1.164	-8.23	1.768	0	-2.939	13.685	0	0
	1.746	-7.202	1.768	0	-4.739	19.308	0	0
	2.328	-6.173	1.768	0	-6.762	23.611	0	0
	2.91	-5.144	1.768	0	-8.965	26.09	0	0
	3.492	-4.115	1.768	0	-11.311	26.331	0	0
	4.074	-3.086	1.768	0	-13.757	24.019	0	0
	4.656	-2.058	1.768	0	-16.403	19.093	0	0
	5.238	-1.029	1.768	0	-19.137	11.138	0	0
	5.82	0	1.768	-21.878	-21.878	0	0	0

Support    React. Pos    React. Negative

1	1.731	-21.906
2	2.782	-21.992
3	3.624	-20.779
4	3.043	-20.948
5	3.513	-20.75
6	3.034	-21.969
7	1.768	-21.906



Id Group 3, HS-20 Truck Operating: 1.3\*1.0\*(Truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shez	Corr. Shez	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	35.698	-2.909	35.698	0	0	0
	0.619	19.414	31.363	-3.687	31.363	19.414	0	0
	1.238	33.375	26.959	-8.09	26.959	33.375	0	0
	1.857	41.978	22.605	-12.444	22.605	41.978	0	0
	2.476	45.502	18.377	-16.672	18.377	45.502	0	0
	3.095	44.421	14.353	-20.697	14.353	44.421	0	0
	3.714	39.387	10.605	-24.445	10.605	39.387	0	0
	4.333	31.239	7.21	-27.84	7.21	31.239	0	0
	4.952	21.319	4.305	-30.744	4.305	21.319	0	0
	5.571	10.579	1.899	-33.151	1.899	10.579	0	0
2	0	4.765	0.77	-3.849	35.953	0	-1.248	0
	0.619	11.617	32.335	-2.714	33.335	10.998	0	0
	1.238	22.216	30.017	-5.996	30.017	22.216	0	0
	1.857	31.098	26.194	-8.855	26.194	31.098	0	0
	2.476	36.661	22.042	-13.007	22.042	36.661	0	0
	3.095	38.358	17.735	-17.315	17.735	38.358	0	0
	3.714	36.059	13.442	-21.608	13.442	36.059	0	0
	4.333	30.066	9.336	-25.714	9.336	30.066	0	0
	4.952	21.414	5.672	-29.377	5.672	21.414	0	0
	5.571	11.015	2.532	-32.518	4.573	3.152	0	0
3	0	6.386	3.473	-2.717	35.91	0	-1.258	0
	0.619	11.091	32.458	-2.592	33.399	10.447	0	0
	1.238	21.48	29.253	-5.796	30.146	21.421	0	0
	1.857	30.353	26.32	-8.729	26.351	30.261	0	0
	2.476	36.434	21.332	-13.718	22.197	35.899	0	0
	3.095	38.512	16.874	-18.175	17.864	37.72	0	0
	3.714	36.394	12.464	-22.585	13.536	35.556	0	0
	4.333	30.391	8.289	-26.76	9.393	29.691	0	0
	4.952	21.316	4.545	-30.504	5.607	20.824	0	0
	5.571	10.2	1.367	-33.682	3.831	2.646	0	0
4	0	5.83	3.199	-2.452	36.181	0	-1.873	0
	0.619	10.294	33.569	-1.48	33.623	10.067	0	0
	1.238	21.356	30.28	-4.769	30.304	21.269	0	0
	1.857	30.296	26.423	-8.626	26.44	30.244	0	0
	2.476	36.032	22.158	-12.891	22.227	35.867	0	0
	3.095	37.949	17.037	-18.012	17.817	37.573	0	0
	3.714	35.831	12.623	-22.427	13.388	35.149	0	0
	4.333	29.996	8.464	-26.586	9.352	29.529	0	0
	4.952	21.165	5.707	-29.342	5.707	21.165	0	0
	5.571	10.865	2.538	-32.512	4.058	2.886	0	0
5	0	7.248	3.288	-3.969	35.296	0	-1.357	0
	0.585	10.624	32.464	-2.586	32.674	9.764	0	0
	1.17	20.537	29.288	-5.761	29.398	20.153	0	0

	1.755	28.642	25.629	-9.421	25.668	28.529	0	0
	2.34	34.269	21.515	-13.535	21.746	33.727	0	0
	2.925	36.383	17.221	-17.828	17.669	35.597	0	0
	3.51	34.722	12.913	-22.136	13.58	33.943	0	0
	4.095	29.411	8.759	-26.29	9.624	28.907	0	0
	4.68	20.969	5.946	-29.104	5.946	20.969	0	0
	5.265	10.948	2.69	-32.36	4.251	2.497	0	0
6	0	4.984	4.251	-0.856	35.25	0	-1.373	0
	0.582	9.983	33.144	-1.906	33.334	8.986	0	0
	1.164	20.099	30.733	-4.317	30.868	19.471	0	0
	1.746	29.237	27.873	-7.176	27.919	29.049	0	0
	2.328	36.709	24.537	-10.512	24.621	36.418	0	0
	2.91	41.48	20.795	-14.254	21.032	40.793	0	0
	3.492	42.574	16.762	-18.288	17.162	41.643	0	0
	4.074	39.356	12.509	-22.541	13.068	38.38	0	0
	4.656	31.357	8.111	-26.939	8.805	30.548	0	0
	5.238	18.279	3.642	-31.408	4.431	17.82	0	0
	5.82	0	2.938	-35.829	2.938	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	35.698	-2.909	-2.909	0	0	0
	0.619	-1.801	0	-2.909	-4.435	18.951	0	0
	1.238	-3.601	0	-2.909	-8.813	32.481	0	0
	1.857	-5.402	0	-2.909	-13.079	40.8	0	0
	2.476	-7.202	0	-2.909	-17.175	44.256	0	0
	3.095	-9.003	0	-2.909	-21.047	43.339	0	0
	3.714	-10.804	0	-2.909	-24.636	38.676	0	0
	4.333	-12.604	0	-2.909	-27.888	31.033	0	0
	4.952	-14.405	0	-2.909	-30.813	20.98	0	0
	5.571	-16.205	0	-2.909	-33.294	9.783	0	0
2	0	-22.323	4.573	-24.636	-35.218	0	-1.26	0
	0.619	-19.493	4.573	0	-3.849	2.383	0	0
	1.238	-16.662	4.573	0	-5.996	22.216	0	0
	1.857	-14.665	3.109	0	-9.699	30.575	0	0
	2.476	-12.908	2.717	0	-13.675	35.834	0	0
	3.095	-11.836	0.626	0	-17.778	37.497	0	0
	3.714	-11.733	0	-0.8	-21.861	35.433	0	0
	4.333	-12.447	0	-2.12	-25.776	29.873	0	0
	4.952	-14.35	0	-3.575	-29.461	21.102	0	0
	5.571	-16.678	0	-3.849	-32.697	10.236	0	0
3	0	-19.061	22.204	-3.849	-35.259	0	-1.256	0
	0.619	-16.323	3.831	0	-3.939	2.695	0	0
	1.238	-13.952	3.831	0	-5.796	21.48	0	0
	1.857	-12.113	2.869	0	-9.582	30.208	0	0
	2.476	-10.7	1.83	0	-13.861	36.265	0	0
	3.095	-10.043	0.001	0	-18.266	38.349	0	0
	3.714	-10.643	0	-1.671	-22.624	36.301	0	0
	4.333	-12.065	0	-3.77	-26.767	30.371	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 13 FB 1

	4.952	-14.398	0	-3.77	-30.544	21.171	0	0
	5.571	-16.811	0	-3.939	-33.743	9.939	0	0
4	0	-19.722	4.058	-25.214	-36.174	0	-1.868	0
	0.619	-17.21	4.058	0	-3.515	2.421	0	0
	1.238	-14.698	4.058	0	-5.717	21.079	0	0
	1.857	-12.26	3.913	0	-9.561	29.968	0	0
	2.476	-10.162	2.238	0	-13.751	35.763	0	0
	3.095	-9.249	0.344	0	-18.106	37.781	0	0
	3.714	-9.732	0	-1.719	-22.445	35.788	0	0
	4.333	-11.062	0	-2.7	-26.586	29.996	0	0
	4.952	-12.81	0	-3.347	-30.345	21.072	0	0
	5.571	-14.984	0	-3.515	-33.543	10.132	0	0
5	0	-19.884	4.251	-23.447	-35.975	0	-1.371	0
	0.585	-17.397	4.251	0	-4.505	2.818	0	0
	1.17	-14.91	4.251	0	-5.761	20.537	0	0
	1.755	-12.424	4.248	0	-9.421	28.642	0	0
	2.34	-10.637	1.644	0	-13.535	34.269	0	0
	2.925	-10.37	0	-1.124	-17.828	36.383	0	0
	3.51	-11.524	0	-2.639	-22.136	34.722	0	0
	4.095	-13.424	0	-3.778	-26.29	29.411	0	0
	4.68	-15.636	0	-4.325	-30.12	20.967	0	0
	5.265	-18.264	0	-4.505	-33.455	10.305	0	0
6	0	-20.899	24.621	-4.505	-36.106	0	-1.361	0
	0.582	-15.388	2.938	0	-1.906	9.983	0	0
	1.164	-13.678	2.938	0	-4.317	20.099	0	0
	1.746	-11.968	2.938	0	-7.176	29.237	0	0
	2.328	-10.258	2.938	0	-10.512	36.709	0	0
	2.91	-8.549	2.938	0	-14.254	41.48	0	0
	3.492	-6.839	2.938	0	-18.288	42.574	0	0
	4.074	-5.129	2.938	0	-22.541	39.356	0	0
	4.656	-3.419	2.938	0	-26.939	31.357	0	0
	5.238	-1.71	2.938	0	-31.408	18.279	0	0
	5.82	0	2.938	-35.829	-35.829	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.909	-35.741
2	4.619	-36.253
3	6.19	-36.164
4	5.651	-36.76
5	7.257	-36.288
6	5.107	-36.435
7	2.938	-35.873

Id Group I, HS-20 Truck Inventory: 1.3\*1.67\*(truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	59.613	-4.858	59.613	0	0	0
	0.619	32.42	52.375	-6.156	52.375	32.42	0	0
	1.238	55.735	45.021	-13.511	45.021	55.735	0	0
	1.857	70.101	37.75	-20.781	37.75	70.101	0	0
	2.476	75.987	30.689	-27.842	30.689	75.987	0	0
	3.095	74.182	23.968	-34.563	23.968	74.182	0	0
	3.714	65.774	17.71	-40.821	17.71	65.774	0	0
	4.333	52.167	12.04	-46.492	12.04	52.167	0	0
	4.952	35.602	7.189	-51.342	7.189	35.602	0	0
	5.571	17.667	3.171	-55.36	3.171	17.667	0	0
2	0	7.958	1.286	-6.428	60.039	0	-2.084	0
	0.619	19.4	53.998	-4.533	55.668	18.366	0	0
	1.238	37.1	50.127	-10.014	50.127	37.1	0	0
	1.857	51.931	43.743	-14.788	43.743	51.931	0	0
	2.476	61.222	36.81	-21.722	36.81	61.222	0	0
	3.095	64.056	29.617	-28.915	29.617	64.056	0	0
	3.714	60.217	22.447	-36.084	22.447	60.217	0	0
	4.333	50.208	15.59	-42.941	15.59	50.208	0	0
	4.952	35.76	9.472	-49.059	9.472	35.76	0	0
	5.571	18.394	4.228	-54.303	7.636	5.263	0	0
3	0	10.665	5.8	-4.537	59.968	0	-2.101	0
	0.619	18.522	54.203	-4.328	55.776	17.445	0	0
	1.238	35.87	48.851	-9.68	50.342	35.773	0	0
	1.857	50.688	43.954	-14.578	44.005	50.534	0	0
	2.476	60.843	35.623	-22.908	37.067	59.949	0	0
	3.095	64.313	28.179	-30.352	29.833	62.99	0	0
	3.714	60.776	20.815	-37.716	22.604	59.377	0	0
	4.333	50.752	13.842	-44.689	15.685	49.583	0	0
	4.952	35.597	7.59	-50.941	9.363	34.776	0	0
	5.571	17.033	2.283	-56.248	6.397	4.418	0	0
4	0	9.735	5.341	-4.095	60.42	0	-3.127	0
	0.619	17.19	56.059	-2.472	56.148	16.811	0	0
	1.238	35.664	50.567	-7.965	50.607	35.518	0	0
	1.857	50.593	44.125	-14.406	44.154	50.506	0	0
	2.476	60.171	37.003	-21.528	37.118	59.897	0	0
	3.095	63.373	28.451	-30.08	29.754	62.746	0	0
	3.714	59.837	21.079	-37.452	22.357	58.697	0	0
	4.333	50.092	14.134	-44.397	15.617	49.312	0	0
	4.952	35.345	9.531	-49	9.531	35.345	0	0
	5.571	18.145	4.238	-54.293	6.777	4.82	0	0
5	0	12.105	5.491	-6.628	58.942	0	-2.265	0
	0.585	17.741	54.213	-4.318	54.564	16.306	0	0
	1.17	34.296	48.91	-9.621	49.093	33.655	0	0

	1.755	47.831	42.799	-15.732	42.864	47.642	0	0
	2.34	57.227	35.929	-22.602	36.316	56.323	0	0
	2.925	60.757	28.759	-29.773	29.507	59.446	0	0
	3.51	57.984	21.565	-36.967	22.678	56.684	0	0
	4.095	49.116	14.627	-43.904	16.072	48.274	0	0
	4.68	35.018	9.93	-48.602	9.93	35.018	0	0
	5.265	18.283	4.492	-54.039	7.099	4.17	0	0
6	0	8.323	7.099	-1.43	58.867	0	-2.293	0
	0.582	16.671	55.348	-3.183	55.666	15.006	0	0
	1.164	33.564	51.322	-7.209	51.548	32.516	0	0
	1.746	48.824	46.547	-11.984	46.624	48.511	0	0
	2.328	61.302	40.976	-17.555	41.115	60.816	0	0
	2.91	69.27	34.727	-23.804	35.122	68.122	0	0
	3.492	71.096	27.992	-30.539	28.66	69.541	0	0
	4.074	65.723	20.889	-37.642	21.823	64.093	0	0
	4.656	52.365	13.544	-44.987	14.705	51.014	0	0
	5.238	30.526	6.082	-52.45	7.399	29.759	0	0
	5.82	0	4.906	-59.833	4.906	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	59.613	-4.858	-4.858	0	0	0
	0.619	-3.007	0	-4.858	-7.406	31.647	0	0
	1.238	-6.014	0	-4.858	-14.717	54.241	0	0
	1.857	-9.021	0	-4.858	-21.841	68.134	0	0
	2.476	-12.028	0	-4.858	-28.682	73.906	0	0
	3.095	-15.035	0	-4.858	-35.147	72.374	0	0
	3.714	-18.042	0	-4.858	-41.141	64.586	0	0
	4.333	-21.049	0	-4.858	-46.571	51.824	0	0
	4.952	-24.055	0	-4.858	-51.456	35.036	0	0
	5.571	-27.062	0	-4.858	-55.599	16.336	0	0
2	0	-37.279	7.636	-41.141	-58.813	0	-2.105	0
	0.619	-32.552	7.636	0	-6.428	3.979	0	0
	1.238	-27.825	7.636	0	-10.014	37.1	0	0
	1.857	-24.489	5.192	0	-16.197	51.059	0	0
	2.476	-21.556	4.538	0	-22.837	59.841	0	0
	3.095	-19.766	1.045	0	-29.689	62.618	0	0
	3.714	-19.594	0	-1.336	-36.506	59.171	0	0
	4.333	-20.786	0	-3.54	-43.045	49.886	0	0
	4.952	-23.964	0	-5.969	-49.199	35.239	0	0
	5.571	-27.852	0	-6.428	-54.603	17.093	0	0
3	0	-31.831	37.079	-6.428	-58.882	0	-2.097	0
	0.619	-27.259	6.397	0	-6.578	4.5	0	0
	1.238	-23.299	6.397	0	-9.68	35.87	0	0
	1.857	-20.229	4.791	0	-16.001	50.446	0	0
	2.476	-17.868	3.056	0	-23.148	60.561	0	0
	3.095	-16.772	0.001	0	-30.504	64.041	0	0
	3.714	-17.774	0	-2.791	-37.78	60.621	0	0
	4.333	-20.147	0	-6.296	-44.7	50.718	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 13 FB 1

	4.952	-24.044	0	-6.296	-51.007	35.355	0	0
	5.571	-28.073	0	-6.578	-56.35	16.598	0	0
4	0	-32.935	6.777	-42.106	-60.409	0	-3.12	0
	0.619	-28.74	6.777	0	-5.869	4.042	0	0
	1.238	-24.545	6.777	0	-9.547	35.201	0	0
	1.857	-20.474	6.535	0	-15.966	50.045	0	0
	2.476	-16.97	3.737	0	-22.963	59.722	0	0
	3.095	-15.445	0.574	0	-30.237	63.093	0	0
	3.714	-16.252	0	-2.871	-37.483	59.764	0	0
	4.333	-18.472	0	-4.509	-44.397	50.092	0	0
	4.952	-21.392	0	-5.59	-50.676	35.19	0	0
	5.571	-25.022	0	-5.869	-56.015	16.92	0	0
5	0	-33.205	7.099	-39.155	-60.077	0	-2.29	0
	0.585	-29.052	7.099	0	-7.523	4.705	0	0
	1.17	-24.899	7.099	0	-9.621	34.296	0	0
	1.755	-20.748	7.093	0	-15.732	47.831	0	0
	2.34	-17.764	2.745	0	-22.602	57.227	0	0
	2.925	-17.317	0	-1.877	-29.773	60.757	0	0
	3.51	-19.244	0	-4.406	-36.967	57.984	0	0
	4.095	-22.418	0	-6.309	-43.904	49.116	0	0
	4.68	-26.111	0	-7.222	-50.298	35.014	0	0
	5.265	-30.5	0	-7.523	-55.868	17.208	0	0
6	0	-34.901	41.115	-7.523	-60.295	0	-2.274	0
	0.582	-25.697	4.906	0	-3.183	16.671	0	0
	1.164	-22.842	4.906	0	-7.209	33.564	0	0
	1.746	-19.986	4.906	0	-11.984	48.824	0	0
	2.328	-17.131	4.906	0	-17.555	61.302	0	0
	2.91	-14.276	4.906	0	-23.804	69.27	0	0
	3.492	-11.421	4.906	0	-30.539	71.096	0	0
	4.074	-8.566	4.906	0	-37.642	65.723	0	0
	4.656	-5.71	4.906	0	-44.987	52.365	0	0
	5.238	-2.855	4.906	0	-52.45	30.526	0	0
	5.82	0	4.906	-59.833	-59.833	0	0	0

Support    Reac. Pos    Reac. Negative

1	4.858	-59.686
2	7.713	-60.541
3	10.337	-60.392
4	9.437	-61.387
5	12.119	-60.599
6	8.529	-60.845
7	4.906	-59.907

Id Group 4, HS-20 Lane Operating: 1.3\*1.0(Lane+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	30.381	-2.472	30.381	0	0	0
	0.619	11.726	18.726	-0.989	26.408	16.346	0	0
	1.238	20.134	15.83	-3.886	22.498	27.853	0	0
	1.857	25.343	12.996	-6.719	18.734	34.789	0	0
	2.476	27.548	10.258	-9.457	15.159	37.534	0	0
	3.095	27.024	7.647	-12.069	11.817	36.573	0	0
	3.714	24.124	5.194	-14.522	8.75	32.496	0	0
	4.333	19.28	2.931	-16.785	5.999	25.995	0	0
	4.952	13.007	1.135	-18.58	3.608	17.865	0	0
	5.571	6.428	0.744	-18.971	1.615	8.995	0	0
2	0	2.95	0.477	-2.383	31.118	0	-2.924	0
	0.619	6.905	18.587	-1.128	28.454	7.627	-1.812	0
	1.238	13.302	17.623	-2.092	25.407	17.258	-0.793	0
	1.857	18.714	15.188	-4.527	22.061	24.728	-0.114	0
	2.476	22.112	12.518	-7.197	18.541	29.4	0	0
	3.095	23.22	9.776	-9.939	14.968	30.944	0	0
	3.714	21.962	7.046	-12.67	11.463	29.329	0	0
	4.333	18.469	4.409	-15.306	8.142	24.821	0	0
	4.952	13.106	2.388	-17.327	5.124	17.973	0	0
	5.571	6.96	1.164	-18.551	4.181	3.234	0	0
3	0	4.253	3.023	-1.099	31.443	0	-2.147	0
	0.619	7.032	18.555	-1.161	28.486	7.432	-1.579	0
	1.238	13.199	17.281	-2.434	25.5	16.858	-0.594	0
	1.857	18.527	15.23	-4.485	22.183	24.294	0	0
	2.476	21.939	12.564	-7.152	18.666	29.032	0	0
	3.095	23.091	9.812	-9.903	15.076	30.682	0	0
	3.714	21.878	7.062	-12.654	11.539	29.17	0	0
	4.333	18.41	4.399	-15.317	8.178	24.732	0	0
	4.952	13.042	2.371	-17.344	5.116	17.907	0	0
	5.571	6.861	1.105	-18.61	3.493	2.713	0	0
4	0	3.546	2.52	-0.918	31.392	0	-2.437	0
	0.619	6.897	18.624	-1.092	28.515	7.305	-1.684	0
	1.238	13.094	17.338	-2.378	25.52	16.734	-0.677	0
	1.857	18.424	15.242	-4.473	22.192	24.169	-0.011	0
	2.476	21.832	12.567	-7.148	18.664	28.897	0	0
	3.095	22.976	9.809	-9.907	15.064	30.532	0	0
	3.714	21.756	7.054	-12.662	11.521	29.007	0	0
	4.333	18.289	4.39	-15.325	8.161	24.57	0	0
	4.952	12.952	2.371	-17.344	5.107	17.775	0	0
	5.571	6.849	1.122	-18.593	3.506	2.847	0	0
5	0	3.905	1.032	-2.966	31.259	0	-2.056	0
	0.585	6.709	18.498	-1.218	28.376	7.04	-1.591	0
	1.17	12.563	17.219	-2.497	25.434	15.973	-0.713	0

	1.755	17.597	15.179	-4.537	22.171	23.039	-0.141	0
	2.34	20.835	12.563	-7.153	18.707	27.582	0	0
	2.925	21.96	9.859	-9.856	15.164	29.23	0	0
	3.51	20.863	7.149	-12.566	11.659	27.892	0	0
	4.095	17.624	4.514	-15.201	8.309	23.753	0	0
	4.68	12.513	2.238	-17.477	5.229	17.266	0	0
	5.265	6.516	1.182	-18.534	3.621	2.18	0	0
6	0	3.047	2.599	-0.524	31.332	0	-2.576	0
	0.582	6.091	18.938	-0.778	29.066	6.534	-1.577	0
	1.164	12.255	18.613	-1.102	26.735	15.712	-0.619	0
	1.746	18.104	16.7	-3.016	24.07	23.774	0	0
	2.328	22.618	14.462	-5.253	21.122	29.961	0	0
	2.91	25.317	12.035	-7.68	17.94	33.634	0	0
	3.492	25.796	9.451	-10.265	14.573	34.27	0	0
	4.074	23.724	6.74	-12.976	11.07	31.462	0	0
	4.656	18.844	3.934	-15.781	7.48	24.917	0	0
	5.238	10.973	1.065	-18.65	3.848	14.453	-0.026	0
	5.82	0	2.497	-30.277	2.497	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	30.381	-2.472	-2.472	0	0	0
	0.619	-1.171	0	-1.892	-3.86	15.373	-0.024	0
	1.238	-2.343	0	-1.893	-7.499	26.509	0	0
	1.857	-3.515	0	-1.893	-11.101	33.478	0	0
	2.476	-4.687	0	-1.893	-14.617	36.469	0	0
	3.095	-5.859	0	-1.893	-17.999	35.789	0	0
	3.714	-7.031	0	-1.893	-21.199	31.87	0	0
	4.333	-8.202	0	-1.893	-24.166	25.264	0	0
	4.952	-9.38	0	-2.138	-26.85	16.654	-0.668	0
	5.571	-15.485	0	-13.085	-29.201	6.847	-1.749	0
2	0	-25.387	17.19	-18.096	-31.457	0	-2.936	0
	0.619	-15.921	11.455	0	-3.323	2.116	0	0
	1.238	-10.715	0.861	0	-5.245	18.306	0	0
	1.857	-10.37	0.558	0	-8.35	25.169	0	0
	2.476	-10.025	0.558	0	-11.725	29.524	0	0
	3.095	-9.679	0.558	0	-15.253	30.895	0	0
	3.714	-9.334	0.558	0	-18.816	29.1	0	0
	4.333	-8.989	0.558	0	-22.292	24.249	-0.023	0
	4.952	-9.37	0	-2.592	-25.56	16.757	-0.642	0
	5.571	-14.373	0	-13.429	-28.495	7.347	-1.603	0
3	0	-23.762	16.845	-16.866	-31.363	0	-2.148	0
	0.619	-14.378	13.391	0	-3.47	2.782	0	0
	1.238	-9.003	4.033	0	-5.186	18.078	0	0
	1.857	-8.75	0.032	0	-8.257	24.868	0	0
	2.476	-8.73	0.032	0	-11.623	29.255	0	0
	3.095	-8.711	0.032	0	-15.162	30.707	0	0
	3.714	-8.691	0.032	0	-18.751	28.997	0	0
	4.333	-8.671	0.032	0	-22.264	24.206	0	0



	4.952	-9.45	0	-2.753	-25.573	16.732	-0.659	0
	5.571	-14.353	0	-13.419	-28.549	7.291	-1.675	0
4	0	-23.759	16.835	-16.873	-31.378	0	-2.437	0
	0.619	-14.373	13.374	0	-3.208	2.548	0	0
	1.238	-9.578	2.792	0	-5.127	17.963	0	0
	1.857	-8.603	0.222	0	-8.21	24.774	0	0
	2.476	-8.465	0.222	0	-11.588	29.173	0	0
	3.095	-8.328	0.222	0	-15.139	30.629	0	0
	3.714	-8.19	0.222	0	-18.735	28.923	0	0
	4.333	-8.052	0.222	0	-22.249	24.147	0	0
	4.952	-8.261	0	-3.841	-25.552	16.717	-0.48	0
	5.571	-13.735	0	-13.251	-28.51	7.373	-1.456	0
5	0	-23.063	16.889	-16.712	-31.406	0	-2.065	0
	0.585	-14.203	11.22	0	-4.107	2.934	0	0
	1.17	-9.696	2.829	0	-5.176	17.241	0	0
	1.755	-9.161	0	-0.276	-8.206	23.711	0	0
	2.34	-9.323	0	-0.276	-11.525	27.924	0	0
	2.925	-9.484	0	-0.276	-15.017	29.383	0	0
	3.51	-9.646	0	-0.276	-18.566	27.862	0	0
	4.095	-9.808	0	-0.276	-22.055	23.406	-0.081	0
	4.68	-9.977	0	-3.483	-25.363	16.342	-0.695	0
	5.265	-14.905	0	-11.414	-28.369	7.281	-1.615	0
6	0	-23.801	17.955	-17.078	-30.997	0	-2.566	0
	0.582	-14.564	12.993	0	-1.626	8.518	0	0
	1.164	-8.943	2.023	0	-3.621	16.858	0	0
	1.746	-7.822	1.92	0	-6.011	24.488	0	0
	2.328	-6.704	1.92	0	-8.755	30.574	0	0
	2.91	-5.587	1.92	0	-11.814	34.378	0	0
	3.492	-4.469	1.92	0	-15.143	35.253	0	0
	4.074	-3.352	1.92	0	-18.701	32.653	0	0
	4.656	-2.235	1.92	0	-22.445	26.126	0	0
	5.238	-1.117	1.919	0	-26.33	15.324	0	0
	5.82	0	2.497	-30.277	-30.277	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.472	-30.417
2	3.969	-33.878
3	5.572	-33.504
4	4.653	-33.626
5	5.404	-33.387
6	4.332	-33.565
7	2.497	-30.277

Id Group 2, HS-20 Lane Inventory: 1.3\*1.67\*(Lane+IM)\*DF  
 Type Combination

Maximum table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	50.735	-4.128	50.735	0	0	0
	0.619	19.581	31.272	-1.652	44.099	27.298	0	0
	1.238	33.623	26.435	-6.489	37.571	46.513	0	0
	1.857	42.321	21.703	-11.221	31.285	58.097	0	0
	2.476	46.003	17.131	-15.793	25.315	62.681	0	0
	3.095	45.128	12.769	-20.154	19.734	61.075	0	0
	3.714	40.285	8.673	-24.251	14.611	54.267	0	0
	4.333	32.196	4.894	-28.03	10.019	43.411	0	0
	4.952	21.721	1.896	-31.028	6.025	29.833	0	0
	5.571	10.734	1.242	-31.681	2.696	15.022	0	0
2	0	4.926	0.796	-3.979	51.966	0	-4.884	0
	0.619	11.532	31.039	-1.884	47.516	12.736	-3.026	0
	1.238	22.215	29.43	-3.494	42.428	28.82	-1.324	0
	1.857	31.251	25.364	-7.56	36.841	41.294	-0.191	0
	2.476	36.926	20.904	-12.019	30.963	49.097	0	0
	3.095	38.776	16.326	-16.598	24.996	51.674	0	0
	3.714	36.675	11.766	-21.158	19.142	48.978	0	0
	4.333	30.843	7.364	-25.56	13.597	41.449	0	0
	4.952	21.886	3.988	-28.936	8.557	30.014	0	0
	5.571	11.623	1.944	-30.98	6.982	5.401	0	0
3	0	7.102	5.048	-1.836	52.508	0	-3.586	0
	0.619	11.743	30.985	-1.938	47.57	12.412	-2.637	0
	1.238	22.043	28.859	-4.065	42.583	28.152	-0.992	0
	1.857	30.939	25.434	-7.49	37.045	40.57	0	0
	2.476	36.637	20.981	-11.943	31.172	48.482	0	0
	3.095	38.56	16.386	-16.538	25.177	51.237	0	0
	3.714	36.535	11.793	-21.131	19.27	48.712	0	0
	4.333	30.744	7.345	-25.578	13.657	41.302	0	0
	4.952	21.779	3.96	-28.964	8.544	29.903	0	0
	5.571	11.458	1.846	-31.078	5.833	4.531	0	0
4	0	5.922	4.208	-1.532	52.422	0	-4.069	0
	0.619	11.518	31.101	-1.823	47.619	12.199	-2.812	0
	1.238	21.866	28.953	-3.971	42.617	27.945	-1.131	0
	1.857	30.767	25.454	-7.47	37.06	40.361	-0.018	0
	2.476	36.459	20.987	-11.937	31.167	48.257	0	0
	3.095	38.369	16.38	-16.544	25.156	50.987	0	0
	3.714	36.331	11.779	-21.144	19.24	48.441	0	0
	4.333	30.541	7.332	-25.592	13.628	41.031	0	0
	4.952	21.629	3.96	-28.964	8.528	29.684	0	0
	5.571	11.437	1.874	-31.05	5.855	4.755	0	0
5	0	6.522	1.724	-4.953	52.2	0	-3.433	0
	0.585	11.204	30.89	-2.033	47.387	11.757	-2.658	0
	1.17	20.98	28.755	-4.169	42.474	26.675	-1.191	0

	1.755	29.387	25.348	-7.576	37.024	38.474	-0.235	0
	2.34	34.793	20.979	-11.944	31.24	46.06	0	0
	2.925	36.672	16.465	-16.459	25.322	48.812	0	0
	3.51	34.84	11.939	-20.985	19.469	46.578	0	0
	4.095	29.431	7.538	-25.385	13.875	39.666	0	0
	4.68	20.896	3.738	-29.186	8.733	28.834	0	0
	5.265	10.882	1.974	-30.95	6.047	3.64	0	0
6	0	5.088	4.34	-0.874	52.323	0	-4.301	0
	0.582	10.172	31.625	-1.298	48.539	10.912	-2.634	0
	1.164	20.465	31.083	-1.841	44.647	26.238	-1.033	0
	1.746	30.232	27.888	-5.036	40.196	39.701	0	0
	2.328	37.772	24.151	-8.773	35.272	50.034	0	0
	2.91	42.279	20.098	-12.825	29.958	56.168	0	0
	3.492	43.078	15.782	-17.142	24.336	57.23	0	0
	4.074	39.618	11.255	-21.669	18.487	52.54	0	0
	4.656	31.469	6.57	-26.354	12.491	41.61	0	0
	5.238	18.324	1.779	-31.145	6.426	24.136	-0.043	0
	5.82	0	4.17	-50.56	4.17	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	50.735	-4.128	-4.128	0	0	0
	0.619	-1.956	0	-3.16	-6.446	25.672	-0.041	0
	1.238	-3.913	0	-3.161	-12.523	44.268	0	0
	1.857	-5.87	0	-3.161	-18.538	55.906	0	0
	2.476	-7.827	0	-3.161	-24.409	60.901	0	0
	3.095	-9.784	0	-3.161	-30.057	59.767	0	0
	3.714	-11.741	0	-3.161	-35.401	53.221	0	0
	4.333	-13.697	0	-3.161	-40.356	42.191	0	0
	4.952	-15.664	0	-3.571	-44.839	27.811	-1.115	0
	5.571	-25.859	0	-21.851	-48.765	11.434	-2.921	0
2	0	-42.395	28.707	-30.219	-52.531	0	-4.903	0
	0.619	-26.588	19.129	0	-5.55	3.534	0	0
	1.238	-17.894	1.438	0	-8.758	30.571	0	0
	1.857	-17.318	0.932	0	-13.944	42.032	0	0
	2.476	-16.741	0.932	0	-19.58	49.304	0	0
	3.095	-16.164	0.932	0	-25.472	51.594	0	0
	3.714	-15.588	0.932	0	-31.422	48.595	0	0
	4.333	-15.011	0.932	0	-37.227	40.494	-0.039	0
	4.952	-15.647	0	-4.328	-42.684	27.983	-1.072	0
	5.571	-24.003	0	-22.426	-47.585	12.268	-2.677	0
3	0	-39.681	28.13	-28.165	-52.376	0	-3.587	0
	0.619	-24.011	22.362	0	-5.795	4.647	0	0
	1.238	-15.034	6.736	0	-8.661	30.189	0	0
	1.857	-14.612	0.053	0	-13.788	41.529	0	0
	2.476	-14.579	0.053	0	-19.409	48.855	0	0
	3.095	-14.546	0.053	0	-25.32	51.279	0	0
	3.714	-14.513	0.053	0	-31.314	48.424	0	0
	4.333	-14.48	0.053	0	-37.18	40.424	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 13 FB 1

	4.952	-15.781	0	-4.597	-42.706	27.941	-1.1	0
	5.571	-23.969	0	-22.409	-47.675	12.175	-2.796	0
4	0	-39.677	28.114	-28.177	-52.4	0	-4.07	0
	0.619	-24.003	22.334	0	-5.357	4.255	0	0
	1.238	-15.995	4.663	0	-8.562	29.997	0	0
	1.857	-14.367	0.372	0	-13.71	41.372	0	0
	2.476	-14.137	0.372	0	-19.352	48.717	0	0
	3.095	-13.907	0.372	0	-25.281	51.149	0	0
	3.714	-13.677	0.372	0	-31.287	48.3	0	0
	4.333	-13.447	0.372	0	-37.155	40.325	0	0
	4.952	-13.795	0	-6.414	-42.67	27.917	-0.801	0
	5.571	-22.937	0	-22.129	-47.611	12.312	-2.431	0
5	0	-38.515	28.204	-27.908	-52.446	0	-3.448	0
	0.585	-23.719	18.737	0	-6.858	4.9	0	0
	1.17	-16.192	4.725	0	-8.644	28.792	0	0
	1.755	-15.299	0	-0.461	-13.704	39.596	0	0
	2.34	-15.569	0	-0.461	-19.245	46.631	0	0
	2.925	-15.839	0	-0.461	-25.077	49.069	0	0
	3.51	-16.109	0	-0.461	-31.005	46.528	0	0
	4.095	-16.378	0	-0.461	-36.831	39.087	-0.135	0
	4.68	-16.661	0	-5.816	-42.355	27.291	-1.161	0
	5.265	-24.891	0	-19.06	-47.375	12.158	-2.696	0
6	0	-39.746	29.983	-28.519	-51.764	0	-4.286	0
	0.582	-24.321	21.698	0	-2.716	14.224	0	0
	1.164	-14.935	3.378	0	-6.046	28.152	0	0
	1.746	-13.062	3.206	0	-10.038	40.893	0	0
	2.328	-11.195	3.206	0	-14.621	51.057	0	0
	2.91	-9.33	3.206	0	-19.728	57.409	0	0
	3.492	-7.464	3.206	0	-25.288	58.871	0	0
	4.074	-5.598	3.206	0	-31.231	54.529	0	0
	4.656	-3.732	3.206	0	-37.482	43.63	0	0
	5.238	-1.865	3.205	0	-43.971	25.591	0	0
	5.82	0	4.17	-50.56	-50.56	0	0	0

Support	Reac. Pos	Reac. Negative
1	4.128	-50.795
2	6.628	-56.574
3	9.304	-55.951
4	7.771	-56.154
5	9.024	-55.756
6	7.235	-56.052
7	4.17	-50.56

Id Group 9, HS-15 Truck Fatigue: (truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	17.951	-1.426	17.951	0	0	0
	0.619	9.73	15.718	-2.169	15.718	9.73	0	0
	1.238	16.689	13.481	-4.406	13.481	16.689	0	0
	1.857	20.971	11.293	-6.594	11.293	20.971	0	0
	2.476	22.745	9.186	-8.701	9.186	22.745	0	0
	3.095	22.256	7.191	-10.696	7.191	22.256	0	0
	3.714	19.828	5.339	-12.548	5.339	19.828	0	0
	4.333	15.864	3.661	-14.226	3.661	15.864	0	0
	4.952	10.88	2.197	-15.69	2.197	10.88	0	0
	5.571	5.399	0.969	-16.918	0.969	5.399	0	0
2	0	2.36	0.381	-1.906	17.991	0	-0.195	0
	0.619	5.929	16.502	-1.385	16.628	5.851	0	0
	1.238	11.338	14.949	-3.06	14.949	11.338	0	0
	1.857	15.67	13.045	-4.843	13.045	15.67	0	0
	2.476	18.393	10.993	-6.894	10.993	18.393	0	0
	3.095	19.246	8.873	-9.014	8.873	19.246	0	0
	3.714	18.163	6.763	-11.124	6.763	18.163	0	0
	4.333	15.27	4.741	-13.147	4.741	15.27	0	0
	4.952	10.928	2.895	-14.992	2.895	10.928	0	0
	5.571	5.621	1.292	-16.595	2.378	1.781	0	0
3	0	3.253	2.378	-0.776	17.988	0	-0.202	0
	0.619	5.66	16.564	-1.323	16.685	5.578	0	0
	1.238	10.962	14.929	-2.958	15.043	10.954	0	0
	1.857	15.282	13.157	-4.731	13.157	15.282	0	0
	2.476	18.109	10.979	-6.908	11.108	18.062	0	0
	3.095	19.081	8.84	-9.047	8.978	19	0	0
	3.714	18.099	6.708	-11.18	6.849	18.004	0	0
	4.333	15.273	4.663	-13.224	4.807	15.194	0	0
	4.952	10.923	2.942	-14.945	2.942	10.923	0	0
	5.571	5.631	1.314	-16.573	1.955	1.35	0	0
4	0	2.56	1.955	-0.527	18.014	0	-0.236	0
	0.619	5.646	16.561	-1.326	16.704	5.548	0	0
	1.238	10.936	14.92	-2.967	15.053	10.927	0	0
	1.857	15.249	13.156	-4.731	13.156	15.249	0	0
	2.476	18.013	11.094	-6.794	11.094	18.013	0	0
	3.095	18.945	8.838	-9.05	8.949	18.918	0	0
	3.714	17.952	6.705	-11.183	6.805	17.871	0	0
	4.333	15.129	4.659	-13.228	4.773	15.07	0	0
	4.952	10.801	2.913	-14.975	2.913	10.801	0	0
	5.571	5.545	1.295	-16.592	1.972	1.402	0	0
5	0	3.008	0.736	-2.351	17.91	0	-0.211	0
	0.585	5.422	16.568	-1.32	16.594	5.312	0	0
	1.17	10.481	14.947	-2.94	14.961	10.432	0	0

	1.755	14.574	13.094	-4.793	13.099	14.559	0	0
	2.34	17.281	11.069	-6.819	11.098	17.212	0	0
	2.925	18.267	8.96	-8.927	9.017	18.167	0	0
	3.51	17.422	6.846	-11.041	6.931	17.323	0	0
	4.095	14.816	4.802	-13.085	4.912	14.753	0	0
	4.68	10.701	3.034	-14.853	3.034	10.701	0	0
	5.265	5.587	1.373	-16.515	2.081	1.223	0	0
6	0	2.44	2.081	-0.419	17.906	0	-0.214	0
	0.582	5.095	16.915	-0.973	16.938	4.971	0	0
	1.164	10.257	15.684	-2.203	15.701	10.18	0	0
	1.746	14.921	14.225	-3.662	14.233	14.887	0	0
	2.328	18.623	12.554	-5.333	12.574	18.553	0	0
	2.91	20.906	10.703	-7.184	10.743	20.79	0	0
	3.492	21.371	8.707	-9.18	8.768	21.23	0	0
	4.074	19.711	6.598	-11.289	6.677	19.573	0	0
	4.656	15.692	4.406	-13.481	4.5	15.583	0	0
	5.238	9.152	2.162	-15.726	2.264	9.093	0	0
	5.82	0	1.446	-17.968	1.446	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shez	Corr. Shez	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	17.951	-1.426	-1.426	0	0	0
	0.619	-0.883	0	-1.426	-2.263	9.671	0	0
	1.238	-1.765	0	-1.426	-4.501	16.571	0	0
	1.857	-2.648	0	-1.426	-6.681	20.81	0	0
	2.476	-3.531	0	-1.426	-8.773	22.567	0	0
	3.095	-4.413	0	-1.426	-10.749	22.093	0	0
	3.714	-5.296	0	-1.426	-12.58	19.709	0	0
	4.333	-6.179	0	-1.426	-14.239	15.809	0	0
	4.952	-7.061	0	-1.426	-15.698	10.839	0	0
	5.571	-7.944	0	-1.426	-16.936	5.3	0	0
2	0	-11.464	2.378	-12.024	-17.902	0	-0.203	0
	0.619	-9.992	2.378	0	-1.906	1.18	0	0
	1.238	-8.52	2.378	0	-3.06	11.338	0	0
	1.857	-7.142	2.139	0	-4.95	15.604	0	0
	2.476	-5.818	2.139	0	-6.979	18.288	0	0
	3.095	-4.493	2.139	0	-9.073	19.136	0	0
	3.714	-4.913	0	-1.681	-11.156	18.083	0	0
	4.333	-5.953	0	-1.681	-13.155	15.245	0	0
	4.952	-7.08	0	-1.906	-15.003	10.888	0	0
	5.571	-8.26	0	-1.906	-16.618	5.522	0	0
3	0	-9.54	1.955	-11.156	-17.906	0	-0.202	0
	0.619	-8.33	1.955	0	-1.935	1.324	0	0
	1.238	-7.12	1.955	0	-2.958	10.962	0	0
	1.857	-5.978	1.832	0	-4.843	15.275	0	0
	2.476	-4.844	1.832	0	-6.908	18.109	0	0
	3.095	-3.723	1.714	0	-9.047	19.081	0	0
	3.714	-4.763	0	-1.782	-11.18	18.099	0	0
	4.333	-5.866	0	-1.782	-13.224	15.273	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 13 FB 1

	4.952	-7.06	0	-1.935	-15.1	10.912	0	0
	5.571	-8.257	0	-1.935	-16.727	5.525	0	0
4	0	-9.582	1.972	-11.18	-18.013	0	-0.235	0
	0.619	-8.361	1.972	0	-1.794	1.235	0	0
	1.238	-7.141	1.972	0	-2.967	10.936	0	0
	1.857	-5.92	1.972	0	-4.853	15.214	0	0
	2.476	-4.707	1.866	0	-6.912	17.999	0	0
	3.095	-3.562	1.849	0	-9.05	18.945	0	0
	3.714	-4.435	0	-1.69	-11.183	17.952	0	0
	4.333	-5.481	0	-1.69	-13.228	15.129	0	0
	4.952	-6.538	0	-1.708	-15.103	10.79	0	0
	5.571	-7.647	0	-1.794	-16.724	5.452	0	0
5	0	-9.736	2.081	-11.183	-17.997	0	-0.217	0
	0.585	-8.518	2.081	0	-2.351	1.633	0	0
	1.17	-7.301	2.081	0	-2.94	10.481	0	0
	1.755	-6.083	2.081	0	-4.793	14.574	0	0
	2.34	-4.866	2.081	0	-6.819	17.281	0	0
	2.925	-4.111	0	-2.095	-8.927	18.267	0	0
	3.51	-5.397	0	-2.207	-11.041	17.422	0	0
	4.095	-6.689	0	-2.207	-13.085	14.816	0	0
	4.68	-7.994	0	-2.351	-14.981	10.701	0	0
	5.265	-9.369	0	-2.351	-16.652	5.506	0	0
6	0	-10.745	12.096	-2.351	-18.01	0	-0.207	0
	0.582	-7.574	1.446	0	-0.973	5.095	0	0
	1.164	-6.732	1.446	0	-2.203	10.257	0	0
	1.746	-5.891	1.446	0	-3.662	14.921	0	0
	2.328	-5.049	1.446	0	-5.333	18.623	0	0
	2.91	-4.208	1.446	0	-7.184	20.906	0	0
	3.492	-3.366	1.446	0	-9.18	21.371	0	0
	4.074	-2.525	1.446	0	-11.289	19.711	0	0
	4.656	-1.683	1.446	0	-13.481	15.692	0	0
	5.238	-0.842	1.446	0	-15.726	9.152	0	0
	5.82	0	1.446	-17.968	-17.968	0	0	0

Support    React. Pos    React. Negative

1	1.426	-17.974
2	2.288	-18.125
3	3.153	-18.029
4	2.482	-18.062
5	3.087	-18.043
6	2.501	-18.101
7	1.446	-17.991

Id Group 8, Ohio 5C1 Operating: 1.3\*1.0(Truck+IM)\*DF + 1.3\*1.0(DL)  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	24.926	-1.738	24.926	0	0	0
	0.619	12.805	20.686	0	20.686	12.805	0	0
	1.238	20.629	16.664	-3.073	16.664	20.629	0	0
	1.857	24.089	12.972	-6.765	12.972	24.089	0	0
	2.476	25.644	10.357	-9.38	10.357	25.644	0	0
	3.095	25.301	8.175	-11.562	8.175	25.301	0	0
	3.714	22.748	6.125	-13.612	6.125	22.748	0	0
	4.333	19.141	2.901	-16.836	3.042	13.183	0	0
	4.952	12.592	0	-20.989	1.817	8.998	0	0
	5.571	4.329	0.777	-13.155	0.777	4.329	0	0
2	0	2.885	0.466	-2.33	26.415	0	-7.268	0
	0.619	4.618	12.853	-1.079	22.717	4.15	0	0
	1.238	12.599	18.868	-1.037	19.184	3.129	0	0
	1.857	17.719	15.079	-4.658	17.134	9.84	0	0
	2.476	19.544	11.524	-8.213	14.61	15.413	0	0
	3.095	19.064	11.666	-8.071	11.666	19.064	0	0
	3.714	20.146	8.354	-11.383	8.354	20.146	0	0
	4.333	18.138	4.731	-15.006	4.731	18.138	0	0
	4.952	12.745	0.912	-18.825	2.961	0.293	0	0
	5.571	4.499	1.034	-12.898	2.961	2.126	0	0
3	0	3.961	2.961	-0.879	26.53	0	-7.8	0
	0.619	5.612	12.62	-1.312	22.871	3.523	0	0
	1.238	13.159	18.548	-1.189	19.033	12.022	0	0
	1.857	18.42	14.747	-4.99	16.913	10.521	0	0
	2.476	20.323	11.186	-8.551	14.505	15.684	0	0
	3.095	19.255	7.978	-11.759	11.667	19.088	0	0
	3.714	20.074	8.439	-11.298	8.439	20.074	0	0
	4.333	18.09	4.87	-14.867	4.87	18.09	0	0
	4.952	12.783	1.075	-18.662	2.417	8.966	0	0
	5.571	4.395	1.026	-12.906	2.372	1.634	0	0
4	0	3.102	2.372	-0.635	26.647	0	-7.981	0
	0.619	4.395	12.906	-1.026	22.99	3.404	0	0
	1.238	12.783	18.662	-1.075	19.139	11.974	0	0
	1.857	18.09	14.867	-4.87	16.948	10.597	0	0
	2.476	20.074	11.298	-8.439	14.571	15.789	0	0
	3.095	19.255	11.759	-7.978	11.759	19.255	0	0
	3.714	20.323	8.551	-11.186	8.551	20.323	0	0
	4.333	18.42	4.99	-14.747	4.99	18.42	0	0
	4.952	13.159	1.189	-18.548	2.74	10.132	0	0
	5.571	5.612	1.312	-12.62	2.398	1.641	0	0
5	0	3.961	0.879	-2.961	26.354	0	-7.6	0
	0.619	4.499	12.898	-1.034	22.785	3.542	0	0
	1.238	12.745	18.825	-0.912	19.031	11.979	0	0



	1.857	18.138	15.006	-4.731	16.69	10.09	0	0
	2.476	20.146	11.383	-8.354	14.259	15.128	0	0
	3.095	19.064	8.071	-11.666	11.424	18.491	0	0
	3.714	19.544	8.213	-11.524	8.223	19.532	0	0
	4.333	17.719	4.658	-15.079	4.742	17.667	0	0
	4.952	12.599	1.037	-18.868	2.383	8.831	0	0
	5.571	4.618	1.079	-12.853	2.33	1.443	0	0
6	0	2.885	2.33	-0.466	28.325	0	-10.177	0
	0.619	4.329	13.155	-0.777	24.935	2.05	0	0
	1.238	12.592	20.989	0	21.147	11.807	0	0
	1.857	19.141	16.836	-2.901	17.327	10.444	0	0
	2.476	22.748	13.612	-6.125	15.327	16.378	0	0
	3.095	25.301	11.562	-8.175	12.907	21.14	0	0
	3.714	25.644	9.38	-10.357	10.062	23.956	0	0
	4.333	24.089	6.765	-12.972	7.375	22.956	0	0
	4.952	20.629	3.073	-16.664	4.974	18.277	0	0
	5.571	12.805	0	-20.686	2.508	10.665	0	0
	6.19	0	1.738	-24.926	1.738	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	24.926	-1.738	-1.738	0	0	0
	0.619	-1.076	0	-1.738	-2.508	10.665	0	0
	1.238	-2.152	0	-1.738	-4.974	18.277	0	0
	1.857	-3.228	0	-1.738	-7.375	22.956	0	0
	2.476	-4.304	0	-1.738	-10.062	23.956	0	0
	3.095	-5.38	0	-1.738	-12.907	21.14	0	0
	3.714	-6.456	0	-1.738	-15.327	16.378	0	0
	4.333	-7.531	0	-1.738	-17.327	10.444	0	0
	4.952	-8.607	0	-1.738	-21.147	11.807	0	0
	5.571	-12.084	0	-15.327	-24.935	2.05	0	0
2	0	-21.977	17.134	-16.454	-28.324	0	-10.177	0
	0.619	-12.539	2.961	0	-2.33	1.443	0	0
	1.238	-10.706	2.961	0	-2.383	8.831	0	0
	1.857	-9.363	2.17	0	-4.742	17.667	0	0
	2.476	-8.094	2.021	0	-8.223	19.532	0	0
	3.095	-7.183	1.066	0	-11.424	18.491	0	0
	3.714	-7.192	0	-0.716	-14.259	15.128	0	0
	4.333	-7.769	0	-0.989	-16.69	10.09	0	0
	4.952	-8.655	0	-2.33	-19.031	11.979	0	0
	5.571	-11.382	0	-14.654	-22.785	3.542	0	0
3	0	-20.903	15.857	-16.69	-26.354	0	-7.6	0
	0.619	-11.253	14.505	0	-2.398	1.641	0	0
	1.238	-8.645	2.372	0	-2.74	10.132	0	0
	1.857	-7.662	1.462	0	-4.99	18.42	0	0
	2.476	-6.781	1.403	0	-8.551	20.323	0	0
	3.095	-6.047	1.002	0	-11.759	19.255	0	0
	3.714	-6.721	0	-1.335	-14.571	15.789	0	0
	4.333	-7.557	0	-1.393	-16.948	10.597	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	4.952	-8.751	0	-2.398	-19.139	11.974	0	0
	5.571	-11.379	0	-14.594	-22.99	3.404	0	0
4	0	-20.924	16.661	-16.661	-26.647	0	-7.981	0
	0.619	-11.379	14.594	0	-2.372	1.634	0	0
	1.238	-8.751	2.398	0	-2.417	8.966	0	0
	1.857	-7.557	1.393	0	-4.87	18.09	0	0
	2.476	-6.721	1.335	0	-8.439	20.074	0	0
	3.095	-6.047	0	-1.002	-11.667	19.088	0	0
	3.714	-6.781	0	-1.403	-14.505	15.684	0	0
	4.333	-7.662	0	-1.462	-16.913	10.521	0	0
	4.952	-8.645	0	-2.372	-19.033	12.022	0	0
	5.571	-11.253	0	-14.505	-22.871	3.523	0	0
5	0	-20.903	16.69	-15.857	-26.53	0	-7.8	0
	0.619	-11.382	14.654	0	-2.961	2.126	0	0
	1.238	-8.655	2.33	0	-2.961	0.293	0	0
	1.857	-7.769	0.989	0	-4.731	18.138	0	0
	2.476	-7.192	0.716	0	-8.354	20.146	0	0
	3.095	-7.183	0	-1.066	-11.666	19.064	0	0
	3.714	-8.094	0	-2.021	-14.61	15.413	0	0
	4.333	-9.363	0	-2.17	-17.134	9.84	0	0
	4.952	-10.706	0	-2.961	-19.184	3.129	0	0
	5.571	-12.539	0	-2.961	-22.717	4.15	0	0
6	0	-21.977	16.454	-17.134	-26.415	0	-7.268	0
	0.619	-12.084	15.327	0	-0.777	4.329	0	0
	1.238	-8.607	1.738	0	-1.817	8.998	0	0
	1.857	-7.531	1.738	0	-3.042	13.183	0	0
	2.476	-6.456	1.738	0	-6.125	22.748	0	0
	3.095	-5.38	1.738	0	-8.175	25.301	0	0
	3.714	-4.304	1.738	0	-10.357	25.644	0	0
	4.333	-3.228	1.738	0	-12.972	24.089	0	0
	4.952	-2.152	1.738	0	-16.664	20.629	0	0
	5.571	-1.076	1.738	0	-20.686	12.805	0	0
	6.19	0	1.738	-24.926	-24.926	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.738	-24.97
2	2.797	-33.642
3	3.84	-32.547
4	3.007	-32.567
5	3.84	-32.547
6	2.797	-33.642
7	1.738	-24.97

Id Group 7, Ohio 4F1 Operating: 1.3\*1.0(Truck+IM)\*DF + 1.3\*1.0(DL)  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	20.601	-1.144	20.601	0	0	0
	0.619	10.632	17.176	0	17.176	10.632	0	0
	1.238	17.215	13.905	-2.349	13.905	17.215	0	0
	1.857	20.21	10.883	-5.371	10.883	20.21	0	0
	2.476	20.588	8.315	-7.939	8.315	20.588	0	0
	3.095	20.6	6.656	-9.598	6.656	20.6	0	0
	3.714	18.852	5.076	-11.178	5.076	18.852	0	0
	4.333	16.25	2.501	-13.753	3.133	13.575	0	0
	4.952	11.193	0	-17.118	1.969	9.75	0	0
	5.571	5.404	0.97	-12.962	0.97	5.404	0	0
2	0	1.894	0.306	-1.53	23.565	0	-14.468	0
	0.619	4.943	12.328	-1.604	20.886	0	-5.181	0
	1.238	10.376	13.785	-2.525	17.903	2.65	0	0
	1.857	13.694	10.967	-5.287	14.753	8.505	0	0
	2.476	14.771	8.421	-7.833	12.332	10.924	0	0
	3.095	15.549	7.212	-6.72	10.602	13.549	0	0
	3.714	15.049	5.632	-8.3	8.461	14.9	0	0
	4.333	14.373	5.923	-10.331	5.923	14.373	0	0
	4.952	11.469	3.055	-13.199	3.239	8.581	0	0
	5.571	5.942	0	-16.286	2.45	5.374	0	0
3	0	3.165	2.42	-0.648	23.224	0	-12.792	0
	0.619	6.747	12.354	-1.578	20.591	0	-3.903	0
	1.238	11.796	13.394	-2.86	17.668	3.53	0	0
	1.857	14.791	10.602	-5.652	14.587	9.032	0	0
	2.476	15.561	7.95	-5.982	12.01	11.701	0	0
	3.095	15.843	6.342	-7.59	10.239	14.204	0	0
	3.714	15.327	8.106	-8.148	8.106	15.327	0	0
	4.333	14.566	5.605	-10.649	5.605	14.566	0	0
	4.952	11.473	2.791	-13.463	2.791	11.473	0	0
	5.571	5.831	0	-16.485	1.524	1.05	0	0
4	0	1.993	1.524	-1.524	23.259	0	-12.748	0
	0.619	5.831	16.485	0	20.649	0	-3.866	0
	1.238	11.473	13.463	-2.791	17.746	3.587	0	0
	1.857	14.566	10.649	-5.605	14.679	9.127	0	0
	2.476	15.327	8.148	-8.106	12.082	11.415	0	0
	3.095	15.843	7.59	-6.342	10.239	14.299	0	0
	3.714	15.561	5.982	-7.95	8.129	15.474	0	0
	4.333	14.791	5.652	-10.602	5.652	14.791	0	0
	4.952	11.796	2.86	-13.394	2.872	10.613	0	0
	5.571	6.747	1.578	-12.354	1.629	1.115	0	0
5	0	3.165	0.648	-2.42	23.023	0	-12.79	0
	0.619	5.942	16.286	0	20.343	0	-3.922	0
	1.238	11.469	13.199	-3.055	17.389	3.49	0	0

	1.857	14.373	10.331	-5.923	14.301	8.923	0	0
	2.476	15.049	8.3	-5.632	12.111	11.545	0	0
	3.095	15.549	6.72	-7.212	10.176	13.802	0	0
	3.714	14.771	7.833	-8.421	7.937	14.642	0	0
	4.333	13.694	5.287	-10.967	5.375	13.639	0	0
	4.952	10.376	2.525	-13.785	2.615	8.831	0	0
	5.571	4.943	1.604	-12.328	1.604	4.943	0	0
6	0	1.894	1.53	-0.306	24.31	0	-14.47	0
	0.619	5.404	12.962	-0.97	21.71	0	-4.862	0
	1.238	11.193	17.118	0	18.692	3.4	0	0
	1.857	16.25	13.753	-2.501	15.315	9.48	0	0
	2.476	18.852	11.178	-5.076	12.897	12.469	0	0
	3.095	20.6	9.598	-6.656	11.201	15.639	0	0
	3.714	20.588	7.939	-8.315	9.155	17.577	0	0
	4.333	20.21	5.371	-10.883	6.719	17.707	0	0
	4.952	17.215	2.349	-13.905	4.479	14.577	0	0
	5.571	10.632	0	-17.176	2.683	8.4	0	0
	6.19	0	1.144	-20.601	1.144	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	20.601	-1.144	-1.144	0	0	0
	0.619	-0.708	0	-1.144	-2.683	8.4	0	0
	1.238	-1.416	0	-1.144	-4.479	14.577	0	0
	1.857	-2.124	0	-1.144	-6.719	17.707	0	0
	2.476	-2.832	0	-1.144	-9.155	17.577	0	0
	3.095	-3.541	0	-1.144	-11.201	15.639	0	0
	3.714	-4.249	0	-1.144	-12.897	12.469	0	0
	4.333	-4.957	0	-1.144	-15.315	9.48	0	0
	4.952	-5.665	0	-1.144	-18.692	3.4	0	0
	5.571	-12.113	0	-11.341	-21.71	0	-4.862	0
2	0	-19.741	11.584	-18.692	-24.31	0	-14.47	0
	0.619	-12.726	10.897	0	-1.604	4.943	0	0
	1.238	-8.817	2.42	0	-2.615	8.831	0	0
	1.857	-8.225	0.956	0	-5.375	13.639	0	0
	2.476	-7.634	0.956	0	-7.937	14.642	0	0
	3.095	-7.046	0.945	0	-10.176	13.802	0	0
	3.714	-6.461	0.945	0	-12.111	11.545	0	0
	4.333	-5.876	0.945	0	-14.301	8.923	0	0
	4.952	-5.682	0	-1.53	-17.389	3.49	0	0
	5.571	-11.424	0	-10.333	-20.343	0	-3.922	0
3	0	-18.454	16.501	-11.969	-23.023	0	-12.79	0
	0.619	-11.185	10.537	0	-1.629	1.115	0	0
	1.238	-5.553	1.524	0	-2.872	10.613	0	0
	1.857	-5.423	0.043	0	-5.652	14.791	0	0
	2.476	-5.401	0.034	0	-8.129	15.474	0	0
	3.095	-5.38	0.034	0	-10.239	14.299	0	0
	3.714	-5.359	0.034	0	-12.082	11.415	0	0
	4.333	-5.338	0.034	0	-14.679	9.127	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	4.952	-5.945	0	-1.629	-17.746	3.587	0	0
	5.571	-11.476	0	-10.285	-20.649	0	-3.866	0
4	0	-18.509	16.585	-11.937	-23.259	0	-12.748	0
	0.619	-11.476	10.285	0	-1.524	1.05	0	0
	1.238	-5.945	1.629	0	-2.791	11.473	0	0
	1.857	-5.338	0	-0.034	-5.605	14.566	0	0
	2.476	-5.359	0	-0.034	-8.106	15.327	0	0
	3.095	-5.38	0	-0.034	-10.239	14.204	0	0
	3.714	-5.401	0	-0.034	-12.01	11.701	0	0
	4.333	-5.423	0	-0.043	-14.587	9.032	0	0
	4.952	-5.553	0	-1.524	-17.668	3.53	0	0
	5.571	-11.185	0	-10.537	-20.591	0	-3.903	0
5	0	-18.454	11.969	-16.501	-23.224	0	-12.792	0
	0.619	-11.424	10.333	0	-2.45	5.374	0	0
	1.238	-5.682	1.53	0	-3.239	8.581	0	0
	1.857	-5.876	0	-0.945	-5.923	14.373	0	0
	2.476	-6.461	0	-0.945	-8.461	14.9	0	0
	3.095	-7.046	0	-0.945	-10.602	13.549	0	0
	3.714	-7.634	0	-0.956	-12.332	10.924	0	0
	4.333	-8.225	0	-0.956	-14.753	8.505	0	0
	4.952	-8.817	0	-2.42	-17.903	2.65	0	0
	5.571	-12.726	0	-10.897	-20.886	0	-5.181	0
6	0	-19.741	18.692	-11.584	-23.565	0	-14.468	0
	0.619	-12.113	11.341	0	-0.97	5.404	0	0
	1.238	-5.665	1.144	0	-1.969	9.75	0	0
	1.857	-4.957	1.144	0	-3.133	13.575	0	0
	2.476	-4.249	1.144	0	-5.076	18.852	0	0
	3.095	-3.541	1.144	0	-6.656	20.6	0	0
	3.714	-2.832	1.144	0	-8.315	20.588	0	0
	4.333	-2.124	1.144	0	-10.883	20.21	0	0
	4.952	-1.416	1.144	0	-13.905	17.215	0	0
	5.571	-0.708	1.144	0	-17.176	10.632	0	0
	6.19	0	1.144	-20.601	-20.601	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.144	-20.636
2	1.836	-31.671
3	3.068	-30.044
4	1.932	-30.002
5	3.068	-30.044
6	1.836	-31.671
7	1.144	-20.636

Id Group 6, Ohio 3F1 Operating: 1.3\*1.0(Truck+IM)\*DF + 1.3\*1.0(DL)  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	24.957	-1.781	24.957	0	0	0
	0.619	12.872	20.794	0	20.794	12.872	0	0
	1.238	20.828	16.824	-2.913	16.824	20.828	0	0
	1.857	24.44	13.161	-6.576	13.161	24.44	0	0
	2.476	24.986	10.091	-9.646	10.091	24.986	0	0
	3.095	24.907	8.047	-11.69	8.047	24.907	0	0
	3.714	22.695	6.111	-13.626	6.111	22.695	0	0
	4.333	19.465	2.975	-16.762	3.281	14.218	0	0
	4.952	13.281	0	-20.849	2.09	10.348	0	0
	5.571	5.894	1.058	-12.874	1.058	5.894	0	0
2	0	2.957	0.478	-2.388	26.457	0	-7.319	0
	0.619	5.008	12.222	-1.71	22.861	4.061	0	0
	1.238	12.599	19.083	-1.037	19.083	12.599	0	0
	1.857	17.875	15.332	-4.405	16.786	9.625	0	0
	2.476	19.864	11.782	-7.955	14.254	14.971	0	0
	3.095	18.922	8.545	-11.192	11.495	18.746	0	0
	3.714	20.098	8.335	-11.402	8.335	20.098	0	0
	4.333	18.448	4.831	-14.906	4.831	18.448	0	0
	4.952	13.437	1.099	-18.638	3.45	8.596	0	0
	5.571	6.137	1.412	-12.52	2.938	2.025	0	0
3	0	3.843	2.938	-0.787	26.569	0	-7.85	0
	0.619	7.248	12.236	-1.696	23.016	3.424	0	0
	1.238	13.812	18.368	-1.369	19.252	12.008	0	0
	1.857	18.61	14.684	-5.053	16.507	10.469	0	0
	2.476	20.136	11.264	-8.473	14.138	15.253	0	0
	3.095	18.878	10.98	-8.757	11.488	18.767	0	0
	3.714	20.017	8.416	-11.321	8.416	20.017	0	0
	4.333	18.391	4.969	-14.768	4.969	18.391	0	0
	4.952	13.473	1.264	-18.473	2.815	10.417	0	0
	5.571	6.147	1.436	-12.496	2.372	1.634	0	0
4	0	3.102	0.635	-2.372	26.639	0	-7.97	0
	0.619	6.147	12.496	-1.436	23.11	3.321	0	0
	1.238	13.473	18.473	-1.264	19.363	11.959	0	0
	1.857	18.391	14.768	-4.969	16.515	10.457	0	0
	2.476	20.017	11.321	-8.416	14.138	15.283	0	0
	3.095	18.878	8.757	-10.98	11.516	18.82	0	0
	3.714	20.136	8.473	-11.264	8.473	20.136	0	0
	4.333	18.61	5.053	-14.684	5.053	18.61	0	0
	4.952	13.812	1.369	-18.368	2.994	11.057	0	0
	5.571	7.248	1.696	-12.236	2.458	1.682	0	0
5	0	3.843	0.787	-2.938	26.354	0	-7.6	0
	0.619	6.137	12.52	-1.412	22.785	3.542	0	0
	1.238	13.437	18.638	-1.099	19.031	11.979	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	1.857	18.448	14.906	-4.831	16.563	10.483	0	0
	2.476	20.098	11.402	-8.335	14.177	15.33	0	0
	3.095	18.922	11.192	-8.545	11.379	18.575	0	0
	3.714	19.864	7.955	-11.782	8.223	19.532	0	0
	4.333	17.875	4.405	-15.332	4.742	17.667	0	0
	4.952	12.599	1.037	-19.083	2.586	8.831	0	0
	5.571	5.008	1.71	-12.222	2.388	1.478	0	0
6	0	2.957	2.388	-0.478	28.325	0	-10.177	0
	0.619	5.894	12.874	-1.058	24.933	2.062	0	0
	1.238	13.281	20.849	0	21.142	11.831	0	0
	1.857	19.465	16.762	-2.975	17.252	10.768	0	0
	2.476	22.695	13.626	-6.111	15.267	16.603	0	0
	3.095	24.907	11.69	-8.047	12.873	21.245	0	0
	3.714	24.986	9.646	-10.091	10.062	23.956	0	0
	4.333	24.44	6.576	-13.161	7.53	22.669	0	0
	4.952	20.828	2.913	-16.824	5.355	17.805	0	0
	5.571	12.872	0	-20.794	3.124	10.283	0	0
	6.19	0	1.781	-24.957	1.781	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	24.957	-1.781	-1.781	0	0	0
	0.619	-1.103	0	-1.781	-3.124	10.283	0	0
	1.238	-2.205	0	-1.781	-5.355	17.805	0	0
	1.857	-3.308	0	-1.781	-7.53	22.669	0	0
	2.476	-4.41	0	-1.781	-10.062	23.956	0	0
	3.095	-5.513	0	-1.781	-12.873	21.245	0	0
	3.714	-6.615	0	-1.781	-15.267	16.603	0	0
	4.333	-7.718	0	-1.781	-17.252	10.768	0	0
	4.952	-8.82	0	-1.781	-21.142	11.831	0	0
	5.571	-11.747	0	-15.267	-24.933	2.062	0	0
2	0	-21.546	16.786	-16.385	-28.324	0	-10.177	0
	0.619	-12.525	2.938	0	-2.388	1.478	0	0
	1.238	-10.706	2.938	0	-2.586	8.831	0	0
	1.857	-9.794	1.474	0	-4.742	17.667	0	0
	2.476	-8.881	1.474	0	-8.223	19.532	0	0
	3.095	-7.971	1.462	0	-11.379	18.575	0	0
	3.714	-7.787	0	-0.47	-14.177	15.33	0	0
	4.333	-8.078	0	-0.47	-16.563	10.483	0	0
	4.952	-8.87	0	-2.388	-19.031	11.979	0	0
	5.571	-11.01	0	-14.577	-22.785	3.542	0	0
3	0	-20.275	15.375	-16.563	-26.354	0	-7.6	0
	0.619	-11.001	14.485	0	-2.458	1.682	0	0
	1.238	-8.645	2.372	0	-2.994	11.057	0	0
	1.857	-8.015	0.876	0	-5.053	18.61	0	0
	2.476	-7.473	0.876	0	-8.473	20.136	0	0
	3.095	-6.93	0.876	0	-11.516	18.82	0	0
	3.714	-7.4	0	-0.81	-14.138	15.283	0	0
	4.333	-7.902	0	-0.81	-16.515	10.457	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	4.952	-8.97	0	-2.458	-19.363	11.959	0	0
	5.571	-10.971	0	-14.138	-23.11	3.321	0	0
4	0	-20.21	16.515	-16.515	-26.639	0	-7.97	0
	0.619	-10.971	14.138	0	-2.372	1.634	0	0
	1.238	-8.97	2.458	0	-2.815	10.417	0	0
	1.857	-7.902	0.81	0	-4.969	18.391	0	0
	2.476	-7.4	0.81	0	-8.416	20.017	0	0
	3.095	-6.93	0	-0.876	-11.488	18.767	0	0
	3.714	-7.473	0	-0.876	-14.138	15.253	0	0
	4.333	-8.015	0	-0.876	-16.507	10.469	0	0
	4.952	-8.645	0	-2.372	-19.252	12.008	0	0
	5.571	-11.001	0	-14.485	-23.016	3.424	0	0
5	0	-20.275	16.563	-15.375	-26.569	0	-7.85	0
	0.619	-11.01	14.577	0	-2.938	2.025	0	0
	1.238	-8.87	2.388	0	-3.45	8.596	0	0
	1.857	-8.078	0.47	0	-4.831	18.448	0	0
	2.476	-7.787	0.47	0	-8.335	20.098	0	0
	3.095	-7.971	0	-1.462	-11.495	18.746	0	0
	3.714	-8.881	0	-1.474	-14.254	14.971	0	0
	4.333	-9.794	0	-1.474	-16.786	9.625	0	0
	4.952	-10.706	0	-2.938	-19.083	12.599	0	0
	5.571	-12.525	0	-2.938	-22.861	4.061	0	0
6	0	-21.546	16.385	-16.786	-26.457	0	-7.319	0
	0.619	-11.747	15.267	0	-1.058	5.894	0	0
	1.238	-8.82	1.781	0	-2.09	10.348	0	0
	1.857	-7.718	1.781	0	-3.281	14.218	0	0
	2.476	-6.615	1.781	0	-6.111	22.695	0	0
	3.095	-5.513	1.781	0	-8.047	24.907	0	0
	3.714	-4.41	1.781	0	-10.091	24.986	0	0
	4.333	-3.308	1.781	0	-13.161	24.44	0	0
	4.952	-2.205	1.781	0	-16.824	20.828	0	0
	5.571	-1.103	1.781	0	-20.794	12.872	0	0
	6.19	0	1.781	-24.957	-24.957	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.781	-25
2	2.866	-33.263
3	3.725	-31.963
4	3.007	-31.876
5	3.725	-31.963
6	2.866	-33.263
7	1.781	-25



Id Group 5 Ohio 2F1 Operating: 1.3\*1.0(Truck+IM)\*DF + 1.3\*1.0(DL)  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	23.191	-1.835	23.191	0	0	0
	0.619	12.555	20.282	-2.938	20.282	12.555	0	0
	1.238	21.518	17.381	-5.839	17.381	21.518	0	0
	1.857	27.029	14.555	-8.665	14.555	27.029	0	0
	2.476	29.373	11.863	-11.357	11.863	29.373	0	0
	3.095	29.13	9.412	-13.808	9.412	29.13	0	0
	3.714	26.386	7.104	-16.116	7.104	26.386	0	0
	4.333	21.598	4.985	-18.235	4.985	21.598	0	0
	4.952	15.332	3.096	-20.124	3.096	15.332	0	0
	5.571	8.26	1.483	-21.737	1.483	8.26	0	0
2	0	3.044	0.492	-2.458	23.204	0	-0.067	0
	0.619	8.129	20.722	-2.498	21.422	7.696	0	0
	1.238	14.718	19.248	-4.41	19.248	14.718	0	0
	1.857	20.256	16.795	-6.425	16.795	20.256	0	0
	2.476	23.776	14.19	-9.03	14.19	23.776	0	0
	3.095	25.178	11.624	-11.596	11.624	25.178	0	0
	3.714	24.157	9.013	-14.207	9.013	24.157	0	0
	4.333	20.787	6.465	-16.755	6.475	19.61	0	0
	4.952	15.403	4.085	-19.135	4.461	14.237	0	0
	5.571	8.603	1.979	-21.241	3.029	2.087	0	0
3	0	3.963	3.029	-0.812	22.858	1.622	0	0
	0.619	9.018	21.112	-2.108	21.112	9.018	0	0
	1.238	15.712	18.975	-4.245	18.975	15.712	0	0
	1.857	20.933	16.572	-6.648	16.768	19.666	0	0
	2.476	24.107	14.009	-9.211	14.358	23.375	0	0
	3.095	24.929	11.395	-11.825	11.784	24.898	0	0
	3.714	24.005	9.154	-14.066	9.154	24.005	0	0
	4.333	20.742	6.576	-16.644	6.576	20.742	0	0
	4.952	15.428	4.162	-19.058	4.288	14.227	0	0
	5.571	8.654	2.021	-21.199	2.54	1.749	0	0
4	0	3.321	2.54	-2.54	22.942	1.214	0	0
	0.619	8.654	21.199	-2.021	21.199	8.654	0	0
	1.238	15.428	19.058	-4.162	19.058	15.428	0	0
	1.857	20.742	16.644	-6.576	16.777	19.63	0	0
	2.476	24.005	14.066	-9.154	14.381	23.36	0	0
	3.095	24.929	11.825	-11.395	11.825	24.929	0	0
	3.714	24.107	9.211	-14.009	9.211	24.107	0	0
	4.333	20.933	6.648	-16.572	6.648	20.933	0	0
	4.952	15.712	4.245	-18.975	4.285	14.259	0	0
	5.571	9.018	2.108	-21.112	2.506	1.715	0	0
5	0	3.963	0.812	-3.029	22.953	1.178	0	0
	0.619	8.603	21.241	-1.979	21.241	8.603	0	0
	1.238	15.403	19.135	-4.085	19.135	15.403	0	0

	1.857	20.787	16.755	-6.465	16.755	20.787	0	0
	2.476	24.157	14.207	-9.013	14.482	23.475	0	0
	3.095	25.178	11.596	-11.624	11.777	24.842	0	0
	3.714	23.776	9.03	-14.19	9.059	23.74	0	0
	4.333	20.256	6.425	-16.795	6.609	20.142	0	0
	4.952	14.718	4.41	-19.248	4.41	14.718	0	0
	5.571	8.129	2.498	-20.722	2.498	8.129	0	0
6	0	3.044	2.458	-0.492	23.209	0	-0.077	0
	0.619	8.26	21.737	-1.483	21.962	7.009	0	0
	1.238	15.332	20.124	-3.096	20.368	14.124	0	0
	1.857	21.598	18.235	-4.985	18.475	20.559	0	0
	2.476	26.386	16.116	-7.104	16.321	25.622	0	0
	3.095	29.13	13.808	-9.412	13.943	28.712	0	0
	3.714	29.373	11.357	-11.863	11.379	29.319	0	0
	4.333	27.029	8.665	-14.555	8.802	26.774	0	0
	4.952	21.518	5.839	-17.381	6.165	21.114	0	0
	5.571	12.555	2.938	-20.282	3.46	12.231	0	0
	6.19	0	1.835	-23.191	1.835	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	23.191	-1.835	-1.835	0	0	0
	0.619	-1.136	0	-1.835	-3.46	12.231	0	0
	1.238	-2.272	0	-1.835	-6.165	21.114	0	0
	1.857	-3.407	0	-1.835	-8.802	26.774	0	0
	2.476	-4.543	0	-1.835	-11.379	29.319	0	0
	3.095	-5.679	0	-1.835	-13.943	28.712	0	0
	3.714	-6.815	0	-1.835	-16.321	25.622	0	0
	4.333	-7.95	0	-1.835	-18.475	20.559	0	0
	4.952	-9.086	0	-1.835	-20.368	14.124	0	0
	5.571	-10.222	0	-1.835	-21.962	7.009	0	0
2	0	-14.789	3.029	-16.321	-23.209	0	-0.077	0
	0.619	-12.914	3.029	0	-2.498	8.129	0	0
	1.238	-11.062	2.05	0	-4.41	14.718	0	0
	1.857	-9.8	2.001	0	-6.609	20.142	0	0
	2.476	-8.561	2.001	0	-9.059	23.74	0	0
	3.095	-7.325	1.687	0	-11.777	24.842	0	0
	3.714	-7.582	0	-0.99	-14.482	23.475	0	0
	4.333	-8.238	0	-1.261	-16.755	20.787	0	0
	4.952	-9.131	0	-2.458	-19.135	15.403	0	0
	5.571	-10.653	0	-2.458	-21.241	8.603	0	0
3	0	-12.4	2.54	-14.894	-22.953	1.178	0	0
	0.619	-10.828	2.54	0	-2.506	1.715	0	0
	1.238	-9.256	2.54	0	-4.285	14.259	0	0
	1.857	-8.253	1.489	0	-6.648	20.933	0	0
	2.476	-7.37	1.27	0	-9.211	24.107	0	0
	3.095	-6.584	1.27	0	-11.825	24.929	0	0
	3.714	-7.317	0	-1.223	-14.381	23.36	0	0
	4.333	-8.149	0	-1.44	-16.777	19.63	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	4.952	-9.145	0	-2.506	-19.058	15.428	0	0
	5.571	-10.697	0	-2.506	-21.199	8.654	0	0
4	0	-12.248	14.381	-14.381	-22.942	1.214	0	0
	0.619	-10.697	2.506	0	-2.54	1.749	0	0
	1.238	-9.145	2.506	0	-4.288	14.227	0	0
	1.857	-8.149	1.44	0	-6.576	20.742	0	0
	2.476	-7.317	1.223	0	-9.154	24.005	0	0
	3.095	-6.584	0	-1.27	-11.784	24.898	0	0
	3.714	-7.37	0	-1.27	-14.358	23.375	0	0
	4.333	-8.253	0	-1.489	-16.768	19.666	0	0
	4.952	-9.256	0	-2.54	-18.975	15.712	0	0
	5.571	-10.828	0	-2.54	-21.112	9.018	0	0
5	0	-12.4	14.894	-2.54	-22.858	1.622	0	0
	0.619	-10.653	2.458	0	-3.029	2.087	0	0
	1.238	-9.131	2.458	0	-4.461	14.237	0	0
	1.857	-8.238	1.261	0	-6.475	19.61	0	0
	2.476	-7.582	0.99	0	-9.013	24.157	0	0
	3.095	-7.325	0	-1.687	-11.624	25.178	0	0
	3.714	-8.561	0	-2.001	-14.19	23.776	0	0
	4.333	-9.8	0	-2.001	-16.795	20.256	0	0
	4.952	-11.062	0	-2.05	-19.248	14.718	0	0
	5.571	-12.914	0	-3.029	-21.422	7.696	0	0
6	0	-14.789	16.321	-3.029	-23.204	0	-0.067	0
	0.619	-10.222	1.835	0	-1.483	8.26	0	0
	1.238	-9.086	1.835	0	-3.096	15.332	0	0
	1.857	-7.95	1.835	0	-4.985	21.598	0	0
	2.476	-6.815	1.835	0	-7.104	26.386	0	0
	3.095	-5.679	1.835	0	-9.412	29.13	0	0
	3.714	-4.543	1.835	0	-11.863	29.373	0	0
	4.333	-3.407	1.835	0	-14.555	27.029	0	0
	4.952	-2.272	1.835	0	-17.381	21.518	0	0
	5.571	-1.136	1.835	0	-20.282	12.555	0	0
	6.19	0	1.835	-23.191	-23.191	0	0	0

Support    React. Pos    React. Negative

1	1.835	-23.22
2	2.95	-23.311
3	3.841	-22.013
4	3.219	-21.979
5	3.841	-22.013
6	2.95	-23.311
7	1.835	-23.22

Id Group 3, HS-20 Truck Operating: 1.3\*1.0\*(Truck+IM)\*DF+1.3\*1.0\*(DL)  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	37.841	-3.086	37.841	0	0	0
	0.619	20.579	33.246	-3.906	33.246	20.579	0	0
	1.238	35.38	28.579	-8.573	28.579	35.38	0	0
	1.857	44.5	23.964	-13.188	23.964	44.5	0	0
	2.476	48.237	19.482	-17.67	19.482	48.237	0	0
	3.095	47.087	15.214	-21.938	15.214	47.087	0	0
	3.714	41.751	11.241	-25.911	11.241	41.751	0	0
	4.333	33.113	7.642	-29.51	7.642	33.113	0	0
	4.952	22.598	4.563	-32.589	4.563	22.598	0	0
	5.571	11.214	2.013	-35.139	2.013	11.214	0	0
2	0	5.1	0.824	-4.119	38.118	0	-1.333	0
	0.619	12.314	34.275	-2.877	35.346	11.651	0	0
	1.238	23.549	31.831	-6.356	31.831	23.549	0	0
	1.857	32.972	27.78	-9.372	27.78	32.972	0	0
	2.476	38.876	23.377	-13.775	23.377	38.876	0	0
	3.095	40.673	18.806	-18.346	18.806	40.673	0	0
	3.714	38.236	14.254	-22.898	14.254	38.236	0	0
	4.333	31.876	9.898	-27.254	9.898	31.876	0	0
	4.952	22.7	6.013	-31.139	6.013	22.7	0	0
	5.571	11.677	2.684	-34.468	4.847	3.34	0	0
3	0	6.784	3.685	-2.891	38.125	0	-1.413	0
	0.619	11.755	34.406	-2.746	35.491	11.013	0	0
	1.238	22.768	31.011	-6.141	32.066	22.699	0	0
	1.857	32.247	28.031	-9.121	28.064	32.149	0	0
	2.476	38.667	22.653	-14.499	23.672	38.221	0	0
	3.095	40.898	17.929	-19.223	19.082	40.244	0	0
	3.714	38.675	13.253	-23.899	14.483	38.016	0	0
	4.333	32.295	8.813	-28.339	10.065	31.804	0	0
	4.952	22.621	4.825	-32.327	6.016	22.341	0	0
	5.571	10.832	1.454	-35.698	4.058	2.795	0	0
4	0	6.299	3.368	-2.738	38.342	0	-1.974	0
	0.619	10.832	35.698	-1.454	35.754	10.591	0	0
	1.238	22.621	32.327	-4.825	32.352	22.528	0	0
	1.857	32.295	28.339	-8.813	28.357	32.24	0	0
	2.476	38.675	23.899	-13.253	23.972	38.5	0	0
	3.095	40.898	19.223	-17.929	19.354	40.664	0	0
	3.714	38.667	14.499	-22.653	14.686	38.448	0	0
	4.333	32.247	9.121	-28.031	10.152	32.023	0	0
	4.952	22.768	6.141	-31.011	6.141	22.768	0	0
	5.571	11.755	2.746	-34.406	4.269	2.921	0	0
5	0	6.784	2.891	-3.685	37.39	0	-1.41	0
	0.619	11.677	34.468	-2.684	34.668	10.811	0	0
	1.238	22.7	31.139	-6.013	31.231	22.357	0	0

	1.857	31.876	27.254	-9.898	27.322	31.667	0	0
	2.476	38.236	22.898	-14.254	23.171	37.56	0	0
	3.095	40.673	18.346	-18.806	18.844	39.747	0	0
	3.714	38.876	13.775	-23.377	14.495	37.984	0	0
	4.333	32.972	9.372	-27.78	10.28	32.409	0	0
	4.952	23.549	6.356	-31.831	6.356	23.549	0	0
	5.571	12.314	2.877	-34.275	4.119	2.55	0	0
6	0	5.1	4.119	-0.824	37.332	0	-1.346	0
	0.619	11.214	35.139	-2.013	35.292	10.364	0	0
	1.238	22.598	32.589	-4.563	32.661	22.237	0	0
	1.857	33.113	29.51	-7.642	29.56	32.895	0	0
	2.476	41.751	25.911	-11.241	26.114	40.996	0	0
	3.095	47.087	21.938	-15.214	22.309	45.939	0	0
	3.714	48.237	17.67	-19.482	18.206	46.911	0	0
	4.333	44.5	13.188	-23.964	13.863	43.247	0	0
	4.952	35.38	8.573	-28.579	9.342	34.429	0	0
	5.571	20.58	3.906	-33.246	4.701	20.087	0	0
	6.19	0	3.086	-37.841	3.086	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	37.841	-3.086	-3.086	0	0	0
	0.619	-1.91	0	-3.086	-4.701	20.087	0	0
	1.238	-3.82	0	-3.086	-9.342	34.429	0	0
	1.857	-5.73	0	-3.086	-13.863	43.247	0	0
	2.476	-7.64	0	-3.086	-18.206	46.911	0	0
	3.095	-9.55	0	-3.086	-22.309	45.939	0	0
	3.714	-11.461	0	-3.086	-26.114	40.996	0	0
	4.333	-13.371	0	-3.086	-29.56	32.895	0	0
	4.952	-15.281	0	-3.086	-32.661	22.237	0	0
	5.571	-17.191	0	-3.086	-35.292	10.364	0	0
2	0	-23.662	4.847	-26.114	-37.332	0	-1.346	0
	0.619	-20.662	4.847	0	-4.119	2.55	0	0
	1.238	-17.703	3.658	0	-6.356	23.549	0	0
	1.857	-15.545	3.294	0	-10.28	32.409	0	0
	2.476	-13.726	2.585	0	-14.495	37.984	0	0
	3.095	-12.591	1.224	0	-18.844	39.747	0	0
	3.714	-12.465	0	-0.859	-23.171	37.56	0	0
	4.333	-13.276	0	-1.747	-27.322	31.667	0	0
	4.952	-15.348	0	-3.826	-31.231	22.357	0	0
	5.571	-17.849	0	-4.119	-34.668	10.811	0	0
3	0	-20.399	26.418	-4.119	-37.39	0	-1.41	0
	0.619	-17.301	4.058	0	-4.269	2.921	0	0
	1.238	-14.789	4.058	0	-6.141	22.768	0	0
	1.857	-12.852	3.02	0	-10.152	32.023	0	0
	2.476	-11.375	1.911	0	-14.686	38.448	0	0
	3.095	-10.743	0.162	0	-19.354	40.664	0	0
	3.714	-11.411	0	-1.825	-23.972	38.5	0	0
	4.333	-13.099	0	-4.099	-28.357	32.24	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	4.952	-15.636	0	-4.099	-32.352	22.528	0	0
	5.571	-18.22	0	-4.269	-35.754	10.591	0	0
4	0	-20.862	26.717	-4.269	-38.342	0	-1.974	0
	0.619	-18.22	4.269	0	-4.058	2.795	0	0
	1.238	-15.636	4.099	0	-6.017	22.341	0	0
	1.857	-13.099	4.099	0	-10.065	31.804	0	0
	2.476	-11.411	1.825	0	-14.483	38.016	0	0
	3.095	-10.743	0	-0.162	-19.082	40.244	0	0
	3.714	-11.375	0	-1.911	-23.672	38.221	0	0
	4.333	-12.852	0	-3.02	-28.064	32.149	0	0
	4.952	-14.789	0	-4.058	-32.066	22.699	0	0
	5.571	-17.301	0	-4.058	-35.491	11.013	0	0
5	0	-20.399	4.119	-26.418	-38.125	0	-1.413	0
	0.619	-17.849	4.119	0	-4.847	3.34	0	0
	1.238	-15.348	3.826	0	-6.013	22.7	0	0
	1.857	-13.276	1.747	0	-9.898	31.876	0	0
	2.476	-12.465	0.859	0	-14.254	38.236	0	0
	3.095	-12.591	0	-1.224	-18.806	40.673	0	0
	3.714	-13.726	0	-2.585	-23.377	38.876	0	0
	4.333	-15.545	0	-3.294	-27.78	32.972	0	0
	4.952	-17.703	0	-3.658	-31.831	23.549	0	0
	5.571	-20.662	0	-4.847	-35.346	11.651	0	0
6	0	-23.662	26.114	-4.847	-38.118	0	-1.333	0
	0.619	-17.191	3.086	0	-2.013	11.214	0	0
	1.238	-15.281	3.086	0	-4.563	22.598	0	0
	1.857	-13.371	3.086	0	-7.642	33.113	0	0
	2.476	-11.461	3.086	0	-11.241	41.751	0	0
	3.095	-9.55	3.086	0	-15.214	47.087	0	0
	3.714	-7.64	3.086	0	-19.482	48.237	0	0
	4.333	-5.73	3.086	0	-23.964	44.5	0	0
	4.952	-3.82	3.086	0	-28.579	35.38	0	0
	5.571	-1.91	3.086	0	-33.246	20.58	0	0
	6.19	0	3.086	-37.841	-37.841	0	0	0

Support	Reac. Pos	Reac. Negative
1	3.086	-37.887
2	4.943	-38.443
3	6.576	-38.41
4	6.106	-38.954
5	6.576	-38.41
6	4.943	-38.443
7	3.086	-37.887

Id Group I, HS-20 Truck Inventory: 1.3\*1.67\*(truck+IM)\*DF + 1.3(DL)  
 Type Combination

Maximum table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	63.198	-5.154	63.198	0	0	0
	0.619	34.37	55.525	-6.523	55.525	34.37	0	0
	1.238	59.089	47.729	-14.319	47.729	59.089	0	0
	1.857	74.32	40.022	-22.026	40.022	74.32	0	0
	2.476	80.56	32.537	-29.511	32.537	80.56	0	0.01
	3.095	78.641	25.409	-36.639	25.409	78.641	0	0.01
	3.714	69.728	18.774	-43.274	18.774	69.728	0	0
	4.333	55.303	12.763	-49.285	12.763	55.303	0	0
	4.952	37.741	7.621	-54.427	7.621	37.741	0	0
	5.571	18.729	3.362	-58.686	3.362	18.729	0	0
2	0	8.517	1.376	-6.88	63.661	0	-2.227	0
	0.619	20.565	57.243	-4.805	59.031	19.458	0	0
	1.238	39.329	53.161	-10.615	53.161	39.329	0	0
	1.857	55.067	46.396	-15.652	46.396	55.067	0	0
	2.476	64.927	39.043	-23.005	39.043	64.927	0	0
	3.095	67.928	31.409	-30.639	31.409	67.928	0	0
	3.714	63.858	23.805	-38.243	23.805	63.858	0	0
	4.333	53.237	16.531	-45.517	16.531	53.237	0	0
	4.952	37.911	10.042	-52.006	10.042	37.911	0	0
	5.571	19.501	4.483	-57.565	8.095	5.578	0	0
3	0	11.33	6.154	-4.829	63.673	0	-2.36	0
	0.619	19.633	57.462	-4.586	59.273	18.393	0	0
	1.238	38.025	51.792	-10.256	53.554	37.91	0	0
	1.857	53.856	46.815	-15.233	46.869	53.692	0	0
	2.476	64.579	37.833	-24.215	39.535	63.834	0	0
	3.095	68.305	29.944	-32.104	31.87	67.213	0	0
	3.714	64.591	22.133	-39.915	24.189	63.491	0	0
	4.333	53.937	14.719	-47.329	16.81	53.115	0	0
	4.952	37.78	8.059	-53.989	10.048	37.311	0	0
	5.571	18.09	2.428	-59.62	6.778	4.668	0	0
4	0	10.52	5.625	-4.573	64.036	0	-3.296	0
	0.619	18.09	59.62	-2.428	59.714	17.689	0	0
	1.238	37.78	53.989	-8.059	54.032	37.625	0	0
	1.857	53.937	47.329	-14.719	47.36	53.844	0	0
	2.476	64.591	39.915	-22.133	40.036	64.299	0	0
	3.095	68.305	32.104	-29.944	32.323	67.913	0	0
	3.714	64.579	24.215	-37.833	24.528	64.213	0	0
	4.333	53.856	15.233	-46.815	16.954	53.482	0	0
	4.952	38.025	10.256	-51.792	10.256	38.025	0	0
	5.571	19.633	4.586	-57.462	7.13	4.878	0	0
5	0	11.33	4.829	-6.154	62.446	0	-2.355	0
	0.619	19.501	57.565	-4.483	57.899	18.055	0	0
	1.238	37.911	52.006	-10.042	52.16	37.339	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	1.857	53.237	45.517	-16.531	45.63	52.887	0	0
	2.476	63.858	38.243	-23.805	38.699	62.729	0	0
	3.095	67.928	30.639	-31.409	31.471	66.382	0	0
	3.714	64.927	23.005	-39.043	24.208	63.438	0	0
	4.333	55.067	15.652	-46.396	17.169	54.127	0	0
	4.952	39.329	10.615	-53.161	10.615	39.329	0	0
	5.571	20.565	4.805	-57.243	6.88	4.259	0	0
6	0	8.517	6.88	-1.376	62.349	0	-2.248	0
	0.619	18.729	58.686	-3.362	58.941	17.309	0	0
	1.238	37.741	54.427	-7.621	54.548	37.139	0	0
	1.857	55.303	49.285	-12.763	49.369	54.938	0	0
	2.476	69.728	43.274	-18.774	43.613	68.467	0	0
	3.095	78.641	36.639	-25.409	37.259	76.723	0	0.01
	3.714	80.56	29.511	-32.537	30.405	78.347	0	0.01
	4.333	74.32	22.026	-40.022	23.153	72.228	0	0
	4.952	59.089	14.319	-47.729	15.602	57.5	0	0
	5.571	34.37	6.523	-55.525	7.851	33.548	0	0
	6.19	0	5.154	-63.198	5.154	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	63.198	-5.154	-5.154	0	0	0
	0.619	-3.19	0	-5.154	-7.851	33.548	0	0
	1.238	-6.38	0	-5.154	-15.602	57.5	0	0
	1.857	-9.57	0	-5.154	-23.153	72.228	0	0
	2.476	-12.76	0	-5.154	-30.405	78.347	0	0
	3.095	-15.95	0	-5.154	-37.259	76.723	0	0
	3.714	-19.14	0	-5.154	-43.613	68.467	0	0
	4.333	-22.33	0	-5.154	-49.369	54.938	0	0
	4.952	-25.52	0	-5.154	-54.548	37.139	0	0
	5.571	-28.711	0	-5.154	-58.941	17.309	0	0
2	0	-39.519	8.095	-43.613	-62.349	0	-2.248	0
	0.619	-34.508	8.095	0	-6.88	4.259	0	0
	1.238	-29.566	6.11	0	-10.615	39.329	0	0
	1.857	-25.963	5.501	0	-17.169	54.127	0	0
	2.476	-22.924	4.318	0	-24.208	63.438	0	0
	3.095	-21.028	2.044	0	-31.471	66.382	0	0
	3.714	-20.818	0	-1.435	-38.699	62.729	0	0
	4.333	-22.172	0	-2.918	-45.63	52.887	0	0
	4.952	-25.634	0	-6.39	-52.16	37.339	0	0
	5.571	-29.81	0	-6.88	-57.899	18.055	0	0
3	0	-34.068	44.121	-6.88	-62.446	0	-2.355	0
	0.619	-28.894	6.778	0	-7.13	4.878	0	0
	1.238	-24.699	6.778	0	-10.256	38.025	0	0
	1.857	-21.464	5.044	0	-16.954	53.482	0	0
	2.476	-18.998	3.192	0	-24.528	64.213	0	0
	3.095	-17.943	0.27	0	-32.323	67.913	0	0
	3.714	-19.058	0	-3.048	-40.036	64.299	0	0
	4.333	-21.877	0	-6.845	-47.36	53.844	0	0



## SECTION I

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	4.952	-26.115	0	-6.845	-54.032	37.625	0	0
	5.571	-30.429	0	-7.13	-59.714	17.689	0	0
4	0	-34.842	44.621	-7.13	-64.036	0	-3.296	0
	0.619	-30.429	7.13	0	-6.778	4.668	0	0
	1.238	-26.115	6.845	0	-10.048	37.311	0	0
	1.857	-21.877	6.845	0	-16.81	53.115	0	0
	2.476	-19.058	3.048	0	-24.189	63.491	0	0
	3.095	-17.943	0	-0.27	-31.87	67.213	0	0
	3.714	-18.998	0	-3.192	-39.535	63.834	0	0
	4.333	-21.464	0	-5.044	-46.869	53.692	0	0
	4.952	-24.699	0	-6.778	-53.554	37.91	0	0
	5.571	-28.894	0	-6.778	-59.273	18.393	0	0
5	0	-34.068	6.88	-44.121	-63.673	0	-2.36	0
	0.619	-29.81	6.88	0	-8.095	5.578	0	0
	1.238	-25.634	6.39	0	-10.042	37.911	0	0
	1.857	-22.172	2.918	0	-16.531	53.237	0	0
	2.476	-20.818	1.435	0	-23.805	63.858	0	0
	3.095	-21.028	0	-2.044	-31.409	67.928	0	0
	3.714	-22.924	0	-4.318	-39.043	64.927	0	0
	4.333	-25.963	0	-5.501	-46.396	55.067	0	0
	4.952	-29.566	0	-6.11	-53.161	39.329	0	0
	5.571	-34.508	0	-8.095	-59.031	19.458	0	0
6	0	-39.519	43.613	-8.095	-63.661	0	-2.227	0
	0.619	-28.711	5.154	0	-3.362	18.729	0	0
	1.238	-25.52	5.154	0	-7.621	37.741	0	0
	1.857	-22.33	5.154	0	-12.763	55.303	0	0
	2.476	-19.14	5.154	0	-18.774	69.728	0	0
	3.095	-15.95	5.154	0	-25.409	78.641	0	0
	3.714	-12.76	5.154	0	-32.537	80.56	0	0
	4.333	-9.57	5.154	0	-40.022	74.32	0	0
	4.952	-6.38	5.154	0	-47.729	59.089	0	0
	5.571	-3.19	5.154	0	-55.525	34.37	0	0
	6.19	0	5.154	-63.198	-63.198	0	0	0

Support	Reac. Pos	Reac. Negative
1	5.154	-63.275
2	8.256	-64.204
3	10.982	-64.15
4	10.197	-65.057
5	10.982	-64.15
6	8.256	-64.204
7	5.154	-63.275

Id Group 4, HS-20 Lane Operating: 1.3\*1.0(Lane+IM)\*DF + 1.3\*1.0(DL)  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	32.204	-2.621	32.204	0	0	0
	0.619	12.43	19.85	-1.048	27.992	17.327	0	0
	1.238	21.343	16.78	-4.118	23.849	29.524	0	0
	1.857	26.864	13.777	-7.121	19.859	36.877	0	0
	2.476	29.202	10.874	-10.024	16.069	39.787	0	0
	3.095	28.647	8.106	-12.792	12.526	38.769	0	0
	3.714	25.573	5.506	-15.392	9.275	34.447	0	0
	4.333	20.439	3.107	-17.791	6.36	27.557	0	0
	4.952	13.791	1.204	-19.694	3.825	18.94	0	0
	5.571	6.817	0.789	-20.109	1.712	9.539	0	0
2	0	3.132	0.506	-2.53	32.987	0	-3.098	0
	0.619	7.322	19.699	-1.199	30.162	8.083	-1.922	0
	1.238	14.1	18.681	-2.217	26.932	18.293	-0.84	0
	1.857	19.837	16.101	-4.797	23.386	26.212	-0.12	0
	2.476	23.441	13.271	-7.627	19.655	31.166	0	0
	3.095	24.616	10.365	-10.533	15.868	32.804	0	0
	3.714	23.284	7.47	-13.428	12.152	31.093	0	0
	4.333	19.584	4.676	-16.222	8.633	26.316	0	0
	4.952	13.899	2.533	-18.365	5.434	19.059	0	0
	5.571	7.385	1.236	-19.662	4.433	3.435	0	0
3	0	4.515	3.205	-1.171	33.342	0	-2.283	0
	0.619	7.457	19.662	-1.236	30.207	7.869	-1.682	0
	1.238	13.991	18.314	-2.584	27.044	17.868	-0.63	0
	1.857	19.646	16.158	-4.74	23.53	25.76	0	0
	2.476	23.273	13.333	-7.565	19.803	30.793	0	0
	3.095	24.504	10.417	-10.481	15.998	32.553	0	0
	3.714	23.23	7.502	-13.396	12.249	30.963	0	0
	4.333	19.564	4.679	-16.219	8.686	26.269	0	0
	4.952	13.88	2.529	-18.369	5.439	19.04	0	0
	5.571	7.33	1.185	-19.713	3.711	2.915	0	0
4	0	3.806	2.681	-2.681	33.307	0	-2.557	0
	0.619	7.33	19.713	-1.185	30.264	7.717	-1.799	0
	1.238	13.88	18.369	-2.529	27.107	17.734	-0.719	0
	1.857	19.564	16.219	-4.679	23.599	25.66	-0.001	0
	2.476	23.23	13.396	-7.502	19.875	30.738	0	0
	3.095	24.504	10.481	-10.417	16.072	32.549	0	0
	3.714	23.273	7.565	-13.333	12.321	31.009	0	0
	4.333	19.646	4.74	-16.158	8.754	26.359	0	0
	4.952	13.991	2.584	-18.314	5.501	19.162	0	0
	5.571	7.457	1.236	-19.662	3.704	2.967	0	0
5	0	4.515	1.171	-3.205	33.254	0	-2.284	0
	0.619	7.385	19.662	-1.236	30.207	7.775	-1.712	0
	1.238	13.899	18.365	-2.533	27.096	17.752	-0.692	0

	1.857	19.584	16.222	-4.676	23.632	25.695	-0.034	0
	2.476	23.284	13.428	-7.47	19.947	30.839	0	0
	3.095	24.616	10.533	-10.365	16.171	32.744	0	0
	3.714	23.441	7.627	-13.271	12.431	31.292	0	0
	4.333	19.837	4.797	-16.101	8.853	26.677	0	0
	4.952	14.1	2.217	-18.681	5.562	19.405	0	0
	5.571	7.322	1.199	-19.699	3.527	2.246	0	0
6	0	3.132	2.53	-0.506	33.347	0	-3.11	0
	0.619	6.817	20.109	-0.789	30.953	7.256	-1.856	0
	1.238	13.791	19.694	-1.204	28.461	17.651	-0.71	0
	1.857	20.439	17.791	-3.107	25.616	26.779	0	0
	2.476	25.573	15.392	-5.506	22.47	33.78	0	0
	3.095	28.647	12.792	-8.106	19.079	37.935	0	0
	3.714	29.202	10.024	-10.874	15.494	38.655	0	0
	4.333	26.864	7.121	-13.777	11.767	35.485	0	0
	4.952	21.343	4.118	-16.78	7.949	28.098	0	0
	5.571	12.43	1.048	-19.85	4.092	16.295	-0.026	0
	6.19	0	2.621	-32.204	2.621	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	32.204	-2.621	-2.621	0	0	0
	0.619	-1.242	0	-2.007	-4.092	16.295	-0.026	0
	1.238	-2.485	0	-2.008	-7.949	28.098	0	0
	1.857	-3.728	0	-2.008	-11.767	35.485	0	0
	2.476	-4.971	0	-2.008	-15.494	38.655	0	0
	3.095	-6.214	0	-2.008	-19.079	37.935	0	0
	3.714	-7.456	0	-2.008	-22.47	33.78	0	0
	4.333	-8.699	0	-2.008	-25.616	26.779	0	0
	4.952	-9.948	0	-2.268	-28.461	17.651	-0.71	0
	5.571	-16.416	0	-13.87	-30.953	7.256	-1.856	0
2	0	-26.912	18.223	-19.182	-33.347	0	-3.11	0
	0.619	-16.877	12.144	0	-3.527	2.246	0	0
	1.238	-11.358	0.911	0	-5.562	19.405	0	0
	1.857	-10.995	0.587	0	-8.853	26.677	0	0
	2.476	-10.631	0.587	0	-12.431	31.292	0	0
	3.095	-10.268	0.587	0	-16.171	32.744	0	0
	3.714	-9.904	0.587	0	-19.947	30.839	0	0
	4.333	-9.541	0.587	0	-23.632	25.695	-0.034	0
	4.952	-9.996	0	-2.764	-27.096	17.752	-0.692	0
	5.571	-15.252	0	-14.238	-30.207	7.775	-1.712	0
3	0	-25.206	17.869	-17.881	-33.254	0	-2.284	0
	0.619	-15.251	14.208	0	-3.704	2.967	0	0
	1.238	-9.544	4.287	0	-5.501	19.162	0	0
	1.857	-9.287	0.013	0	-8.754	26.359	0	0
	2.476	-9.279	0.013	0	-12.321	31.009	0	0
	3.095	-9.271	0.013	0	-16.072	32.549	0	0
	3.714	-9.263	0.013	0	-19.875	30.738	0	0
	4.333	-9.256	0.013	0	-23.599	25.66	-0.001	0

	4.952	-10.152	0	-2.955	-27.107	17.734	-0.719	0
	5.571	-15.278	0	-14.239	-30.264	7.717	-1.799	0
4	0	-25.256	28.566	-17.9	-33.307	0	-2.557	0
	0.619	-15.278	14.239	0	-3.711	2.915	0	0
	1.238	-10.152	2.955	0	-5.439	19.04	0	0
	1.857	-9.256	0	-0.013	-8.686	26.269	0	0
	2.476	-9.263	0	-0.013	-12.249	30.963	0	0
	3.095	-9.271	0	-0.013	-15.998	32.553	0	0
	3.714	-9.279	0	-0.013	-19.803	30.793	0	0
	4.333	-9.287	0	-0.013	-23.53	25.76	0	0
	4.952	-9.544	0	-4.287	-27.044	17.868	-0.63	0
	5.571	-15.251	0	-14.208	-30.207	7.869	-1.682	0
5	0	-25.206	17.881	-17.869	-33.342	0	-2.283	0
	0.619	-15.252	14.238	0	-4.433	3.435	0	0
	1.238	-9.996	2.764	0	-5.434	19.059	0	0
	1.857	-9.541	0	-0.587	-8.633	26.316	0	0
	2.476	-9.904	0	-0.587	-12.152	31.093	0	0
	3.095	-10.268	0	-0.587	-15.868	32.804	0	0
	3.714	-10.631	0	-0.587	-19.655	31.166	0	0
	4.333	-10.995	0	-0.587	-23.386	26.212	-0.12	0
	4.952	-11.358	0	-3.709	-26.932	18.293	-0.84	0
	5.571	-16.877	0	-12.144	-30.162	8.083	-1.922	0
6	0	-26.912	19.182	-18.223	-32.987	0	-3.098	0
	0.619	-16.416	13.87	0	-1.712	9.539	0	0
	1.238	-9.948	2.268	0	-3.825	18.94	0	0
	1.857	-8.699	2.008	0	-6.36	27.557	0	0
	2.476	-7.456	2.008	0	-9.275	34.447	0	0
	3.095	-6.214	2.008	0	-12.526	38.769	0	0
	3.714	-4.971	2.008	0	-16.069	39.787	0	0
	4.333	-3.728	2.008	0	-19.859	36.877	0	0
	4.952	-2.485	2.008	0	-23.849	29.524	0	0
	5.571	-1.242	2.007	0	-27.992	17.327	0	0
	6.19	0	2.621	-32.204	-32.204	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.621	-32.242
2	4.212	-35.912
3	5.913	-35.529
4	4.976	-35.67
5	5.913	-35.529
6	4.212	-35.912
7	2.621	-32.204

Id Group 2, HS-20 Lane Inventory:  $1.3 \times 1.67 \times (\text{Lane} + \text{IM}) \times \text{DF} + 1.3(\text{DL})$   
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	53.785	-4.377	53.785	0	0	0
	0.619	20.759	33.152	-1.75	46.75	28.938	0	0
	1.238	35.645	28.024	-6.878	39.83	49.309	0	0
	1.857	44.866	23.008	-11.894	33.166	61.589	0	0
	2.476	48.77	18.161	-16.741	26.837	66.449	0	0
	3.095	47.843	13.538	-21.364	20.92	64.748	0	0
	3.714	42.71	9.195	-25.707	15.49	57.531	0	0
	4.333	34.135	5.189	-29.713	10.622	46.024	0	0
	4.952	23.032	2.01	-32.892	6.388	31.631	0	0
	5.571	11.385	1.318	-33.584	2.86	15.93	0	0
2	0	5.231	0.845	-4.225	55.092	0	-5.174	0
	0.619	12.228	32.899	-2.003	50.374	13.499	-3.21	0
	1.238	23.549	31.199	-3.703	44.98	30.552	-1.404	0
	1.857	33.13	26.891	-8.011	39.058	43.778	-0.201	0
	2.476	39.149	22.164	-12.738	32.826	52.051	0	0
	3.095	41.112	17.31	-17.592	26.501	54.786	0	0
	3.714	38.888	12.477	-22.425	20.296	51.93	0	0
	4.333	32.707	7.809	-27.093	14.418	43.951	0	0
	4.952	23.213	4.231	-30.671	9.075	31.83	0	0
	5.571	12.334	2.064	-32.838	7.404	5.737	0	0
3	0	7.541	5.354	-1.956	55.685	0	-3.813	0
	0.619	12.455	32.838	-2.064	50.45	13.143	-2.809	0
	1.238	23.367	30.587	-4.315	45.166	29.842	-1.053	0
	1.857	32.811	26.986	-7.916	39.297	43.022	0	0
	2.476	38.868	22.267	-12.635	33.073	51.427	0	0
	3.095	40.925	17.397	-17.505	26.719	54.368	0	0
	3.714	38.796	12.529	-22.373	20.457	51.711	0	0
	4.333	32.673	7.814	-27.088	14.507	43.872	0	0
	4.952	23.181	4.223	-30.679	9.084	31.8	0	0
	5.571	12.242	1.979	-32.923	6.198	4.868	0	0
4	0	6.357	4.477	-4.477	55.626	0	-4.271	0
	0.619	12.242	32.923	-1.979	50.543	12.889	-3.005	0
	1.238	23.181	30.679	-4.223	45.273	29.617	-1.201	0
	1.857	32.673	27.088	-7.814	39.413	42.855	-0.001	0
	2.476	38.796	22.373	-12.529	33.194	51.336	0	0
	3.095	40.925	17.505	-17.397	26.841	54.361	0	0
	3.714	38.868	12.635	-22.267	20.577	51.788	0	0
	4.333	32.811	7.916	-26.986	14.621	44.022	0	0
	4.952	23.367	4.315	-30.587	9.187	32.003	0	0
	5.571	12.455	2.064	-32.838	6.186	4.955	0	0
5	0	7.541	1.956	-5.354	55.538	0	-3.814	0
	0.619	12.334	32.838	-2.064	50.449	12.985	-2.86	0
	1.238	23.213	30.671	-4.231	45.253	29.648	-1.155	0

	1.857	32.707	27.093	-7.809	39.468	42.914	-0.057	0
	2.476	38.888	22.425	-12.477	33.314	51.504	0	0
	3.095	41.112	17.592	-17.31	27.007	54.686	0	0
	3.714	39.149	12.738	-22.164	20.761	52.261	0	0
	4.333	33.13	8.011	-26.891	14.786	44.554	0	0
	4.952	23.549	3.703	-31.199	9.289	32.408	0	0
	5.571	12.228	2.003	-32.899	5.891	3.751	0	0
6	0	5.231	4.225	-0.845	55.693	0	-5.194	0
	0.619	11.385	33.584	-1.318	51.695	12.118	-3.099	0
	1.238	23.032	32.892	-2.01	47.534	29.48	-1.185	0
	1.857	34.135	29.713	-5.189	42.781	44.723	0	0
	2.476	42.71	25.707	-9.195	37.528	56.417	0	0
	3.095	47.843	21.364	-13.538	31.864	63.356	0	0
	3.714	48.77	16.741	-18.161	25.876	64.559	0	0
	4.333	44.866	11.894	-23.008	19.652	59.265	0	0
	4.952	35.645	6.878	-28.024	13.276	46.927	0	0
	5.571	20.759	1.75	-33.152	6.833	27.214	-0.044	0
	6.19	0	4.377	-53.785	4.377	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	53.785	-4.377	-4.377	0	0	0
	0.619	-2.075	0	-3.352	-6.833	27.214	-0.044	0
	1.238	-4.151	0	-3.353	-13.276	46.927	0	0
	1.857	-6.226	0	-3.353	-19.652	59.265	0	0
	2.476	-8.302	0	-3.353	-25.876	64.559	0	0
	3.095	-10.377	0	-3.353	-31.864	63.356	0	0
	3.714	-12.453	0	-3.353	-37.528	56.417	0	0
	4.333	-14.529	0	-3.353	-42.781	44.723	0	0
	4.952	-16.614	0	-3.787	-47.534	29.48	-1.185	0
	5.571	-27.416	0	-23.164	-51.695	12.118	-3.099	0
2	0	-44.946	30.435	-32.035	-55.693	0	-5.194	0
	0.619	-28.187	20.281	0	-5.891	3.751	0	0
	1.238	-18.97	1.522	0	-9.289	32.408	0	0
	1.857	-18.363	0.981	0	-14.786	44.554	0	0
	2.476	-17.755	0.981	0	-20.761	52.261	0	0
	3.095	-17.148	0.981	0	-27.007	54.686	0	0
	3.714	-16.541	0.981	0	-33.314	51.504	0	0
	4.333	-15.934	0.981	0	-39.468	42.914	-0.057	0
	4.952	-16.694	0	-4.617	-45.253	29.648	-1.155	0
	5.571	-25.472	0	-23.78	-50.449	12.985	-2.86	0
3	0	-42.096	29.844	-29.863	-55.538	0	-3.814	0
	0.619	-25.47	23.73	0	-6.186	4.955	0	0
	1.238	-15.939	7.16	0	-9.187	32.003	0	0
	1.857	-15.51	0.021	0	-14.621	44.022	0	0
	2.476	-15.497	0.021	0	-20.577	51.788	0	0
	3.095	-15.484	0.021	0	-26.841	54.361	0	0
	3.714	-15.471	0.021	0	-33.194	51.336	0	0
	4.333	-15.458	0.021	0	-39.413	42.855	-0.001	0

	4.952	-16.955	0	-4.935	-45.273	29.617	-1.201	0
	5.571	-25.517	0	-23.78	-50.543	12.889	-3.005	0
4	0	-42.18	47.708	-29.894	-55.626	0	-4.271	0
	0.619	-25.517	23.78	0	-6.198	4.868	0	0
	1.238	-16.955	4.935	0	-9.084	31.8	0	0
	1.857	-15.458	0	-0.021	-14.507	43.872	0	0
	2.476	-15.471	0	-0.021	-20.457	51.711	0	0
	3.095	-15.484	0	-0.021	-26.719	54.368	0	0
	3.714	-15.497	0	-0.021	-33.073	51.427	0	0
	4.333	-15.51	0	-0.021	-39.297	43.022	0	0
	4.952	-15.939	0	-7.16	-45.166	29.842	-1.053	0
	5.571	-25.47	0	-23.73	-50.45	13.143	-2.809	0
5	0	-42.096	29.863	-29.844	-55.685	0	-3.813	0
	0.619	-25.472	23.78	0	-7.404	5.737	0	0
	1.238	-16.694	4.617	0	-9.075	31.83	0	0
	1.857	-15.934	0	-0.981	-14.418	43.951	0	0
	2.476	-16.541	0	-0.981	-20.296	51.93	0	0
	3.095	-17.148	0	-0.981	-26.501	54.786	0	0
	3.714	-17.755	0	-0.981	-32.826	52.051	0	0
	4.333	-18.363	0	-0.981	-39.058	43.778	-0.201	0
	4.952	-18.97	0	-6.194	-44.98	30.552	-1.404	0
	5.571	-28.187	0	-20.281	-50.374	13.499	-3.21	0
6	0	-44.946	32.035	-30.435	-55.092	0	-5.174	0
	0.619	-27.416	23.164	0	-2.86	15.93	0	0
	1.238	-16.614	3.787	0	-6.388	31.631	0	0
	1.857	-14.529	3.353	0	-10.622	46.024	0	0
	2.476	-12.453	3.353	0	-15.49	57.531	0	0
	3.095	-10.377	3.353	0	-20.92	64.748	0	0
	3.714	-8.302	3.353	0	-26.837	66.449	0	0
	4.333	-6.226	3.353	0	-33.166	61.589	0	0
	4.952	-4.151	3.353	0	-39.83	49.309	0	0
	5.571	-2.075	3.352	0	-46.75	28.938	0	0
	6.19	0	4.377	-53.785	-53.785	0	0	0

Support	Reac. Pos	Reac. Negative
1	4.377	-53.848
2	7.035	-59.977
3	9.876	-59.337
4	8.31	-59.573
5	9.876	-59.337
6	7.035	-59.977
7	4.377	-53.785

Id Group 9, HS-15 Truck Fatigue: (truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	19.031	-1.512	19.031	0	0	0
	0.619	10.315	16.663	-2.299	16.663	10.315	0	0
	1.238	17.693	14.291	-4.671	14.291	17.693	0	0
	1.857	22.232	11.972	-6.99	11.972	22.232	0	0
	2.476	24.112	9.738	-9.224	9.738	24.112	0	0
	3.095	23.594	7.623	-11.339	7.623	23.594	0	0
	3.714	21.021	5.66	-13.303	5.66	21.021	0	0
	4.333	16.817	3.881	-15.081	3.881	16.817	0	0
	4.952	11.534	2.329	-16.633	2.329	11.534	0	0
	5.571	5.724	1.027	-17.935	1.027	5.724	0	0
2	0	2.509	0.405	-2.026	19.073	0	-0.207	0
	0.619	6.285	17.494	-1.468	17.628	6.202	0	0
	1.238	12.019	15.848	-3.244	15.848	12.019	0	0
	1.857	16.613	13.83	-5.132	13.83	16.613	0	0
	2.476	19.5	11.655	-7.307	11.655	19.5	0	0
	3.095	20.405	9.408	-9.554	9.408	20.405	0	0
	3.714	19.257	7.171	-11.792	7.171	19.257	0	0
	4.333	16.189	5.026	-13.936	5.026	16.189	0	0
	4.952	11.586	3.069	-15.893	3.069	11.586	0	0
	5.571	5.96	1.37	-17.592	2.521	1.907	0	0
3	0	3.467	2.521	-0.84	19.077	0	-0.224	0
	0.619	6	17.561	-1.402	17.699	5.905	0	0
	1.238	11.621	15.828	-3.134	15.963	11.612	0	0
	1.857	16.211	13.966	-4.996	13.966	16.211	0	0
	2.476	19.201	11.642	-7.32	11.796	19.173	0	0
	3.095	20.235	9.375	-9.587	9.539	20.181	0	0
	3.714	19.197	7.115	-11.847	7.281	19.135	0	0
	4.333	16.204	4.947	-14.015	5.109	16.148	0	0
	4.952	11.592	3.123	-15.84	3.123	11.592	0	0
	5.571	5.978	1.395	-17.567	2.071	1.427	0	0
4	0	2.709	2.071	-2.071	19.096	0	-0.248	0
	0.619	5.978	17.567	-1.395	17.731	5.866	0	0
	1.238	11.592	15.84	-3.123	16.005	11.58	0	0
	1.857	16.204	14.015	-4.947	14.015	16.204	0	0
	2.476	19.197	11.847	-7.115	11.847	19.197	0	0
	3.095	20.235	9.587	-9.375	9.587	20.235	0	0
	3.714	19.201	7.32	-11.642	7.32	19.201	0	0
	4.333	16.211	4.996	-13.966	5.132	16.195	0	0
	4.952	11.621	3.134	-15.828	3.134	11.621	0	0
	5.571	6	1.402	-17.561	2.074	1.419	0	0
5	0	3.467	0.84	-2.521	18.984	0	-0.224	0
	0.619	5.96	17.592	-1.37	17.618	5.849	0	0
	1.238	11.586	15.893	-3.069	15.905	11.542	0	0



	1.857	16.189	13.936	-5.026	13.945	16.163	0	0
	2.476	19.257	11.792	-7.171	11.827	19.17	0	0
	3.095	20.405	9.554	-9.408	9.618	20.287	0	0
	3.714	19.5	7.307	-11.655	7.398	19.387	0	0
	4.333	16.613	5.132	-13.83	5.247	16.542	0	0
	4.952	12.019	3.244	-15.848	3.244	12.019	0	0
	5.571	6.285	1.468	-17.494	2.026	1.254	0	0
6	0	2.509	2.026	-0.405	18.978	0	-0.215	0
	0.619	5.724	17.935	-1.027	17.954	5.618	0	0
	1.238	11.534	16.633	-2.329	16.642	11.491	0	0
	1.857	16.817	15.081	-3.881	15.096	16.752	0	0
	2.476	21.021	13.303	-5.66	13.338	20.89	0	0
	3.095	23.594	11.339	-7.623	11.396	23.419	0	0
	3.714	24.112	9.224	-9.738	9.3	23.924	0	0
	4.333	22.232	6.99	-11.972	7.081	22.063	0	0
	4.952	17.693	4.671	-14.291	4.77	17.57	0	0
	5.571	10.315	2.299	-16.663	2.399	10.253	0	0
	6.19	0	1.512	-19.031	1.512	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.031	-1.512	-1.512	0	0	0
	0.619	-0.936	0	-1.512	-2.399	10.253	0	0
	1.238	-1.872	0	-1.512	-4.77	17.57	0	0
	1.857	-2.808	0	-1.512	-7.081	22.063	0	0
	2.476	-3.744	0	-1.512	-9.3	23.924	0	0
	3.095	-4.679	0	-1.512	-11.396	23.419	0	0
	3.714	-5.615	0	-1.512	-13.338	20.89	0	0
	4.333	-6.551	0	-1.512	-15.096	16.752	0	0
	4.952	-7.487	0	-1.512	-16.642	11.491	0	0
	5.571	-8.423	0	-1.512	-17.954	5.618	0	0
2	0	-12.135	2.521	-13.338	-18.978	0	-0.215	0
	0.619	-10.575	2.521	0	-2.026	1.254	0	0
	1.238	-9.015	2.521	0	-3.244	12.019	0	0
	1.857	-7.571	2.268	0	-5.247	16.542	0	0
	2.476	-6.168	2.268	0	-7.398	19.387	0	0
	3.095	-4.764	2.268	0	-9.618	20.287	0	0
	3.714	-5.21	0	-1.783	-11.827	19.17	0	0
	4.333	-6.314	0	-1.783	-13.945	16.163	0	0
	4.952	-7.526	0	-2.026	-15.905	11.542	0	0
	5.571	-8.78	0	-2.026	-17.618	5.849	0	0
3	0	-10.112	2.071	-11.827	-18.984	0	-0.224	0
	0.619	-8.83	2.071	0	-2.074	1.419	0	0
	1.238	-7.548	2.071	0	-3.134	11.621	0	0
	1.857	-6.34	1.939	0	-5.132	16.195	0	0
	2.476	-5.139	1.939	0	-7.32	19.201	0	0
	3.095	-3.954	1.813	0	-9.587	20.235	0	0
	3.714	-5.079	0	-1.901	-11.847	19.197	0	0
	4.333	-6.285	0	-2.074	-14.015	16.204	0	0

## SECTION 1

## CONSYS

## Section I Fascia 1 Unit 16 FB 1

	4.952	-7.569	0	-2.074	-16.005	11.58	0	0
	5.571	-8.853	0	-2.074	-17.731	5.866	0	0
4	0	-10.137	11.847	-11.847	-19.096	0	-0.248	0
	0.619	-8.853	2.074	0	-2.071	1.427	0	0
	1.238	-7.569	2.074	0	-3.123	11.592	0	0
	1.857	-6.285	2.074	0	-5.109	16.148	0	0
	2.476	-5.079	1.901	0	-7.281	19.135	0	0
	3.095	-3.954	0	-1.813	-9.539	20.181	0	0
	3.714	-5.139	0	-1.939	-11.796	19.173	0	0
	4.333	-6.34	0	-1.939	-13.966	16.211	0	0
	4.952	-7.548	0	-2.071	-15.963	11.612	0	0
	5.571	-8.83	0	-2.071	-17.699	5.905	0	0
5	0	-10.112	11.827	-2.071	-19.077	0	-0.224	0
	0.619	-8.78	2.026	0	-2.521	1.907	0	0
	1.238	-7.526	2.026	0	-3.069	11.586	0	0
	1.857	-6.314	1.783	0	-5.026	16.189	0	0
	2.476	-5.21	1.783	0	-7.171	19.257	0	0
	3.095	-4.764	0	-2.268	-9.408	20.405	0	0
	3.714	-6.168	0	-2.268	-11.655	19.5	0	0
	4.333	-7.571	0	-2.268	-13.83	16.613	0	0
	4.952	-9.015	0	-2.521	-15.848	12.019	0	0
	5.571	-10.575	0	-2.521	-17.628	6.202	0	0
6	0	-12.135	13.338	-2.521	-19.073	0	-0.207	0
	0.619	-8.423	1.512	0	-1.027	5.724	0	0
	1.238	-7.487	1.512	0	-2.329	11.534	0	0
	1.857	-6.551	1.512	0	-3.881	16.817	0	0
	2.476	-5.615	1.512	0	-5.66	21.021	0	0
	3.095	-4.679	1.512	0	-7.623	23.594	0	0
	3.714	-3.744	1.512	0	-9.738	24.112	0	0
	4.333	-2.808	1.512	0	-11.972	22.232	0	0
	4.952	-1.872	1.512	0	-14.291	17.693	0	0
	5.571	-0.936	1.512	0	-16.663	10.315	0	0
	6.19	0	1.512	-19.031	-19.031	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.512	-19.054
2	2.432	-19.215
3	3.361	-19.123
4	2.626	-19.146
5	3.361	-19.123
6	2.432	-19.215
7	1.512	-19.054

Id Group 8, Ohio 5C1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shez	Corr. Shez	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	16.358	-1.768	16.358	0	0	0
	0.492	6.651	13.519	-0.999	13.519	6.651	0	0
	0.984	11.061	11.241	-3.277	11.241	11.061	0	0
	1.476	14.042	9.514	-5.004	9.514	14.042	0	0
	1.968	15.409	7.83	-6.688	7.83	15.409	0	0
	2.46	15.286	6.214	-8.304	6.214	15.286	0	0
	2.952	13.847	4.691	-9.827	4.691	13.847	0	0
	3.444	11.314	3.285	-11.233	3.285	11.314	0	0
	3.936	7.96	2.022	-12.496	2.022	7.96	0	0
	4.428	3.393	0	-15.155	0.604	2.673	0	0
2	0	2.347	0.477	-1.759	19.473	0	-5.856	0
	0.614	3.116	9.515	-0.733	16.806	2.316	0	0
	1.228	8.508	13.876	-0.642	13.998	8.495	0	0
	1.842	12.343	11.216	-3.302	12.305	8.113	0	0
	2.456	13.826	8.594	-5.924	10.617	11.581	0	0
	3.07	13.896	8.599	-5.919	8.599	13.896	0	0
	3.684	14.552	6.281	-8.237	6.281	14.552	0	0
	4.298	13.121	3.697	-10.821	3.697	13.121	0	0
	4.912	9.314	0.931	-13.587	1.81	6.586	0	0
	5.526	3.286	0.781	-9.467	1.387	1.04	0	0
3	0	2.348	0.489	-1.802	19.466	0	-5.703	0
	0.615	3.201	9.496	-0.752	16.784	2.537	0	0
	1.23	8.88	13.798	-0.72	13.969	8.729	0	0
	1.845	12.873	10.998	-3.52	12.428	7.752	0	0
	2.46	14.426	8.364	-6.154	10.678	11.472	0	0
	3.075	13.933	8.612	-5.906	8.612	13.933	0	0
	3.69	14.652	6.259	-8.259	6.259	14.652	0	0
	4.305	13.227	3.653	-10.865	3.653	13.227	0	0
	4.92	9.389	0.875	-13.643	1.792	6.59	0	0
	5.535	3.246	0.764	-9.484	1.672	1.136	0	0
4	0	2.31	0.477	-1.754	19.643	0	-5.954	0
	0.621	3.367	9.465	-0.783	16.954	2.457	0	0
	1.242	9.334	13.782	-0.736	14.119	8.801	0	0
	1.863	13.28	10.986	-3.532	12.446	7.865	0	0
	2.484	14.773	8.351	-6.167	10.703	11.677	0	0
	3.105	14.225	8.638	-5.88	8.638	14.225	0	0
	3.726	15.01	6.278	-8.24	6.278	15.01	0	0
	4.347	13.604	3.657	-10.861	3.657	13.604	0	0
	4.968	9.718	0.858	-13.66	2.021	7.486	0	0
	5.589	4.156	0.97	-9.278	1.671	1.147	0	0
5	0	2.824	0.577	-2.151	19.418	0	-5.637	0
	0.621	3.325	9.486	-0.762	16.79	2.599	0	0
	1.242	9.391	13.877	-0.641	14.025	8.838	0	0

	1.863	13.384	11.064	-3.454	12.272	7.459	0	0
	2.484	14.874	8.394	-6.124	10.48	11.179	0	0
	3.105	14.082	5.954	-8.564	8.391	13.661	0	0
	3.726	14.435	6.024	-8.494	6.031	14.427	0	0
	4.347	13.08	3.404	-11.114	3.464	13.043	0	0
	4.968	9.29	0.733	-13.785	1.752	6.512	0	0
	5.589	3.404	0.793	-9.455	1.716	1.068	0	0
6	0	2.134	1.716	-0.345	20.833	0	-7.475	0
	0.619	3.214	9.671	-0.577	18.337	1.53	0	0
	1.238	9.289	15.433	0	15.549	8.715	0	0
	1.857	14.101	12.379	-2.139	12.747	7.673	0	0
	2.476	16.748	10.008	-4.51	11.274	12.047	0	0
	3.095	18.622	8.501	-6.017	9.492	15.556	0	0
	3.714	18.869	6.897	-7.621	7.4	17.625	0	0
	4.333	17.729	4.971	-9.547	5.421	16.893	0	0
	4.952	15.181	2.255	-12.263	3.654	13.45	0	0
	5.571	9.422	0	-15.222	1.84	7.848	0	0
	6.19	0	1.289	-18.34	1.289	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	16.358	-1.768	-1.768	0	0	0
	0.492	-0.87	0	-1.768	-1.808	6.253	0	0
	0.984	-1.74	0	-1.768	-3.67	10.675	0	0
	1.476	-2.609	0	-1.768	-6.051	12.498	0	0
	1.968	-3.479	0	-1.768	-8.192	12.449	0	0
	2.46	-4.349	0	-1.768	-10.078	10.924	0	0
	2.952	-5.219	0	-1.768	-11.707	8.297	0	0
	3.444	-6.088	0	-1.768	-13.083	4.941	0	0
	3.936	-6.958	0	-1.768	-14.207	1.225	0	0
	4.428	-9.088	0	-11.108	-15.229	3.068	0	0
2	0	-14.767	11.494	-12.069	-17.837	0	-3.116	0
	0.614	-7.979	10.41	0	-1.759	1.267	0	0
	1.228	-4.922	1.387	0	-1.759	0.187	0	0
	1.842	-4.538	0.475	0	-3.361	12.313	0	0
	2.456	-4.261	0.359	0	-5.928	13.822	0	0
	3.07	-4.04	0.359	0	-8.303	13.21	0	0
	3.684	-4.424	0	-1.219	-10.412	10.889	0	0
	4.298	-5.247	0	-1.417	-12.229	7.308	0	0
	4.912	-6.294	0	-1.759	-13.743	8.758	0	0
	5.526	-8.307	0	-10.596	-16.49	2.756	0	0
3	0	-15.217	11.579	-12.229	-19.125	0	-5.239	0
	0.615	-8.229	10.678	0	-1.802	1.24	0	0
	1.23	-6.061	1.672	0	-1.802	0.132	0	0
	1.845	-5.389	0.991	0	-3.52	12.873	0	0
	2.46	-4.797	0.819	0	-6.154	14.426	0	0
	3.075	-4.367	0	-0.741	-8.538	13.797	0	0
	3.69	-4.918	0	-1.071	-10.638	11.384	0	0
	4.305	-5.582	0	-1.088	-12.422	7.665	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 14 FB 1

	4.92	-6.518	0	-1.802	-13.86	3.195	0	0
	5.535	-8.384	0	-10.821	-16.639	2.685	0	0
4	0	-15.364	11.668	-12.267	-19.347	0	-5.512	0
	0.621	-8.27	10.416	0	-1.754	1.221	0	0
	1.242	-6.115	1.671	0	-1.79	6.658	0	0
	1.863	-5.452	0.984	0	-3.532	13.28	0	0
	2.484	-4.867	0.786	0	-6.167	14.773	0	0
	3.105	-4.441	0	-0.761	-8.551	14.068	0	0
	3.726	-5.001	0	-1.048	-10.649	11.57	0	0
	4.347	-5.664	0	-1.096	-12.431	7.764	0	0
	4.968	-6.403	0	-1.754	-14.003	8.874	0	0
	5.589	-8.27	0	-10.649	-16.829	2.603	0	0
5	0	-15.403	12.272	-11.686	-19.524	0	-5.754	0
	0.621	-8.368	10.703	0	-2.151	1.488	0	0
	1.242	-6.39	1.716	0	-2.151	0.152	0	0
	1.863	-5.748	0.738	0	-3.454	13.384	0	0
	2.484	-5.322	0.674	0	-6.124	14.874	0	0
	3.105	-5.286	0	-0.774	-8.564	14.082	0	0
	3.726	-5.96	0	-1.483	-10.732	11.39	0	0
	4.347	-6.885	0	-1.574	-12.589	7.281	0	0
	4.968	-7.863	0	-2.151	-14.097	2.333	0	0
	5.589	-9.199	0	-2.151	-16.741	3.041	0	0
6	0	-16.174	12.119	-12.589	-19.463	0	-5.397	0
	0.619	-8.889	11.274	0	-0.577	3.214	0	0
	1.238	-6.385	1.289	0	-1.343	6.649	0	0
	1.857	-5.587	1.289	0	-2.244	9.725	0	0
	2.476	-4.789	1.289	0	-4.51	16.748	0	0
	3.095	-3.991	1.289	0	-6.017	18.622	0	0
	3.714	-3.193	1.289	0	-7.621	18.869	0	0
	4.333	-2.394	1.289	0	-9.547	17.729	0	0
	4.952	-1.596	1.289	0	-12.263	15.181	0	0
	5.571	-0.798	1.289	0	-15.222	9.422	0	0
	6.19	0	1.289	-18.34	-18.34	0	0	0

Support    React. Pos    React. Negative

1	1.768	-16.388
2	2.236	-23.563
3	2.291	-23.807
4	2.23	-23.935
5	2.728	-23.958
6	2.06	-24.747
7	1.289	-18.372

Id Group 7, Ohio 4F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shez	Corr. Shez	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	13.666	-1.18	13.666	0	0	0
	0.492	5.579	11.34	-0.616	11.34	5.579	0	0
	0.984	9.007	9.154	-2.802	9.154	9.007	0	0
	1.476	11.353	7.692	-4.264	7.692	11.353	0	0
	1.968	12.612	6.409	-5.547	6.409	12.612	0	0
	2.46	12.699	5.162	-6.794	5.162	12.699	0	0
	2.952	11.731	3.974	-7.982	3.974	11.731	0	0
	3.444	9.867	2.865	-9.091	2.865	9.867	0	0
	3.936	7.307	1.856	-10.1	1.856	7.307	0	0
	4.428	3.707	0	-12.275	0.807	3.575	0	0
2	0	1.554	0.316	-1.165	16.653	0	-7.504	0
	0.614	3.38	9.147	-1.101	14.813	0	-1.676	0
	1.228	7.141	10.166	-1.79	12.751	3.248	0	0
	1.842	9.616	8.158	-3.798	10.565	6.902	0	0
	2.456	10.504	6.291	-5.665	8.54	9.308	0	0
	3.07	11.328	7.015	-4.941	7.015	11.328	0	0
	3.684	11.672	5.566	-6.39	5.566	11.672	0	0
	4.298	10.794	3.843	-8.113	3.843	10.794	0	0
	4.912	8.357	1.876	-10.08	1.969	7.156	0	0
	5.526	4.175	0	-12.212	1.121	0.765	0	0
3	0	1.585	0.33	-1.216	16.992	0	-9.096	0
	0.615	4.195	9.262	-0.986	15.066	0	-2.678	0
	1.23	8.169	9.925	-2.031	12.932	2.677	0	0
	1.845	10.512	7.849	-4.107	10.685	6.63	0	0
	2.46	11.138	6.003	-5.953	8.793	8.667	0	0
	3.075	11.214	5.387	-4.861	7.495	10.468	0	0
	3.69	11.255	5.939	-6.017	5.939	11.255	0	0
	4.305	10.678	4.119	-7.837	4.119	10.678	0	0
	4.92	8.417	2.071	-9.885	2.071	8.417	0	0
	5.535	4.312	0	-12.085	1.155	0.785	0	0
4	0	1.495	1.155	-0.305	17.111	0	-9.323	0
	0.621	4.253	9.258	-0.99	15.195	0	-2.788	0
	1.242	8.398	9.94	-2.016	13.061	2.701	0	0
	1.863	10.71	7.858	-4.098	10.804	6.783	0	0
	2.484	11.292	6.006	-5.95	8.82	8.585	0	0
	3.105	11.671	5.584	-4.664	7.496	10.59	0	0
	3.726	11.472	4.404	-5.844	5.944	11.443	0	0
	4.347	10.924	4.121	-7.835	4.121	10.924	0	0
	4.968	8.698	2.066	-9.89	2.113	7.824	0	0
	5.589	4.976	1.162	-9.086	1.162	4.976	0	0
5	0	2.326	0.475	-1.772	16.963	0	-9.47	0
	0.621	4.348	12.017	0	14.99	0	-2.912	0
	1.242	8.446	9.74	-2.216	12.814	2.573	0	0

	1.863	10.601	7.624	-4.332	10.536	6.601	0	0
	2.484	11.091	6.109	-4.139	8.909	8.516	0	0
	3.105	11.457	4.949	-5.299	7.482	10.186	0	0
	3.726	10.901	5.757	-6.199	5.831	10.81	0	0
	4.347	10.107	3.876	-8.08	3.939	10.068	0	0
	4.968	7.653	1.836	-10.12	1.939	6.512	0	0
	5.589	3.656	1.197	-9.051	1.197	3.656	0	0
6	0	1.403	1.128	-0.227	17.886	0	-10.671	0
	0.619	4.001	9.53	-0.718	15.973	0	-3.594	0
	1.238	8.249	12.589	0	13.751	2.494	0	0
	1.857	11.962	10.114	-1.842	11.268	6.963	0	0
	2.476	13.87	8.222	-3.734	9.493	9.146	0	0
	3.095	15.151	7.061	-4.895	8.245	11.484	0	0
	3.714	15.139	5.842	-6.114	6.739	12.916	0	0
	4.333	14.873	3.947	-8.009	4.946	13.018	0	0
	4.952	12.667	1.724	-10.232	3.3	10.716	0	0
	5.571	7.822	0	-12.637	1.979	6.175	0	0
	6.19	0	0.843	-15.155	0.843	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	13.666	-1.18	-1.18	0	0	0
	0.492	-0.581	0	-1.18	-2.027	4.885	0	0
	0.984	-1.162	0	-1.18	-3.995	7.834	0	0
	1.476	-1.742	0	-1.18	-5.728	9.193	0	0
	1.968	-2.323	0	-1.18	-7.24	9.281	0	0
	2.46	-2.904	0	-1.18	-8.551	8.376	0	0
	2.952	-3.485	0	-1.18	-9.68	6.719	0	0
	3.444	-4.065	0	-1.18	-10.724	4.244	0	0
	3.936	-5.031	0	-6.424	-11.679	1.091	0	0
	4.428	-8.601	0	-7.742	-13.71	0	-2.649	0
2	0	-12.661	11.65	-8.551	-15.69	0	-7.487	0
	0.614	-6.436	8.385	0	-1.165	0.839	0	0
	1.228	-4.051	1.121	0	-1.801	6.104	0	0
	1.842	-3.917	0.043	0	-3.868	9.581	0	0
	2.456	-3.895	0.034	0	-5.745	10.414	0	0
	3.07	-3.874	0.034	0	-7.395	9.912	0	0
	3.684	-3.854	0.034	0	-8.831	8.365	0	0
	4.298	-3.888	0	-0.078	-10.391	6.422	0	0
	4.912	-4.168	0	-1.165	-12.621	2.548	0	0
	5.526	-8.25	0	-7.395	-14.775	0	-2.737	0
3	0	-13.333	12.082	-8.658	-16.745	0	-9.095	0
	0.615	-7.991	7.71	0	-1.216	0.837	0	0
	1.23	-4.186	1.155	0	-2.031	8.169	0	0
	1.845	-4.084	0.033	0	-4.107	10.512	0	0
	2.46	-4.064	0.033	0	-5.953	11.138	0	0
	3.075	-4.043	0.033	0	-7.534	10.369	0	0
	3.69	-4.024	0.03	0	-8.902	8.288	0	0
	4.305	-4.006	0.03	0	-10.606	6.521	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 14 FB 1

	4.92	-4.4	0	-1.216	-12.879	2.588	0	0
	5.535	-8.483	0	-7.573	-15.041	0	-2.779	0
4	0	-13.616	12.08	-8.847	-16.993	0	-9.24	0
	0.621	-8.199	7.45	0	-1.122	0.781	0	0
	1.242	-4.131	1.129	0	-2.016	8.398	0	0
	1.863	-3.891	0	-0.041	-4.098	10.71	0	0
	2.484	-3.916	0	-0.041	-5.95	11.292	0	0
	3.105	-3.941	0	-0.041	-7.531	10.472	0	0
	3.726	-3.967	0	-0.041	-8.844	8.624	0	0
	4.347	-3.992	0	-0.041	-10.726	6.668	0	0
	4.968	-4.097	0	-1.122	-13	2.603	0	0
	5.589	-8.269	0	-7.83	-15.159	0	-2.895	0
5	0	-13.621	8.724	-12.32	-17.103	0	-9.47	0
	0.621	-8.432	7.661	0	-1.807	3.968	0	0
	1.242	-4.201	1.128	0	-2.389	6.332	0	0
	1.863	-4.328	0	-0.689	-4.332	10.601	0	0
	2.484	-4.756	0	-0.689	-6.204	10.996	0	0
	3.105	-5.184	0	-0.689	-7.783	10	0	0
	3.726	-5.612	0	-0.694	-9.058	8.062	0	0
	4.347	-6.043	0	-0.694	-10.86	6.304	0	0
	4.968	-6.476	0	-1.772	-13.182	1.975	0	0
	5.589	-9.352	0	-7.942	-15.38	0	-3.812	0
6	0	-14.53	13.751	-8.525	-17.35	0	-10.67	0
	0.619	-8.948	8.384	0	-0.718	4.001	0	0
	1.238	-4.177	0.843	0	-1.453	7.196	0	0
	1.857	-3.655	0.843	0	-2.309	10.006	0	0
	2.476	-3.133	0.843	0	-3.734	13.87	0	0
	3.095	-2.61	0.843	0	-4.895	15.151	0	0
	3.714	-2.088	0.843	0	-6.114	15.139	0	0
	4.333	-1.566	0.843	0	-8.009	14.873	0	0
	4.952	-1.044	0.843	0	-10.232	12.667	0	0
	5.571	-0.522	0.843	0	-12.637	7.822	0	0
	6.19	0	0.843	-15.155	-15.155	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.18	-13.69
2	1.481	-20.73
3	1.546	-21.818
4	1.46	-22.019
5	2.247	-22.148
6	1.355	-23.318
7	0.843	-15.181



Id Group 6, Ohio 3F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	16.532	-1.813	16.532	0	0	0
	0.492	6.748	13.715	-0.803	13.715	6.748	0	0
	0.984	10.891	11.068	-3.45	11.068	10.891	0	0
	1.476	13.752	9.317	-5.201	9.317	13.752	0	0
	1.968	15.231	7.739	-6.779	7.739	15.231	0	0
	2.46	15.283	6.213	-8.305	6.213	15.283	0	0
	2.952	14.059	4.762	-9.756	4.762	14.059	0	0
	3.444	11.757	3.414	-11.104	3.414	11.757	0	0
	3.936	8.626	2.191	-12.327	2.191	8.626	0	0
	4.428	4.25	0	-14.962	0.887	3.926	0	0
2	0	2.406	0.489	-1.803	19.517	0	-5.914	0
	0.614	3.428	9.08	-1.168	16.924	2.23	0	0
	1.228	8.508	13.876	-0.642	14.168	8.477	0	0
	1.842	12.442	11.412	-3.106	12.031	7.973	0	0
	2.456	14.048	8.792	-5.726	10.36	11.292	0	0
	3.07	13.689	8.48	-6.038	8.48	13.689	0	0
	3.684	14.538	6.275	-8.243	6.275	14.538	0	0
	4.298	13.366	3.779	-10.739	3.779	13.366	0	0
	4.912	9.838	1.077	-13.441	2.095	7.604	0	0
	5.526	4.507	1.072	-9.176	1.361	0.929	0	0
3	0	2.405	0.5	-1.846	19.497	0	-5.743	0
	0.615	4.408	9.212	-1.036	16.893	2.462	0	0
	1.23	9.621	13.594	-0.924	14.133	8.717	0	0
	1.845	13.289	10.859	-3.659	12.16	7.606	0	0
	2.46	14.537	8.317	-6.201	10.404	11.156	0	0
	3.075	13.694	8.477	-6.041	8.477	13.694	0	0
	3.69	14.606	6.24	-8.278	6.24	14.606	0	0
	4.305	13.443	3.725	-10.793	3.725	13.443	0	0
	4.92	9.892	1.014	-13.504	2.089	7.662	0	0
	5.535	4.544	1.071	-9.177	1.672	1.136	0	0
4	0	2.31	0.477	-1.754	19.63	0	-5.937	0
	0.621	4.473	9.206	-1.042	17.037	2.4	0	0
	1.242	9.86	13.638	-0.88	14.28	8.789	0	0
	1.863	13.53	10.903	-3.615	12.14	7.739	0	0
	2.484	14.762	8.356	-6.162	10.377	11.297	0	0
	3.105	13.942	6.462	-8.056	8.453	13.895	0	0
	3.726	14.86	6.216	-8.302	6.216	14.86	0	0
	4.347	13.731	3.699	-10.819	3.699	13.731	0	0
	4.968	10.187	0.987	-13.531	2.203	8.15	0	0
	5.589	5.346	1.248	-9	1.73	1.188	0	0
5	0	2.824	0.577	-2.151	19.418	0	-5.637	0
	0.621	4.506	9.214	-1.034	16.79	2.599	0	0
	1.242	9.897	13.741	-0.777	14.025	8.838	0	0

	1.863	13.608	10.992	-3.526	12.182	7.738	0	0
	2.484	14.835	8.409	-6.109	10.421	11.326	0	0
	3.105	13.974	8.223	-6.295	8.358	13.723	0	0
	3.726	14.669	5.836	-8.682	6.031	14.427	0	0
	4.347	13.194	3.219	-11.299	3.464	13.043	0	0
	4.968	9.29	0.733	-13.785	1.922	6.512	0	0
	5.589	3.706	1.279	-8.969	1.758	1.095	0	0
6	0	2.186	1.758	-0.353	20.833	0	-7.475	0
	0.619	4.365	9.464	-0.784	18.337	1.53	0	0
	1.238	9.787	15.333	0	15.549	8.715	0	0
	1.857	14.329	12.327	-2.191	12.693	7.908	0	0
	2.476	16.698	10.022	-4.496	11.231	12.208	0	0
	3.095	18.32	8.599	-5.919	9.469	15.628	0	0
	3.714	18.374	7.097	-7.421	7.4	17.625	0	0
	4.333	17.986	4.833	-9.685	5.542	16.668	0	0
	4.952	15.326	2.139	-12.379	3.944	13.091	0	0
	5.571	9.47	0	-15.299	2.304	7.561	0	0
	6.19	0	1.321	-18.359	1.321	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	16.532	-1.813	-1.813	0	0	0
	0.492	-0.892	0	-1.813	-1.985	6.166	0	0
	0.984	-1.784	0	-1.813	-3.67	10.675	0	0
	1.476	-2.676	0	-1.813	-6.031	12.526	0	0
	1.968	-3.568	0	-1.813	-8.145	12.542	0	0
	2.46	-4.461	0	-1.813	-10.011	11.087	0	0
	2.952	-5.353	0	-1.813	-11.63	8.527	0	0
	3.444	-6.245	0	-1.813	-13.018	5.166	0	0
	3.936	-7.137	0	-1.813	-14.172	1.364	0	0
	4.428	-8.759	0	-11.034	-15.227	3.075	0	0
2	0	-14.36	11.533	-11.63	-17.837	0	-3.116	0
	0.614	-7.805	10.169	0	-1.803	1.298	0	0
	1.228	-4.92	1.361	0	-1.803	0.191	0	0
	1.842	-4.639	0.283	0	-3.361	12.313	0	0
	2.456	-4.468	0.274	0	-5.928	13.822	0	0
	3.07	-4.667	0	-0.763	-8.265	13.275	0	0
	3.684	-5.141	0	-0.787	-10.348	11.039	0	0
	4.298	-5.624	0	-0.787	-12.15	7.541	0	0
	4.912	-6.453	0	-1.803	-13.743	8.758	0	0
	5.526	-8.021	0	-10.348	-16.49	2.756	0	0
3	0	-14.839	11.289	-12.15	-19.125	0	-5.239	0
	0.615	-8.04	10.404	0	-1.846	1.27	0	0
	1.23	-6.061	1.672	0	-2.029	7.462	0	0
	1.845	-5.65	0.554	0	-3.659	13.289	0	0
	2.46	-5.309	0.554	0	-6.201	14.537	0	0
	3.075	-5.042	0	-0.661	-8.467	13.672	0	0
	3.69	-5.448	0	-0.661	-10.425	11.136	0	0
	4.305	-5.855	0	-0.661	-12.156	7.6	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 14 FB 1

	4.92	-6.676	0	-1.846	-14.033	8.779	0	0
	5.535	-8.098	0	-10.425	-16.814	2.567	0	0
4	0	-14.878	12.14	-11.319	-19.443	0	-5.637	0
	0.621	-8.035	10.377	0	-1.754	1.221	0	0
	1.242	-6.334	1.73	0	-2.046	7.596	0	0
	1.863	-5.697	0.553	0	-3.615	13.53	0	0
	2.484	-5.354	0.553	0	-6.162	14.762	0	0
	3.105	-5.088	0	-0.671	-8.434	13.859	0	0
	3.726	-5.505	0	-0.671	-10.396	11.272	0	0
	4.347	-5.922	0	-0.671	-12.134	7.74	0	0
	4.968	-6.403	0	-1.754	-14.166	8.863	0	0
	5.589	-8.096	0	-10.396	-16.941	2.526	0	0
5	0	-14.957	12.182	-11.345	-19.562	0	-5.804	0
	0.621	-8.102	10.679	0	-2.151	1.488	0	0
	1.242	-6.547	1.758	0	-2.545	6.343	0	0
	1.863	-5.969	0.357	0	-3.526	13.608	0	0
	2.484	-5.748	0.357	0	-6.109	14.835	0	0
	3.105	-5.863	0	-1.068	-8.436	13.843	0	0
	3.726	-6.528	0	-1.073	-10.466	11.06	0	0
	4.347	-7.195	0	-1.073	-12.339	7.126	0	0
	4.968	-7.863	0	-2.151	-14.062	9.29	0	0
	5.589	-9.199	0	-2.151	-16.844	2.977	0	0
6	0	-15.862	12.068	-12.339	-19.49	0	-5.43	0
	0.619	-8.648	11.231	0	-0.784	4.365	0	0
	1.238	-6.541	1.321	0	-1.543	7.639	0	0
	1.857	-5.723	1.321	0	-2.419	10.48	0	0
	2.476	-4.905	1.321	0	-4.496	16.698	0	0
	3.095	-4.088	1.321	0	-5.919	18.32	0	0
	3.714	-3.27	1.321	0	-7.421	18.374	0	0
	4.333	-2.453	1.321	0	-9.685	17.986	0	0
	4.952	-1.635	1.321	0	-12.379	15.326	0	0
	5.571	-0.818	1.321	0	-15.299	9.47	0	0
	6.19	0	1.321	-18.359	-18.359	0	0	0

Support    React. Pos    React. Negative

1	1.813	-16.561
2	2.292	-23.199
3	2.346	-23.439
4	2.23	-23.459
5	2.728	-23.527
6	2.111	-24.474
7	1.321	-18.391

Id Group 5 Ohio 2F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)	
1	0	0	17.059	-1.89	17.059	0	0	0	
	0.492	7.363	14.966	-2.114	14.966	7.363	0	0	
	0.984	12.67	12.876	-4.204	12.876	12.67	0	0	
	1.476	16.125	10.925	-6.155	10.925	16.125	0	0	
	1.968	17.783	9.036	-8.044	9.036	17.783	0	0	
	2.46	17.759	7.219	-9.861	7.219	17.759	0	0	
	2.952	16.241	5.502	-11.578	5.502	16.241	0	0	
	3.444	13.473	3.912	-13.168	3.912	13.473	0	0	
	3.936	9.753	2.478	-14.602	2.478	9.753	0	0	
	4.428	5.434	1.227	-15.853	1.227	5.434	0	0	
	2	0	2.494	0.507	-1.87	17.07	0	-0.054	0
		0.614	5.559	15.348	-1.732	15.858	5.193	0	0
		1.228	10.18	14.012	-3.067	14.322	10.147	0	0
1.842		14.191	12.551	-4.529	12.551	14.191	0	0	
2.456		16.881	10.659	-6.421	10.659	16.881	0	0	
3.07		18.051	8.757	-8.323	8.757	18.051	0	0	
3.684		17.456	6.808	-10.272	6.808	17.456	0	0	
4.298		15.119	4.893	-12.187	4.893	15.119	0	0	
4.912		11.263	3.097	-13.983	3.097	11.263	0	0	
5.526		6.32	1.502	-15.578	1.601	1.092	0	0	
3		0	2.44	0.508	-1.873	16.954	0.505	0	0
	0.615	6.045	15.66	-1.42	15.66	6.045	0	0	
	1.23	11.088	14.07	-3.01	14.07	11.088	0	0	
	1.845	15.049	12.279	-4.801	12.355	14.33	0	0	
	2.46	17.493	10.368	-6.712	10.585	17.054	0	0	
	3.075	18.186	8.694	-8.386	8.694	18.186	0	0	
	3.69	17.555	6.758	-10.322	6.758	17.555	0	0	
	4.305	15.188	4.859	-12.221	4.859	15.188	0	0	
	4.92	11.315	3.079	-14.001	3.123	10.419	0	0	
	5.535	6.364	1.499	-15.581	1.816	1.234	0	0	
4	0	2.464	0.508	-1.87	16.891	0.82	0	0	
	0.621	6.306	15.612	-1.468	15.612	6.306	0	0	
	1.242	11.315	14.038	-3.042	14.038	11.315	0	0	
	1.863	15.255	12.26	-4.82	12.34	14.452	0	0	
	2.484	17.682	10.36	-6.72	10.581	17.205	0	0	
	3.105	18.369	8.701	-8.379	8.701	18.369	0	0	
	3.726	17.77	6.779	-10.301	6.779	17.77	0	0	
	4.347	15.435	4.894	-12.186	4.894	15.435	0	0	
	4.968	11.589	3.125	-13.955	3.144	10.521	0	0	
	5.589	6.653	1.552	-15.528	1.817	1.247	0	0	
5	0	2.912	0.595	-2.218	16.887	0.852	0	0	
	0.621	6.332	15.628	-1.452	15.628	6.332	0	0	
	1.242	11.35	14.078	-3.002	14.078	11.35	0	0	

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 14 FB 1

	1.863	15.323	12.327	-4.753	12.327	15.323	0	0
	2.484	17.81	10.453	-6.627	10.651	17.319	0	0
	3.105	18.563	8.534	-8.546	8.661	18.326	0	0
	3.726	17.529	6.647	-10.433	6.661	17.511	0	0
	4.347	14.939	4.724	-12.356	4.868	14.85	0	0
	4.968	10.853	3.251	-13.829	3.251	10.853	0	0
	5.589	5.999	1.845	-15.235	1.845	5.999	0	0
6	0	2.249	1.809	-0.363	17.072	0	-0.056	0
	0.619	6.091	15.987	-1.093	16.153	5.162	0	0
	1.238	11.292	14.8	-2.28	14.98	10.399	0	0
	1.857	15.898	13.411	-3.669	13.587	15.133	0	0
	2.476	19.415	11.852	-5.228	12.003	18.857	0	0
	3.095	21.429	10.156	-6.924	10.254	21.127	0	0
	3.714	21.604	8.355	-8.725	8.367	21.572	0	0
	4.333	19.886	6.372	-10.708	6.477	19.69	0	0
	4.952	15.83	4.293	-12.787	4.539	15.526	0	0
	5.571	9.235	2.16	-14.92	2.55	8.994	0	0
	6.19	0	1.355	-17.058	1.355	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	17.059	-1.89	-1.89	0	0	0
	0.492	-0.93	0	-1.89	-2.27	7.286	0	0
	0.984	-1.86	0	-1.89	-4.223	12.652	0	0
	1.476	-2.789	0	-1.89	-6.244	15.993	0	0
	1.968	-3.719	0	-1.89	-8.211	17.454	0	0
	2.46	-4.649	0	-1.89	-10.079	17.223	0	0
	2.952	-5.579	0	-1.89	-11.824	15.516	0	0
	3.444	-6.509	0	-1.89	-13.421	12.601	0	0
	3.936	-7.438	0	-1.89	-14.846	8.793	0	0
	4.428	-8.368	0	-1.89	-16.074	4.456	0	0
2	0	-9.298	10.659	-1.89	-17.071	0	-0.04	0
	0.614	-6.771	1.601	0	-1.87	1.346	0	0
	1.228	-5.788	1.601	0	-3.067	10.18	0	0
	1.842	-5.269	0.704	0	-4.648	14.13	0	0
	2.456	-4.838	0.695	0	-6.459	16.838	0	0
	3.07	-4.564	0	-1.011	-8.471	17.793	0	0
	3.684	-5.249	0	-1.123	-10.489	16.946	0	0
	4.298	-5.939	0	-1.123	-12.436	14.38	0	0
	4.912	-6.69	0	-1.87	-14.235	10.363	0	0
	5.526	-7.838	0	-1.87	-15.621	5.482	0	0
3	0	-8.986	10.585	-1.87	-16.876	0.874	0	0
	0.615	-7.699	1.816	0	-1.873	1.289	0	0
	1.23	-6.582	1.816	0	-3.136	10.376	0	0
	1.845	-5.9	1.015	0	-4.801	15.049	0	0
	2.46	-5.329	0.887	0	-6.712	17.493	0	0
	3.075	-4.821	0	-0.96	-8.662	18.186	0	0
	3.69	-5.411	0	-0.96	-10.57	17.094	0	0
	4.305	-6.037	0	-1.092	-12.355	14.384	0	0

	4.92	-6.774	0	-1.873	-14.001	11.315	0	0
	5.535	-7.926	0	-1.873	-15.581	6.364	0	0
4	0	-9.077	10.581	-1.873	-16.87	0.912	0	0
	0.621	-7.78	1.817	0	-1.87	1.302	0	0
	1.242	-6.651	1.817	0	-3.157	10.472	0	0
	1.863	-5.917	1.031	0	-4.82	15.255	0	0
	2.484	-5.32	0.867	0	-6.72	17.682	0	0
	3.105	-4.822	0	-0.947	-8.66	18.359	0	0
	3.726	-5.409	0	-0.947	-10.559	17.247	0	0
	4.347	-6.077	0	-1.115	-12.337	14.513	0	0
	4.968	-6.828	0	-1.87	-13.955	11.589	0	0
	5.589	-7.989	0	-1.87	-15.528	6.653	0	0
5	0	-9.151	10.916	-1.87	-16.813	1.198	0	0
	0.621	-7.859	1.809	0	-2.218	1.534	0	0
	1.242	-6.736	1.809	0	-3.286	10.504	0	0
	1.863	-6.063	0.941	0	-4.769	14.465	0	0
	2.484	-5.57	0.726	0	-6.627	17.81	0	0
	3.105	-5.368	0	-1.47	-8.546	18.563	0	0
	3.726	-6.281	0	-1.47	-10.433	17.529	0	0
	4.347	-7.194	0	-1.47	-12.356	14.939	0	0
	4.968	-8.121	0	-1.497	-14.16	10.853	0	0
	5.589	-9.485	0	-2.218	-15.759	5.673	0	0
6	0	-10.862	12.003	-2.218	-17.068	0	-0.049	0
	0.619	-7.548	1.355	0	-1.093	6.091	0	0
	1.238	-6.709	1.355	0	-2.28	11.292	0	0
	1.857	-5.87	1.355	0	-3.669	15.898	0	0
	2.476	-5.032	1.355	0	-5.228	19.415	0	0
	3.095	-4.193	1.355	0	-6.924	21.429	0	0
	3.714	-3.355	1.355	0	-8.725	21.604	0	0
	4.333	-2.516	1.355	0	-10.708	19.886	0	0
	4.952	-1.677	1.355	0	-12.787	15.83	0	0
	5.571	-0.839	1.355	0	-14.92	9.235	0	0
	6.19	0	1.355	-17.058	-17.058	0	0	0

Support    Reac. Pos   Reac. Negative

1	1.89	-17.08
2	2.377	-17.081
3	2.381	-16.565
4	2.379	-16.231
5	2.813	-16.209
6	2.172	-17.141
7	1.355	-17.08

Id Group 3, HS-20 Truck Operating: 1.3\*1.0\*(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	28.074	-3.171	28.074	0	0	0
	0.492	12.126	24.646	-2.682	24.646	12.126	0	0
	0.984	20.852	21.191	-6.137	21.191	20.852	0	0
	1.476	26.266	17.796	-9.532	17.796	26.266	0	0
	1.968	28.556	14.51	-12.818	14.51	28.556	0	0
	2.46	28.005	11.384	-15.944	11.384	28.005	0	0
	2.952	24.995	8.467	-18.861	8.467	24.995	0	0
	3.444	20.162	5.854	-21.474	5.854	20.162	0	0
	3.936	14.069	3.575	-23.753	3.575	14.069	0	0
	4.428	7.129	1.61	-25.718	1.61	7.129	0	0
2	0	4.183	0.85	-3.136	28.09	0	-1.125	0
	0.614	8.308	25.372	-1.956	26.199	7.713	0	0
	1.228	16.236	22.916	-4.412	23.706	16.152	0	0
	1.842	23.055	20.77	-6.558	20.77	23.055	0	0
	2.456	27.548	17.534	-9.794	17.534	27.548	0	0
	3.07	29.111	14.144	-13.184	14.144	29.111	0	0
	3.684	27.581	10.744	-16.584	10.744	27.581	0	0
	4.298	23.138	7.474	-19.854	7.474	23.138	0	0
	4.912	16.581	4.553	-22.775	4.553	16.581	0	0
	5.526	8.567	2.035	-25.293	2.566	2.499	0	0
3	0	4.808	2.234	-2.46	28.059	0	-1.059	0
	0.615	8.536	25.323	-2.005	26.135	7.977	0	0
	1.23	16.564	22.837	-4.491	23.626	16.506	0	0
	1.845	23.426	20.688	-6.64	20.688	23.426	0	0
	2.46	27.893	17.461	-9.867	17.461	27.893	0	0
	3.075	29.43	14.072	-13.256	14.084	29.408	0	0
	3.69	27.891	10.631	-16.697	10.698	27.814	0	0
	4.305	23.411	6.939	-20.389	7.441	23.297	0	0
	4.92	16.601	3.921	-23.407	4.452	16.387	0	0
	5.535	8.132	1.344	-25.984	2.905	1.974	0	0
4	0	4.65	2.01	-2.5	28.179	0	-1.386	0
	0.621	7.992	25.47	-1.858	26.296	7.805	0	0
	1.242	16.641	23.79	-3.538	23.809	16.57	0	0
	1.863	23.764	20.869	-6.459	20.877	23.741	0	0
	2.484	28.481	17.611	-9.717	17.655	28.375	0	0
	3.105	30.145	14.174	-13.154	14.259	29.992	0	0
	3.726	28.526	10.699	-16.629	10.825	28.378	0	0
	4.347	23.773	6.765	-20.563	7.487	23.655	0	0
	4.968	16.801	4.523	-22.805	4.523	16.801	0	0
	5.589	8.676	2.023	-25.305	2.983	2.048	0	0
5	0	4.861	2.068	-2.629	27.499	0	-1.017	0
	0.621	8.615	25.353	-1.975	25.498	7.984	0	0
	1.242	16.748	22.904	-4.424	22.973	16.491	0	0

	1.863	23.506	20.049	-7.279	20.095	23.363	0	0
	2.484	28.195	16.846	-10.482	17.042	27.71	0	0
	3.105	29.991	13.498	-13.83	13.858	29.322	0	0
	3.726	28.661	10.14	-17.188	10.658	28.018	0	0
	4.347	24.306	6.906	-20.422	7.558	23.902	0	0
	4.968	17.364	4.672	-22.656	4.672	17.364	0	0
	5.589	9.077	2.114	-25.214	3.014	1.877	0	0
6	0	3.749	3.014	-0.606	27.457	0	-0.965	0
	0.619	8.259	25.845	-1.482	25.953	7.66	0	0
	1.238	16.638	23.968	-3.36	24.016	16.401	0	0
	1.857	24.402	21.696	-5.632	21.74	24.213	0	0
	2.476	30.754	19.047	-8.281	19.204	30.171	0	0
	3.095	34.672	16.125	-11.203	16.406	33.804	0	0
	3.714	35.507	12.987	-14.341	13.388	34.516	0	0
	4.333	32.749	9.693	-17.635	10.194	31.817	0	0
	4.952	26.032	6.301	-21.027	6.869	25.328	0	0
	5.571	15.139	2.871	-24.457	3.457	14.776	0	0
	6.19	0	2.269	-27.833	2.269	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	28.074	-3.171	-3.171	0	0	0
	0.492	-1.56	0	-3.171	-3.383	11.781	0	0
	0.984	-3.12	0	-3.171	-6.726	20.272	0	0
	1.476	-4.68	0	-3.171	-9.991	25.59	0	0
	1.968	-6.24	0	-3.171	-13.137	27.927	0	0
	2.46	-7.8	0	-3.171	-16.126	27.556	0	0
	2.952	-9.36	0	-3.171	-18.918	24.826	0	0
	3.444	-10.92	0	-3.171	-21.524	19.99	0	0
	3.936	-12.48	0	-3.171	-23.88	13.57	0	0
	4.428	-14.04	0	-3.171	-25.898	6.334	0	0
2	0	-15.6	18.479	-3.171	-27.524	0	-1.101	0
	0.614	-10.833	2.561	0	-3.136	2.258	0	0
	1.228	-9.26	2.561	0	-4.412	16.236	0	0
	1.842	-7.897	1.998	0	-7.246	22.706	0	0
	2.456	-6.745	1.532	0	-10.334	26.941	0	0
	3.07	-6.166	0.129	0	-13.554	28.468	0	0
	3.684	-7.369	0	-3.136	-16.783	27.114	0	0
	4.298	-9.294	0	-3.136	-19.898	23.008	0	0
	4.912	-11.219	0	-3.136	-22.851	16.31	0	0
	5.526	-13.144	0	-3.136	-25.449	7.912	0	0
3	0	-15.069	19.45	-3.136	-27.513	0	-1.055	0
	0.615	-12.318	2.905	0	-3.2	2.202	0	0
	1.23	-10.541	2.775	0	-4.491	16.564	0	0
	1.845	-9.143	2.171	0	-7.339	23.047	0	0
	2.46	-8.063	1.342	0	-10.428	27.244	0	0
	3.075	-7.647	0	-0.015	-13.689	28.793	0	0
	3.69	-8.261	0	-1.541	-17.118	27.591	0	0
	4.305	-9.706	0	-3.081	-20.405	23.365	0	0



## SECTION I

## CONSYS

## Section I Fascia 1 Unit 14 FB 1

	4.92	-11.601	0	-3.081	-23.424	16.538	0	0
	5.535	-13.541	0	-3.2	-26.025	7.959	0	0
4	0	-15.508	19.501	-3.2	-28.034	0	-1.218	0
	0.621	-12.771	2.983	0	-2.988	2.081	0	0
	1.242	-10.918	2.983	0	-4.41	16.43	0	0
	1.863	-9.29	2.089	0	-7.365	23.352	0	0
	2.484	-8.238	1.245	0	-10.6	27.924	0	0
	3.105	-7.815	0	-0.42	-13.977	29.59	0	0
	3.726	-8.355	0	-1.435	-17.353	28.134	0	0
	4.347	-9.466	0	-2.246	-20.589	23.693	0	0
	4.968	-10.91	0	-2.988	-23.543	16.753	0	0
	5.589	-12.766	0	-2.988	-26.074	8.149	0	0
5	0	-14.971	3.014	-17.353	-28.025	0	-1.018	0
	0.621	-13.099	3.014	0	-3.549	2.455	0	0
	1.242	-11.265	2.8	0	-4.424	16.748	0	0
	1.863	-9.796	1.351	0	-7.279	23.506	0	0
	2.484	-9.211	0.305	0	-10.482	28.195	0	0
	3.105	-9.308	0	-0.785	-13.83	29.991	0	0
	3.726	-10.126	0	-1.79	-17.188	28.661	0	0
	4.347	-11.437	0	-2.416	-20.422	24.306	0	0
	4.968	-12.972	0	-3.549	-23.398	17.363	0	0
	5.589	-15.176	0	-3.549	-25.981	8.6	0	0
6	0	-17.38	19.204	-3.549	-28.015	0	-0.956	0
	0.619	-12.642	2.269	0	-1.482	8.259	0	0
	1.238	-11.237	2.269	0	-3.36	16.638	0	0
	1.857	-9.832	2.269	0	-5.632	24.402	0	0
	2.476	-8.428	2.269	0	-8.281	30.754	0	0
	3.095	-7.023	2.269	0	-11.203	34.672	0	0
	3.714	-5.618	2.269	0	-14.341	35.507	0	0
	4.333	-4.214	2.269	0	-17.635	32.749	0	0
	4.952	-2.809	2.269	0	-21.027	26.032	0	0
	5.571	-1.405	2.269	0	-24.457	15.139	0	0
	6.19	0	2.269	-27.833	-27.833	0	0	0

Support	Reac. Pos	Reac. Negative
1	3.171	-28.109
2	3.986	-28.332
3	4.694	-28.279
4	4.51	-28.587
5	4.697	-28.23
6	3.62	-28.251
7	2.269	-27.867

Id Group I, HS-20 Truck Inventory: 1.3\*1.67\*(truck+IM)\*DF  
 Type Combination

Maximum table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	46.881	-5.295	46.881	0	0	0
	0.492	20.249	41.156	-4.479	41.156	20.249	0	0
	0.984	34.821	35.388	-10.248	35.388	34.821	0	0
	1.476	43.863	29.717	-15.918	29.717	43.863	0	0
	1.968	47.686	24.231	-21.404	24.231	47.686	0	0
	2.46	46.767	19.011	-26.624	19.011	46.767	0	0
	2.952	41.739	14.139	-31.496	14.139	41.739	0	0
	3.444	33.669	9.776	-35.859	9.776	33.669	0	0
	3.936	23.495	5.969	-39.666	5.969	23.495	0	0
	4.428	11.905	2.689	-42.947	2.689	11.905	0	0
2	0	6.985	1.42	-5.236	46.907	0	-1.879	0
	0.614	13.874	42.369	-3.266	43.749	12.88	0	0
	1.228	27.112	38.267	-7.368	39.586	26.973	0	0
	1.842	38.5	34.684	-10.952	34.684	38.5	0	0
	2.456	46.002	29.281	-16.355	29.281	46.002	0	0
	3.07	48.612	23.619	-22.016	23.619	48.612	0	0
	3.684	46.058	17.942	-27.694	17.942	46.058	0	0
	4.298	38.639	12.482	-33.154	12.482	38.639	0	0
	4.912	27.689	7.603	-38.033	7.603	27.689	0	0
	5.526	14.306	3.398	-42.237	4.285	4.173	0	0
3	0	8.029	3.731	-4.108	46.856	0	-1.769	0
	0.615	14.254	42.288	-3.348	43.643	13.321	0	0
	1.23	27.66	38.136	-7.499	39.453	27.564	0	0
	1.845	39.119	34.547	-11.088	34.547	39.119	0	0
	2.46	46.579	29.158	-16.477	29.158	46.579	0	0
	3.075	49.145	23.499	-22.136	23.52	49.108	0	0
	3.69	46.575	17.753	-27.882	17.864	46.446	0	0
	4.305	39.094	11.587	-34.048	12.425	38.904	0	0
	4.92	27.722	6.548	-39.087	7.434	27.365	0	0
	5.535	13.58	2.244	-43.391	4.851	3.297	0	0
4	0	7.766	3.357	-4.174	47.056	0	-2.315	0
	0.621	13.347	42.532	-3.103	43.911	13.033	0	0
	1.242	27.789	39.727	-5.908	39.76	27.671	0	0
	1.863	39.684	34.85	-10.785	34.862	39.645	0	0
	2.484	47.561	29.408	-16.227	29.482	47.383	0	0
	3.105	50.339	23.669	-21.966	23.811	50.083	0	0
	3.726	47.636	17.866	-27.769	18.076	47.389	0	0
	4.347	39.698	11.298	-34.338	12.502	39.502	0	0
	4.968	28.056	7.553	-38.082	7.553	28.056	0	0
	5.589	14.488	3.378	-42.258	4.981	3.419	0	0
5	0	8.118	3.454	-4.39	45.92	0	-1.698	0
	0.621	14.386	42.338	-3.298	42.58	13.332	0	0
	1.242	27.968	38.248	-7.387	38.363	27.538	0	0

	1.863	39.253	33.48	-12.155	33.557	39.015	0	0
	2.484	47.083	28.132	-17.503	28.458	46.273	0	0
	3.105	50.082	22.54	-23.095	23.141	48.964	0	0
	3.726	47.862	16.932	-28.703	17.798	46.787	0	0
	4.347	40.589	11.532	-34.103	12.621	39.915	0	0
	4.968	28.996	7.802	-37.834	7.802	28.996	0	0
	5.589	15.158	3.531	-42.105	5.034	3.134	0	0
6	0	6.26	5.034	-1.011	45.85	0	-1.612	0
	0.619	13.792	43.16	-2.476	43.339	12.792	0	0
	1.238	27.784	40.025	-5.611	40.104	27.388	0	0
	1.857	40.749	36.231	-9.404	36.304	40.434	0	0
	2.476	51.356	31.808	-13.828	32.07	50.382	0	0
	3.095	57.899	26.928	-18.707	27.396	56.449	0	0
	3.714	59.294	21.688	-23.948	22.357	57.638	0	0
	4.333	54.687	16.186	-29.449	17.024	53.131	0	0
	4.952	43.471	10.522	-35.114	11.471	42.295	0	0
	5.571	25.281	4.794	-40.842	5.772	24.675	0	0
	6.19	0	3.789	-46.478	3.789	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	46.881	-5.295	-5.295	0	0	0
	0.492	-2.605	0	-5.295	-5.649	19.673	0	0
	0.984	-5.21	0	-5.295	-11.232	33.853	0	0
	1.476	-7.815	0	-5.295	-16.684	42.732	0	0
	1.968	-10.42	0	-5.295	-21.938	46.636	0	0
	2.46	-13.025	0	-5.295	-26.929	46.016	0	0
	2.952	-15.63	0	-5.295	-31.592	41.457	0	0
	3.444	-18.235	0	-5.295	-35.943	33.381	0	0
	3.936	-20.84	0	-5.295	-39.878	22.66	0	0
	4.428	-23.446	0	-5.295	-43.246	10.577	0	0
2	0	-26.051	30.857	-5.295	-45.963	0	-1.838	0
	0.614	-18.09	4.277	0	-5.236	3.77	0	0
	1.228	-15.464	4.277	0	-7.368	27.112	0	0
	1.842	-13.187	3.337	0	-12.1	37.916	0	0
	2.456	-11.264	2.559	0	-17.257	44.989	0	0
	3.07	-10.297	0.216	0	-22.634	47.539	0	0
	3.684	-12.305	0	-5.236	-28.026	45.278	0	0
	4.298	-15.52	0	-5.236	-33.227	38.421	0	0
	4.912	-18.735	0	-5.236	-38.159	27.236	0	0
	5.526	-21.95	0	-5.236	-42.498	13.212	0	0
3	0	-25.165	32.48	-5.236	-45.944	0	-1.763	0
	0.615	-20.57	4.851	0	-5.343	3.676	0	0
	1.23	-17.602	4.634	0	-7.499	27.66	0	0
	1.845	-15.268	3.626	0	-12.255	38.487	0	0
	2.46	-13.465	2.241	0	-17.414	45.494	0	0
	3.075	-12.77	0	-0.026	-22.859	48.081	0	0
	3.69	-13.795	0	-2.574	-28.586	46.074	0	0
	4.305	-16.209	0	-5.145	-34.074	39.017	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 14 FB 1

	4.92	-19.373	0	-5.145	-39.116	27.617	0	0
	5.535	-22.611	0	-5.343	-43.459	13.291	0	0
4	0	-25.897	32.565	-5.343	-46.815	0	-2.035	0
	0.621	-21.326	4.981	0	-4.99	3.474	0	0
	1.242	-18.233	4.981	0	-7.365	27.437	0	0
	1.863	-15.514	3.489	0	-12.299	38.995	0	0
	2.484	-13.757	2.08	0	-17.702	46.631	0	0
	3.105	-13.05	0	-0.701	-23.34	49.412	0	0
	3.726	-13.953	0	-2.397	-28.978	46.982	0	0
	4.347	-15.808	0	-3.751	-34.381	39.565	0	0
	4.968	-18.219	0	-4.99	-39.314	27.975	0	0
	5.589	-21.318	0	-4.99	-43.541	13.607	0	0
5	0	-25	5.034	-28.978	-46.799	0	-1.701	0
	0.621	-21.874	5.034	0	-5.926	4.099	0	0
	1.242	-18.811	4.676	0	-7.387	27.968	0	0
	1.863	-16.359	2.256	0	-12.155	39.253	0	0
	2.484	-15.382	0.509	0	-17.503	47.083	0	0
	3.105	-15.543	0	-1.311	-23.095	50.082	0	0
	3.726	-16.91	0	-2.99	-28.703	47.862	0	0
	4.347	-19.099	0	-4.034	-34.103	40.589	0	0
	4.968	-21.662	0	-5.926	-39.073	28.994	0	0
	5.589	-25.342	0	-5.926	-43.385	14.36	0	0
6	0	-29.022	32.07	-5.926	-46.783	0	-1.597	0
	0.619	-21.11	3.789	0	-2.476	13.792	0	0
	1.238	-18.765	3.789	0	-5.611	27.784	0	0
	1.857	-16.419	3.789	0	-9.404	40.749	0	0
	2.476	-14.073	3.789	0	-13.828	51.356	0	0
	3.095	-11.728	3.789	0	-18.707	57.899	0	0
	3.714	-9.382	3.789	0	-23.948	59.294	0	0
	4.333	-7.037	3.789	0	-29.449	54.687	0	0
	4.952	-4.691	3.789	0	-35.114	43.471	0	0
	5.571	-2.346	3.789	0	-40.842	25.281	0	0
	6.19	0	3.789	-46.478	-46.478	0	0	0

Support	Reac. Pos	Reac. Negative
1	5.295	-46.939
2	6.656	-47.312
3	7.839	-47.224
4	7.531	-47.738
5	7.844	-47.142
6	6.045	-47.176
7	3.789	-46.535

Id Group 4, HS-20 Lane Operating: 1.3\*1.0(Lane+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kn	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	23.426	-2.692	23.426	0	0	0
	0.492	7.175	14.45	-0.922	20.453	10.063	0	0
	0.984	12.368	12.3	-3.072	17.517	17.237	0	0
	1.476	15.643	10.195	-5.177	14.678	21.665	0	0
	1.968	17.11	8.156	-7.216	11.966	23.55	0	0
	2.46	16.921	6.206	-9.166	9.413	23.156	0	0
	2.952	15.272	4.367	-11.005	7.048	20.807	0	0
	3.444	12.403	2.66	-12.712	4.902	16.883	0	0
	3.936	8.599	1.109	-14.263	3.004	11.822	0	0
	4.428	4.39	0.513	-14.859	1.382	6.12	0	0
2	0	2.565	0.521	-1.923	24.176	0	-1.761	0
	0.614	4.961	14.312	-1.06	22.21	5.76	-0.99	0
	1.228	9.691	13.537	-1.835	19.917	12.937	-0.255	0
	1.842	13.856	12.045	-3.327	17.351	18.666	0	0
	2.456	16.595	9.972	-5.4	14.614	22.363	0	0
	3.07	17.604	7.825	-7.547	11.808	23.696	0	0
	3.684	16.787	5.673	-9.699	9.036	22.582	0	0
	4.298	14.215	3.586	-11.786	6.395	19.187	0	0
	4.912	10.146	1.846	-13.526	3.983	13.916	0	0
	5.526	5.339	0.831	-14.541	2.325	1.869	0	0
3	0	2.733	0.688	-1.978	24.39	0	-1.783	0
	0.615	5.281	14.497	-0.875	22.218	5.736	-1.199	0
	1.23	10.055	13.51	-1.862	19.902	13.021	-0.437	0
	1.845	14.207	11.937	-3.435	17.324	18.788	0	0
	2.46	16.89	9.863	-5.509	14.587	22.48	0	0
	3.075	17.829	7.721	-7.651	11.789	23.787	0	0
	3.69	16.938	5.577	-9.795	9.03	22.646	0	0
	4.305	14.296	3.5	-11.872	6.405	19.23	0	0
	4.92	10.17	1.873	-13.499	4.01	13.951	0	0
	5.535	5.374	0.874	-14.498	2.657	2.072	0	0
4	0	2.807	0.741	-1.971	24.484	0	-1.841	0
	0.621	5.377	14.509	-0.863	22.258	5.723	-1.273	0
	1.242	10.203	13.526	-1.846	19.94	13.097	-0.481	0
	1.863	14.4	11.946	-3.426	17.36	18.94	0	0
	2.484	17.113	9.868	-5.504	14.621	22.686	0	0
	3.105	18.063	7.722	-7.65	11.821	24.024	0	0
	3.726	17.163	5.575	-9.797	9.059	22.887	0	0
	4.347	14.494	3.494	-11.878	6.433	19.454	0	0
	4.968	10.324	1.886	-13.486	4.037	14.139	0	0
	5.589	5.493	0.894	-14.478	2.671	2.152	0	0
5	0	3.3	0.845	-2.344	24.451	0	-1.707	0
	0.621	5.432	14.47	-0.902	22.223	5.737	-1.262	0
	1.242	10.243	13.516	-1.856	19.933	13.1	-0.508	0

	1.863	14.44	11.937	-3.435	17.384	18.961	-0.022	0
	2.484	17.173	9.88	-5.492	14.672	22.755	0	0
	3.105	18.157	7.75	-7.622	11.893	24.158	0	0
	3.726	17.29	5.611	-9.761	9.141	23.084	0	0
	4.347	14.631	3.527	-11.845	6.509	19.677	0	0
	4.968	10.398	1.626	-13.746	4.088	14.309	0	0
	5.589	5.398	0.879	-14.493	2.592	1.66	0	0
6	0	2.312	1.859	-0.374	24.529	0	-2.287	0
	0.619	5.021	14.79	-0.582	22.767	5.345	-1.366	0
	1.238	10.155	14.484	-0.888	20.933	12.996	-0.523	0
	1.857	15.046	13.084	-2.288	18.839	19.71	0	0
	2.476	18.821	11.319	-4.053	16.525	24.86	0	0
	3.095	21.08	9.407	-5.965	14.031	27.913	0	0
	3.714	21.486	7.371	-8.001	11.394	28.44	0	0
	4.333	19.764	5.236	-10.136	8.653	26.106	0	0
	4.952	15.701	3.028	-12.344	5.846	20.67	0	0
	5.571	9.144	0.77	-14.602	3.009	11.986	-0.02	0
	6.19	0	1.937	-23.689	1.937	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	23.426	-2.692	-2.692	0	0	0
	0.492	-1.015	0	-2.063	-3.014	9.508	-0.064	0
	0.984	-2.031	0	-2.064	-5.78	16.426	-0.045	0
	1.476	-3.046	0	-2.064	-8.515	20.801	0	0
	1.968	-4.061	0	-2.064	-11.185	22.743	0	0
	2.46	-5.077	0	-2.064	-13.758	22.431	0	0
	2.952	-6.092	0	-2.064	-16.199	20.109	-0.062	0
	3.444	-7.107	0	-2.064	-18.474	16.087	-0.295	0
	3.936	-8.123	0	-2.064	-20.549	10.747	-0.684	0
	4.428	-11.266	0	-10.108	-22.389	4.539	-1.253	0
2	0	-17.318	12.916	-14.085	-24.192	0	-1.742	0
	0.614	-10.161	10.487	0	-2.679	1.97	0	0
	1.228	-5.921	4.356	0	-3.88	13.401	0	0
	1.842	-5.793	0	-0.318	-6.254	18.697	0	0
	2.456	-5.989	0	-0.318	-8.871	22.189	0	0
	3.07	-6.184	0	-0.318	-11.634	23.438	0	0
	3.684	-6.379	0	-0.318	-14.444	22.246	0	0
	4.298	-6.574	0	-0.318	-17.2	18.657	-0.037	0
	4.912	-7.324	0	-2.097	-19.8	12.968	-0.505	0
	5.526	-11.048	0	-10.334	-22.141	5.727	-1.233	0
3	0	-18.25	13.104	-13.029	-24.4	0	-1.782	0
	0.615	-10.992	10.416	0	-2.737	2.081	0	0
	1.23	-6.797	3.107	0	-3.996	13.823	0	0
	1.845	-6.634	0	-0.078	-6.382	19.102	0	0
	2.46	-6.682	0	-0.078	-9.002	22.534	0	0
	3.075	-6.73	0	-0.078	-11.759	23.701	0	0
	3.69	-6.778	0	-0.078	-14.557	22.419	0	0
	4.305	-6.826	0	-0.078	-17.299	18.746	-0.034	0

	4.92	-7.525	0	-2.174	-19.884	12.983	-0.537	0
	5.535	-11.219	0	-10.445	-22.211	5.678	-1.303	0
4	0	-18.49	13.141	-13.133	-24.455	0	-1.839	0
	0.621	-11.139	10.444	0	-2.73	2.154	0	0
	1.242	-7.187	2.09	0	-3.988	14.002	0	0
	1.863	-6.696	0	-0.053	-6.375	19.337	0	0
	2.484	-6.729	0	-0.053	-8.995	22.81	0	0
	3.105	-6.763	0	-0.053	-11.754	23.995	0	0
	3.726	-6.796	0	-0.053	-14.555	22.707	0	0
	4.347	-6.829	0	-0.053	-17.299	19.003	0	0
	4.968	-7.043	0	-3.149	-19.888	13.185	-0.466	0
	5.589	-11.249	0	-10.444	-22.218	5.808	-1.242	0
5	0	-18.594	13.155	-13.141	-24.522	0	-1.707	0
	0.621	-11.247	10.472	0	-3.242	2.509	0	0
	1.242	-7.35	2.027	0	-3.993	14.048	0	0
	1.863	-7.026	0	-0.423	-6.347	19.406	0	0
	2.484	-7.289	0	-0.423	-8.937	22.933	0	0
	3.105	-7.551	0	-0.423	-11.671	24.197	0	0
	3.726	-7.814	0	-0.423	-14.458	22.989	0	0
	4.347	-8.077	0	-0.423	-17.203	19.335	-0.086	0
	4.968	-8.343	0	-2.71	-19.812	13.493	-0.615	0
	5.589	-12.417	0	-8.922	-22.188	5.963	-1.412	0
6	0	-19.82	14.113	-13.398	-24.265	0	-2.28	0
	0.619	-12.099	10.207	0	-1.261	7.025	0	0
	1.238	-7.345	1.568	0	-2.816	13.945	0	0
	1.857	-6.423	1.482	0	-4.682	20.285	0	0
	2.476	-5.505	1.482	0	-6.826	25.352	0	0
	3.095	-4.588	1.482	0	-9.218	28.529	0	0
	3.714	-3.67	1.482	0	-11.823	29.275	0	0
	4.333	-2.753	1.482	0	-14.61	27.131	0	0
	4.952	-1.835	1.482	0	-17.544	21.72	0	0
	5.571	-0.917	1.482	0	-20.592	12.746	0	0
	6.19	0	1.937	-23.689	-23.689	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.692	-23.454
2	3.391	-25.879
3	3.616	-26.086
4	3.663	-26.188
5	4.314	-26.141
6	3.098	-26.409
7	1.937	-23.689

Id Group 2, HS-20 Lane Inventory: 1.3\*1.67\*(Lane+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	39.119	-4.495	39.119	0	0	0
	0.492	11.982	24.13	-1.54	34.154	16.804	0	0
	0.984	20.653	20.54	-5.13	29.252	28.784	0	0
	1.476	26.123	17.025	-8.645	24.511	36.178	0	0
	1.968	28.572	13.62	-12.05	19.983	39.326	0	0
	2.46	28.256	10.363	-15.306	15.719	38.669	0	0
	2.952	25.502	7.292	-18.378	11.77	34.746	0	0
	3.444	20.712	4.442	-21.227	8.186	28.193	0	0
	3.936	14.359	1.852	-23.818	5.016	19.742	0	0
	4.428	7.331	0.857	-24.813	2.308	10.221	0	0
2	0	4.283	0.871	-3.211	40.372	0	-2.94	0
	0.614	8.284	23.899	-1.77	37.089	9.619	-1.653	0
	1.228	16.183	22.605	-3.064	33.26	21.603	-0.426	0
	1.842	23.137	20.113	-5.556	28.974	31.171	0	0
	2.456	27.711	16.652	-9.018	24.403	37.345	0	0
	3.07	29.397	13.067	-12.603	19.719	39.57	0	0
	3.684	28.032	9.474	-16.196	15.089	37.71	0	0
	4.298	23.739	5.988	-19.682	10.679	32.041	0	0
	4.912	16.943	3.082	-22.588	6.652	23.238	0	0
	5.526	8.916	1.388	-24.282	3.883	3.121	0	0
3	0	4.563	1.15	-3.302	40.729	0	-2.977	0
	0.615	8.818	24.209	-1.461	37.102	9.579	-2.003	0
	1.23	16.791	22.56	-3.11	33.234	21.744	-0.73	0
	1.845	23.724	19.934	-5.735	28.929	31.375	0	0
	2.46	28.205	16.471	-9.199	24.358	37.539	0	0
	3.075	29.773	12.893	-12.777	19.687	39.723	0	0
	3.69	28.285	9.313	-16.356	15.079	37.816	0	0
	4.305	23.874	5.844	-19.825	10.696	32.113	0	0
	4.92	16.983	3.128	-22.542	6.697	23.297	0	0
	5.535	8.973	1.46	-24.21	4.437	3.46	0	0
4	0	4.687	1.238	-3.292	40.886	0	-3.074	0
	0.621	8.979	24.229	-1.441	37.17	9.556	-2.125	0
	1.242	17.038	22.587	-3.083	33.298	21.871	-0.804	0
	1.863	24.046	19.948	-5.722	28.99	31.628	0	0
	2.484	28.577	16.479	-9.191	24.415	37.884	0	0
	3.105	30.164	12.895	-12.774	19.74	40.117	0	0
	3.726	28.661	9.31	-16.36	15.128	38.22	0	0
	4.347	24.204	5.834	-19.835	10.743	32.487	0	0
	4.968	17.241	3.15	-22.52	6.741	23.61	0	0
	5.589	9.173	1.494	-24.176	4.461	3.594	0	0
5	0	5.511	1.412	-3.914	40.831	0	-2.851	0
	0.621	9.071	24.163	-1.507	37.111	9.581	-2.108	0
	1.242	17.104	22.571	-3.099	33.286	21.876	-0.848	0



	1.863	24.114	19.934	-5.736	29.029	31.663	-0.036	0
	2.484	28.678	16.499	-9.171	24.5	37.999	0	0
	3.105	30.321	12.941	-12.729	19.86	40.342	0	0
	3.726	28.873	9.369	-16.301	15.265	38.548	0	0
	4.347	24.432	5.891	-19.779	10.87	32.858	0	0
	4.968	17.364	2.715	-22.955	6.827	23.895	0	0
	5.589	9.014	1.467	-24.203	4.329	2.772	0	0
6	0	3.861	3.105	-0.624	40.961	0	-3.82	0
	0.619	8.385	24.698	-0.972	38.019	8.925	-2.28	0
	1.238	16.957	24.188	-1.482	34.956	21.701	-0.873	0
	1.857	25.125	21.849	-3.821	31.46	32.915	0	0
	2.476	31.43	18.902	-6.768	27.596	41.513	0	0
	3.095	35.202	15.708	-9.961	23.43	46.613	0	0
	3.714	35.88	12.309	-13.361	19.027	47.493	0	0
	4.333	33.005	8.744	-16.926	14.45	43.594	0	0
	4.952	26.22	5.056	-20.614	9.762	34.517	0	0
	5.571	15.269	1.285	-24.384	5.025	20.016	-0.033	0
	6.19	0	3.234	-39.558	3.234	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	39.119	-4.495	-4.495	0	0	0
	0.492	-1.695	0	-3.445	-5.032	15.877	-0.107	0
	0.984	-3.391	0	-3.446	-9.652	27.43	-0.075	0
	1.476	-5.086	0	-3.446	-14.219	34.735	0	0
	1.968	-6.782	0	-3.446	-18.678	37.979	0	0
	2.46	-8.477	0	-3.446	-22.974	37.458	0	0
	2.952	-10.173	0	-3.446	-27.051	33.58	-0.104	0
	3.444	-11.868	0	-3.446	-30.85	26.864	-0.492	0
	3.936	-13.564	0	-3.446	-34.315	17.947	-1.143	0
	4.428	-18.812	0	-16.88	-37.388	7.58	-2.093	0
2	0	-28.919	21.568	-23.52	-40.399	0	-2.908	0
	0.614	-16.968	17.512	0	-4.474	3.289	0	0
	1.228	-9.887	7.274	0	-6.48	22.378	0	0
	1.842	-9.675	0	-0.531	-10.444	31.222	0	0
	2.456	-10.001	0	-0.531	-14.814	37.054	0	0
	3.07	-10.326	0	-0.531	-19.428	39.14	0	0
	3.684	-10.652	0	-0.531	-24.119	37.148	0	0
	4.298	-10.978	0	-0.531	-28.722	31.156	-0.062	0
	4.912	-12.23	0	-3.501	-33.064	21.655	-0.843	0
	5.526	-18.448	0	-17.257	-36.974	9.564	-2.06	0
3	0	-30.476	21.883	-21.757	-40.746	0	-2.976	0
	0.615	-18.356	17.394	0	-4.57	3.474	0	0
	1.23	-11.351	5.188	0	-6.673	23.083	0	0
	1.845	-11.079	0	-0.13	-10.658	31.899	0	0
	2.46	-11.159	0	-0.13	-15.032	37.63	0	0
	3.075	-11.239	0	-0.13	-19.636	39.578	0	0
	3.69	-11.319	0	-0.13	-24.31	37.438	0	0
	4.305	-11.399	0	-0.13	-28.888	31.304	-0.057	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 14 FB 1

	4.92	-12.566	0	-3.63	-33.204	21.68	-0.897	0
	5.535	-18.735	0	-17.442	-37.091	9.482	-2.176	0
4	0	-30.876	21.944	-21.931	-40.837	0	-3.071	0
	0.621	-18.602	17.441	0	-4.56	3.596	0	0
	1.242	-12.001	3.49	0	-6.66	23.381	0	0
	1.863	-11.182	0	-0.089	-10.645	32.292	0	0
	2.484	-11.238	0	-0.089	-15.021	38.09	0	0
	3.105	-11.293	0	-0.089	-19.628	40.069	0	0
	3.726	-11.348	0	-0.089	-24.305	37.919	0	0
	4.347	-11.404	0	-0.089	-28.888	31.733	0	0
	4.968	-11.761	0	-5.258	-33.21	22.017	-0.778	0
	5.589	-18.786	0	-17.441	-37.103	9.698	-2.074	0
5	0	-31.05	21.968	-21.944	-40.95	0	-2.85	0
	0.621	-18.782	17.488	0	-5.415	4.191	0	0
	1.242	-12.274	3.385	0	-6.667	23.459	0	0
	1.863	-11.733	0	-0.706	-10.599	32.406	0	0
	2.484	-12.172	0	-0.706	-14.923	38.297	0	0
	3.105	-12.61	0	-0.706	-19.49	40.407	0	0
	3.726	-13.049	0	-0.706	-24.143	38.39	0	0
	4.347	-13.487	0	-0.706	-28.728	32.288	-0.143	0
	4.968	-13.932	0	-4.526	-33.084	22.532	-1.027	0
	5.589	-20.735	0	-14.899	-37.051	9.958	-2.358	0
6	0	-33.098	23.568	-22.373	-40.52	0	-3.808	0
	0.619	-20.203	17.044	0	-2.106	11.732	0	0
	1.238	-12.265	2.618	0	-4.702	23.287	0	0
	1.857	-10.726	2.475	0	-7.818	33.874	0	0
	2.476	-9.193	2.475	0	-11.399	42.336	0	0
	3.095	-7.661	2.475	0	-15.393	47.64	0	0
	3.714	-6.129	2.475	0	-19.744	48.886	0	0
	4.333	-4.597	2.475	0	-24.398	45.307	0	0
	4.952	-3.064	2.475	0	-29.298	36.27	0	0
	5.571	-1.532	2.474	0	-34.386	21.285	0	0
	6.19	0	3.234	-39.558	-39.558	0	0	0

Support	Reac. Pos	Reac. Negative
1	4.495	-39.165
2	5.663	-43.215
3	6.038	-43.561
4	6.117	-43.731
5	7.204	-43.653
6	5.174	-44.101
7	3.234	-39.558

Id Group 9, HS-15 Truck Fatigue: (truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	14.028	-1.553	14.028	0	0	0
	0.492	6.056	12.309	-1.638	12.309	6.056	0	0
	0.984	10.419	10.589	-3.358	10.589	10.419	0	0
	1.476	13.145	8.906	-5.04	8.906	13.145	0	0
	1.968	14.332	7.283	-6.664	7.283	14.332	0	0
	2.46	14.12	5.74	-8.207	5.74	14.12	0	0
	2.952	12.691	4.299	-9.647	4.299	12.691	0	0
	3.444	10.289	2.988	-10.959	2.988	10.289	0	0
	3.936	7.18	1.824	-12.122	1.824	7.18	0	0
	4.428	3.638	0.822	-13.125	0.822	3.638	0	0
2	0	2.056	0.418	-1.541	14.035	0	-0.174	0
	0.614	4.24	12.948	-0.998	13.052	4.165	0	0
	1.228	8.286	11.695	-2.252	11.794	8.275	0	0
	1.842	11.632	10.335	-3.611	10.335	11.632	0	0
	2.456	13.826	8.741	-5.205	8.741	13.826	0	0
	3.07	14.61	7.076	-6.87	7.076	14.61	0	0
	3.684	13.897	5.407	-8.54	5.407	13.897	0	0
	4.298	11.758	3.798	-10.149	3.798	11.758	0	0
	4.912	8.462	2.323	-11.623	2.323	8.462	0	0
	5.526	4.372	1.039	-12.908	1.342	1.038	0	0
3	0	2.022	0.421	-1.552	14.033	0	-0.167	0
	0.615	4.356	12.923	-1.023	13.027	4.285	0	0
	1.23	8.453	11.655	-2.292	11.755	8.446	0	0
	1.845	11.81	10.29	-3.656	10.29	11.81	0	0
	2.46	13.986	8.696	-5.25	8.696	13.986	0	0
	3.075	14.739	7.036	-6.91	7.036	14.739	0	0
	3.69	13.991	5.374	-8.572	5.374	13.991	0	0
	4.305	11.828	3.708	-10.239	3.774	11.819	0	0
	4.92	8.492	2.308	-11.639	2.308	8.492	0	0
	5.535	4.385	1.032	-12.914	1.483	1.008	0	0
4	0	2.009	0.414	-1.525	14.043	0	-0.182	0
	0.621	4.394	12.924	-1.022	13.044	4.311	0	0
	1.242	8.529	11.656	-2.29	11.777	8.52	0	0
	1.863	11.931	10.316	-3.63	10.316	11.931	0	0
	2.484	14.145	8.722	-5.224	8.722	14.145	0	0
	3.105	14.918	7.06	-6.887	7.06	14.918	0	0
	3.726	14.162	5.391	-8.555	5.391	14.162	0	0
	4.347	11.955	3.685	-10.261	3.78	11.95	0	0
	4.968	8.574	2.308	-11.638	2.308	8.574	0	0
	5.589	4.428	1.032	-12.914	1.488	1.021	0	0
5	0	2.488	0.574	-1.829	13.962	0	-0.162	0
	0.621	4.397	12.939	-1.008	12.957	4.316	0	0
	1.242	8.547	11.689	-2.258	11.698	8.514	0	0

	1.863	11.941	10.249	-3.697	10.255	11.923	0	0
	2.484	14.203	8.672	-5.274	8.697	14.141	0	0
	3.105	15.049	7.026	-6.92	7.072	14.964	0	0
	3.726	14.381	5.373	-8.573	5.439	14.298	0	0
	4.347	12.25	3.774	-10.172	3.857	12.198	0	0
	4.968	8.861	2.384	-11.562	2.384	8.861	0	0
	5.589	4.632	1.079	-12.867	1.488	0.926	0	0
6	0	1.85	1.488	-0.299	13.958	0	-0.156	0
	0.619	4.215	13.19	-0.757	13.203	4.14	0	0
	1.238	8.491	12.232	-1.715	12.238	8.462	0	0
	1.857	12.381	11.089	-2.857	11.098	12.342	0	0
	2.476	15.471	9.781	-4.166	9.805	15.381	0	0
	3.095	17.362	8.337	-5.61	8.377	17.236	0	0
	3.714	17.741	6.781	-7.165	6.837	17.603	0	0
	4.333	16.355	5.139	-8.807	5.206	16.231	0	0
	4.952	13.015	3.434	-10.513	3.507	12.924	0	0
	5.571	7.587	1.69	-12.256	1.764	7.541	0	0
	6.19	0	1.117	-13.996	1.117	0	0	0

## Minimums table:

Span	Location	Moment(m	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	14.028	-1.553	-1.553	0	0	0
	0.492	-0.764	0	-1.553	-1.732	6.009	0	0
	0.984	-1.528	0	-1.553	-3.44	10.338	0	0
	1.476	-2.293	0	-1.553	-5.108	13.046	0	0
	1.968	-3.057	0	-1.553	-6.714	14.233	0	0
	2.46	-3.821	0	-1.553	-8.239	14.039	0	0
	2.952	-4.585	0	-1.553	-9.664	12.642	0	0
	3.444	-5.349	0	-1.553	-10.967	10.261	0	0
	3.936	-6.114	0	-1.553	-12.138	7.119	0	0
	4.428	-6.878	0	-1.553	-13.147	3.539	0	0
2	0	-7.642	8.741	-1.553	-13.965	0	-0.162	0
	0.614	-5.553	1.342	0	-1.541	1.11	0	0
	1.228	-4.729	1.341	0	-2.252	8.286	0	0
	1.842	-3.937	1.28	0	-3.698	11.587	0	0
	2.456	-3.171	1.227	0	-5.274	13.749	0	0
	3.07	-2.675	0	-1.541	-6.917	14.528	0	0
	3.684	-3.621	0	-1.541	-8.565	13.837	0	0
	4.298	-4.568	0	-1.541	-10.154	11.742	0	0
	4.912	-5.514	0	-1.541	-11.633	8.427	0	0
	5.526	-6.46	0	-1.541	-12.928	4.288	0	0
3	0	-7.406	8.696	-1.541	-13.963	0	-0.167	0
	0.615	-6.286	1.483	0	-1.552	1.068	0	0
	1.23	-5.379	1.416	0	-2.292	8.453	0	0
	1.845	-4.514	1.389	0	-3.745	11.762	0	0
	2.46	-3.659	1.389	0	-5.322	13.903	0	0
	3.075	-2.855	0	-1.441	-6.967	14.661	0	0
	3.69	-3.741	0	-1.441	-8.635	13.962	0	0
	4.305	-4.658	0	-1.552	-10.239	11.828	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 14 FB 1

	4.92	-5.613	0	-1.552	-11.715	8.487	0	0
	5.535	-6.567	0	-1.552	-13.001	4.326	0	0
4	0	-7.521	8.722	-1.552	-14.023	0	-0.153	0
	0.621	-6.369	1.488	0	-1.525	1.062	0	0
	1.242	-5.446	1.488	0	-2.29	8.529	0	0
	1.863	-4.543	1.371	0	-3.747	11.882	0	0
	2.484	-3.691	1.371	0	-5.342	14.088	0	0
	3.105	-2.907	0	-1.337	-7.002	14.866	0	0
	3.726	-3.785	0	-1.43	-8.663	14.131	0	0
	4.347	-4.673	0	-1.43	-10.261	11.955	0	0
	4.968	-5.568	0	-1.525	-11.732	8.568	0	0
	5.589	-6.515	0	-1.525	-13.012	4.36	0	0
5	0	-7.462	8.697	-1.525	-14.029	0	-0.162	0
	0.621	-6.465	1.488	0	-1.833	1.349	0	0
	1.242	-5.541	1.488	0	-2.258	8.547	0	0
	1.863	-4.655	1.306	0	-3.697	11.941	0	0
	2.484	-3.844	1.306	0	-5.274	14.203	0	0
	3.105	-3.505	0	-1.663	-6.92	15.049	0	0
	3.726	-4.537	0	-1.663	-8.573	14.381	0	0
	4.347	-5.57	0	-1.663	-10.172	12.25	0	0
	4.968	-6.62	0	-1.833	-11.657	8.861	0	0
	5.589	-7.758	0	-1.833	-12.964	4.572	0	0
6	0	-8.897	9.805	-1.833	-14.026	0	-0.151	0
	0.619	-6.224	1.117	0	-0.757	4.215	0	0
	1.238	-5.532	1.117	0	-1.715	8.491	0	0
	1.857	-4.841	1.117	0	-2.857	12.381	0	0
	2.476	-4.149	1.117	0	-4.166	15.471	0	0
	3.095	-3.458	1.117	0	-5.61	17.362	0	0
	3.714	-2.766	1.117	0	-7.165	17.741	0	0
	4.333	-2.075	1.117	0	-8.807	16.355	0	0
	4.952	-1.383	1.117	0	-10.513	13.015	0	0
	5.571	-0.692	1.117	0	-12.256	7.587	0	0
	6.19	0	1.117	-13.996	-13.996	0	0	0

Support    React. Pos    React. Negative

1	1.553	-14.045
2	1.959	-14.07
3	1.973	-14.068
4	1.94	-14.08
5	2.404	-14.061
6	1.787	-14.128
7	1.117	-14.014

Id Group 8, Ohio 5C1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.448	-1.496	21.448	0	0	0
	0.619	11.018	17.8	0	17.8	11.018	0	0
	1.238	17.751	14.338	-2.645	14.338	17.751	0	0
	1.857	20.728	11.162	-5.821	11.162	20.728	0	0
	2.476	22.066	8.912	-8.071	8.912	22.066	0	0
	3.095	21.771	7.034	-9.949	7.034	21.771	0	0
	3.714	19.574	5.27	-11.713	5.27	19.574	0	0
	4.333	16.47	2.496	-14.487	2.618	11.343	0	0
	4.952	10.835	0	-18.06	1.563	7.742	0	0
	5.571	3.725	0.669	-11.319	0.669	3.725	0	0
2	0	2.482	0.401	-2.005	22.73	0	-6.254	0
	0.619	3.973	11.06	-0.928	19.547	3.571	0	0
	1.238	10.841	16.235	-0.892	16.507	2.692	0	0
	1.857	15.246	12.975	-4.008	14.743	8.467	0	0
	2.476	16.817	9.916	-7.067	12.572	13.262	0	0
	3.095	16.404	10.038	-6.945	10.038	16.404	0	0
	3.714	17.335	7.189	-9.794	7.189	17.335	0	0
	4.333	15.607	4.071	-12.912	4.071	15.607	0	0
	4.952	10.967	0.785	-16.198	2.548	0.252	0	0
	5.571	3.871	0.89	-11.098	2.548	1.829	0	0
3	0	3.409	2.548	-0.756	22.828	0	-6.712	0
	0.619	4.829	10.859	-1.129	19.68	3.032	0	0
	1.238	11.323	15.96	-1.023	16.377	10.345	0	0
	1.857	15.849	12.689	-4.294	14.553	9.053	0	0
	2.476	17.487	9.625	-7.358	12.481	13.495	0	0
	3.095	16.568	6.865	-10.118	10.039	16.424	0	0
	3.714	17.273	7.262	-9.721	7.262	17.273	0	0
	4.333	15.566	4.19	-12.793	4.19	15.566	0	0
	4.952	10.999	0.925	-16.058	2.08	7.715	0	0
	5.571	3.782	0.883	-11.105	2.041	1.406	0	0
4	0	2.669	2.041	-0.546	22.929	0	-6.867	0
	0.619	3.782	11.105	-0.883	19.782	2.929	0	0
	1.238	10.999	16.058	-0.925	16.468	10.303	0	0
	1.857	15.566	12.793	-4.19	14.583	9.119	0	0
	2.476	17.273	9.721	-7.262	12.538	13.586	0	0
	3.095	16.568	10.118	-6.865	10.118	16.568	0	0
	3.714	17.487	7.358	-9.625	7.358	17.487	0	0
	4.333	15.849	4.294	-12.689	4.294	15.849	0	0
	4.952	11.323	1.023	-15.96	2.358	8.719	0	0
	5.571	4.829	1.129	-10.859	2.064	1.412	0	0
5	0	3.409	0.756	-2.548	22.677	0	-6.539	0
	0.619	3.871	11.098	-0.89	19.606	3.048	0	0
	1.238	10.967	16.198	-0.785	16.375	10.307	0	0

	1.857	15.607	12.912	-4.071	14.361	8.682	0	0
	2.476	17.335	9.794	-7.189	12.269	13.017	0	0
	3.095	16.404	6.945	-10.038	9.83	15.911	0	0
	3.714	16.817	7.067	-9.916	7.076	16.807	0	0
	4.333	15.246	4.008	-12.975	4.08	15.202	0	0
	4.952	10.841	0.892	-16.235	2.051	7.599	0	0
	5.571	3.973	0.928	-11.06	2.005	1.241	0	0
6	0	2.482	2.005	-0.401	24.372	0	-8.757	0
	0.619	3.725	11.319	-0.669	21.456	1.764	0	0
	1.238	10.835	18.06	0	18.196	10.16	0	0
	1.857	16.47	14.487	-2.496	14.909	8.987	0	0
	2.476	19.574	11.713	-5.27	13.188	14.093	0	0
	3.095	21.771	9.949	-7.034	11.106	18.19	0	0
	3.714	22.066	8.071	-8.912	8.658	20.613	0	0
	4.333	20.728	5.821	-11.162	6.346	19.753	0	0
	4.952	17.751	2.645	-14.338	4.28	15.726	0	0
	5.571	11.018	0	-17.8	2.158	9.177	0	0
	6.19	0	1.496	-21.448	1.496	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.448	-1.496	-1.496	0	0	0
	0.619	-0.926	0	-1.496	-2.158	9.177	0	0
	1.238	-1.852	0	-1.496	-4.28	15.726	0	0
	1.857	-2.777	0	-1.496	-6.346	19.753	0	0
	2.476	-3.703	0	-1.496	-8.658	20.613	0	0
	3.095	-4.629	0	-1.496	-11.106	18.19	0	0
	3.714	-5.555	0	-1.496	-13.188	14.093	0	0
	4.333	-6.481	0	-1.496	-14.909	8.987	0	0
	4.952	-7.406	0	-1.496	-18.196	10.16	0	0
	5.571	-10.398	0	-13.188	-21.456	1.764	0	0
2	0	-18.911	14.743	-14.158	-24.372	0	-8.757	0
	0.619	-10.79	2.548	0	-2.005	1.241	0	0
	1.238	-9.212	2.548	0	-2.051	7.599	0	0
	1.857	-8.057	1.867	0	-4.08	15.202	0	0
	2.476	-6.965	1.739	0	-7.076	16.807	0	0
	3.095	-6.181	0.918	0	-9.83	15.911	0	0
	3.714	-6.189	0	-0.616	-12.269	13.017	0	0
	4.333	-6.685	0	-0.851	-14.361	8.682	0	0
	4.952	-7.447	0	-2.005	-16.375	10.307	0	0
	5.571	-9.793	0	-12.61	-19.606	3.048	0	0
3	0	-17.986	13.644	-14.361	-22.677	0	-6.539	0
	0.619	-9.683	12.481	0	-2.064	1.412	0	0
	1.238	-7.438	2.041	0	-2.358	8.719	0	0
	1.857	-6.593	1.258	0	-4.294	15.849	0	0
	2.476	-5.834	1.207	0	-7.358	17.487	0	0
	3.095	-5.203	0.862	0	-10.118	16.568	0	0
	3.714	-5.783	0	-1.148	-12.538	13.586	0	0
	4.333	-6.503	0	-1.199	-14.583	9.119	0	0

	4.952	-7.53	0	-2.064	-16.468	10.303	0	0
	5.571	-9.792	0	-12.557	-19.782	2.929	0	0
4	0	-18.004	14.336	-14.336	-22.929	0	-6.867	0
	0.619	-9.792	12.557	0	-2.041	1.406	0	0
	1.238	-7.53	2.064	0	-2.08	7.715	0	0
	1.857	-6.502	1.199	0	-4.19	15.566	0	0
	2.476	-5.783	1.148	0	-7.262	17.273	0	0
	3.095	-5.203	0	-0.862	-10.039	16.424	0	0
	3.714	-5.834	0	-1.207	-12.481	13.495	0	0
	4.333	-6.593	0	-1.258	-14.553	9.053	0	0
	4.952	-7.438	0	-2.041	-16.377	10.345	0	0
	5.571	-9.683	0	-12.481	-19.68	3.032	0	0
5	0	-17.986	14.361	-13.644	-22.828	0	-6.712	0
	0.619	-9.793	12.61	0	-2.548	1.829	0	0
	1.238	-7.447	2.005	0	-2.548	0.252	0	0
	1.857	-6.685	0.851	0	-4.071	15.607	0	0
	2.476	-6.189	0.616	0	-7.189	17.335	0	0
	3.095	-6.181	0	-0.918	-10.038	16.404	0	0
	3.714	-6.965	0	-1.739	-12.572	13.262	0	0
	4.333	-8.057	0	-1.867	-14.743	8.467	0	0
	4.952	-9.212	0	-2.548	-16.507	2.692	0	0
	5.571	-10.79	0	-2.548	-19.547	3.571	0	0
6	0	-18.911	14.158	-14.743	-22.73	0	-6.254	0
	0.619	-10.398	13.188	0	-0.669	3.725	0	0
	1.238	-7.406	1.496	0	-1.563	7.742	0	0
	1.857	-6.481	1.496	0	-2.618	11.343	0	0
	2.476	-5.555	1.496	0	-5.27	19.574	0	0
	3.095	-4.629	1.496	0	-7.034	21.771	0	0
	3.714	-3.703	1.496	0	-8.912	22.066	0	0
	4.333	-2.777	1.496	0	-11.162	20.728	0	0
	4.952	-1.852	1.496	0	-14.338	17.751	0	0
	5.571	-0.926	1.496	0	-17.8	11.018	0	0
	6.19	0	1.496	-21.448	-21.448	0	0	0

Support    Reac. Pos   Reac. Negative

1	1.496	-21.486
2	2.406	-28.948
3	3.304	-28.006
4	2.587	-28.023
5	3.304	-28.006
6	2.406	-28.948
7	1.496	-21.486



Id Group 7, Ohio 4F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	17.726	-0.984	17.726	0	0	0
	0.619	9.149	14.78	0	14.78	9.149	0	0
	1.238	14.813	11.965	-2.021	11.965	14.813	0	0
	1.857	17.39	9.364	-4.622	9.364	17.39	0	0
	2.476	17.716	7.155	-6.831	7.155	17.716	0	0
	3.095	17.725	5.727	-8.259	5.727	17.725	0	0
	3.714	16.221	4.368	-9.618	4.368	16.221	0	0
	4.333	13.982	2.152	-11.834	2.696	11.681	0	0
	4.952	9.631	0	-14.73	1.694	8.389	0	0
	5.571	4.65	0.835	-11.153	0.835	4.65	0	0
2	0	1.63	0.263	-1.316	20.276	0	-12.449	0
	0.619	4.253	10.608	-1.38	17.972	0	-4.458	0
	1.238	8.928	11.861	-2.172	15.405	2.28	0	0
	1.857	11.783	9.436	-4.55	12.694	7.318	0	0
	2.476	12.71	7.246	-6.74	10.611	9.4	0	0
	3.095	13.379	6.206	-5.782	9.122	11.659	0	0
	3.714	12.949	4.846	-7.142	7.28	12.821	0	0
	4.333	12.367	5.097	-8.889	5.097	12.367	0	0
	4.952	9.869	2.629	-11.357	2.787	7.384	0	0
	5.571	5.113	0	-14.014	2.109	4.624	0	0
3	0	2.723	2.082	-0.558	19.984	0	-11.007	0
	0.619	5.805	10.63	-1.358	17.718	0	-3.359	0
	1.238	10.15	11.525	-2.461	15.203	3.038	0	0
	1.857	12.728	9.122	-4.864	12.552	7.772	0	0
	2.476	13.39	6.84	-5.148	10.334	10.068	0	0
	3.095	13.632	5.457	-6.531	8.81	12.222	0	0
	3.714	13.188	6.975	-7.011	6.975	13.188	0	0
	4.333	12.533	4.823	-9.163	4.823	12.533	0	0
	4.952	9.873	2.401	-11.585	2.401	9.873	0	0
	5.571	5.018	0	-14.184	1.311	0.903	0	0
4	0	1.715	1.311	-1.311	20.013	0	-10.969	0
	0.619	5.018	14.184	0	17.768	0	-3.327	0
	1.238	9.873	11.585	-2.401	15.27	3.087	0	0
	1.857	12.533	9.163	-4.823	12.63	7.853	0	0
	2.476	13.188	7.011	-6.975	10.396	9.822	0	0
	3.095	13.632	6.531	-5.457	8.811	12.303	0	0
	3.714	13.39	5.148	-6.84	6.994	13.315	0	0
	4.333	12.728	4.864	-9.122	4.864	12.728	0	0
	4.952	10.15	2.461	-11.525	2.471	9.132	0	0
	5.571	5.805	1.358	-10.63	1.402	0.959	0	0
5	0	2.723	0.558	-2.082	19.81	0	-11.006	0
	0.619	5.113	14.014	0	17.504	0	-3.375	0
	1.238	9.869	11.357	-2.629	14.962	3.003	0	0

	1.857	12.367	8.889	-5.097	12.306	7.678	0	0
	2.476	12.949	7.142	-4.846	10.421	9.934	0	0
	3.095	13.379	5.782	-6.206	8.756	11.876	0	0
	3.714	12.71	6.74	-7.246	6.83	12.599	0	0
	4.333	11.783	4.55	-9.436	4.625	11.736	0	0
	4.952	8.928	2.172	-11.861	2.25	7.599	0	0
	5.571	4.253	1.38	-10.608	1.38	4.253	0	0
6	0	1.63	1.316	-0.263	20.918	0	-12.451	0
	0.619	4.65	11.153	-0.835	18.681	0	-4.184	0
	1.238	9.631	14.73	0	16.084	2.926	0	0
	1.857	13.982	11.834	-2.152	13.178	8.157	0	0
	2.476	16.221	9.618	-4.368	11.097	10.729	0	0
	3.095	17.725	8.259	-5.727	9.638	13.457	0	0
	3.714	17.716	6.831	-7.155	7.878	15.124	0	0
	4.333	17.39	4.622	-9.364	5.781	15.236	0	0
	4.952	14.813	2.021	-11.965	3.854	12.543	0	0
	5.571	9.149	0	-14.78	2.309	7.228	0	0
	6.19	0	0.984	-17.726	0.984	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	17.726	-0.984	-0.984	0	0	0
	0.619	-0.609	0	-0.984	-2.309	7.228	0	0
	1.238	-1.219	0	-0.984	-3.854	12.543	0	0
	1.857	-1.828	0	-0.984	-5.781	15.236	0	0
	2.476	-2.437	0	-0.984	-7.878	15.124	0	0
	3.095	-3.047	0	-0.984	-9.638	13.457	0	0
	3.714	-3.656	0	-0.984	-11.097	10.729	0	0
	4.333	-4.265	0	-0.984	-13.178	8.157	0	0
	4.952	-4.875	0	-0.984	-16.084	2.926	0	0
	5.571	-10.423	0	-9.759	-18.681	0	-4.184	0
2	0	-16.986	9.968	-16.084	-20.918	0	-12.451	0
	0.619	-10.95	9.377	0	-1.38	4.253	0	0
	1.238	-7.587	2.082	0	-2.25	7.599	0	0
	1.857	-7.078	0.822	0	-4.625	11.736	0	0
	2.476	-6.569	0.822	0	-6.83	12.599	0	0
	3.095	-6.063	0.813	0	-8.756	11.876	0	0
	3.714	-5.56	0.813	0	-10.421	9.934	0	0
	4.333	-5.056	0.813	0	-12.306	7.678	0	0
	4.952	-4.889	0	-1.316	-14.962	3.003	0	0
	5.571	-9.83	0	-8.891	-17.504	0	-3.375	0
3	0	-15.879	14.199	-10.298	-19.81	0	-11.006	0
	0.619	-9.624	9.067	0	-1.402	0.959	0	0
	1.238	-4.779	1.311	0	-2.471	9.132	0	0
	1.857	-4.666	0.037	0	-4.864	12.728	0	0
	2.476	-4.647	0.029	0	-6.994	13.315	0	0
	3.095	-4.629	0.029	0	-8.811	12.303	0	0
	3.714	-4.611	0.029	0	-10.396	9.822	0	0
	4.333	-4.593	0.029	0	-12.63	7.853	0	0

	4.952	-5.115	0	-1.402	-15.27	3.087	0	0
	5.571	-9.874	0	-8.85	-17.768	0	-3.327	0
4	0	-15.926	14.271	-10.272	-20.013	0	-10.969	0
	0.619	-9.874	8.85	0	-1.311	0.903	0	0
	1.238	-5.115	1.402	0	-2.401	9.873	0	0
	1.857	-4.593	0	-0.029	-4.823	12.533	0	0
	2.476	-4.611	0	-0.029	-6.975	13.188	0	0
	3.095	-4.629	0	-0.029	-8.81	12.222	0	0
	3.714	-4.647	0	-0.029	-10.334	10.068	0	0
	4.333	-4.666	0	-0.037	-12.552	7.772	0	0
	4.952	-4.779	0	-1.311	-15.203	3.038	0	0
	5.571	-9.624	0	-9.067	-17.718	0	-3.359	0
5	0	-15.879	10.298	-14.199	-19.984	0	-11.007	0
	0.619	-9.83	8.891	0	-2.109	4.624	0	0
	1.238	-4.889	1.316	0	-2.787	7.384	0	0
	1.857	-5.056	0	-0.813	-5.097	12.367	0	0
	2.476	-5.56	0	-0.813	-7.28	12.821	0	0
	3.095	-6.063	0	-0.813	-9.122	11.659	0	0
	3.714	-6.569	0	-0.822	-10.611	9.4	0	0
	4.333	-7.078	0	-0.822	-12.694	7.318	0	0
	4.952	-7.587	0	-2.082	-15.405	2.28	0	0
	5.571	-10.95	0	-9.377	-17.972	0	-4.458	0
6	0	-16.986	16.084	-9.968	-20.276	0	-12.449	0
	0.619	-10.423	9.759	0	-0.835	4.65	0	0
	1.238	-4.875	0.984	0	-1.694	8.389	0	0
	1.857	-4.265	0.984	0	-2.696	11.681	0	0
	2.476	-3.656	0.984	0	-4.368	16.221	0	0
	3.095	-3.047	0.984	0	-5.727	17.725	0	0
	3.714	-2.437	0.984	0	-7.155	17.716	0	0
	4.333	-1.828	0.984	0	-9.364	17.39	0	0
	4.952	-1.219	0.984	0	-11.965	14.813	0	0
	5.571	-0.609	0.984	0	-14.78	9.149	0	0
	6.19	0	0.984	-17.726	-17.726	0	0	0

Support	Reac. Pos	Reac. Negative
1	0.984	-17.757
2	1.58	-27.252
3	2.64	-25.852
4	1.662	-25.816
5	2.64	-25.852
6	1.58	-27.252
7	0.984	-17.757

Id Group 6, Ohio 3F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	21.475	-1.533	21.475	0	0	0
	0.619	11.076	17.893	0	17.893	11.076	0	0
	1.238	17.922	14.477	-2.506	14.477	17.922	0	0
	1.857	21.03	11.325	-5.658	11.325	21.03	0	0
	2.476	21.5	8.683	-8.3	8.683	21.5	0	0
	3.095	21.431	6.924	-10.059	6.924	21.431	0	0
	3.714	19.528	5.258	-11.725	5.258	19.528	0	0
	4.333	16.749	2.56	-14.423	2.823	12.234	0	0
	4.952	11.427	0	-17.94	1.798	8.904	0	0
	5.571	5.071	0.91	-11.078	0.91	5.071	0	0
2	0	2.544	0.411	-2.055	22.765	0	-6.298	0
	0.619	4.309	10.517	-1.471	19.671	3.494	0	0
	1.238	10.841	16.42	-0.892	16.42	10.841	0	0
	1.857	15.381	13.193	-3.79	14.443	8.282	0	0
	2.476	17.093	10.138	-6.845	12.265	12.882	0	0
	3.095	16.282	7.353	-9.63	9.891	16.131	0	0
	3.714	17.294	7.172	-9.811	7.172	17.294	0	0
	4.333	15.874	4.157	-12.826	4.157	15.874	0	0
	4.952	11.562	0.946	-16.037	2.968	7.397	0	0
	5.571	5.281	1.215	-10.773	2.528	1.742	0	0
3	0	3.307	2.528	-0.677	22.861	0	-6.755	0
	0.619	6.237	10.529	-1.459	19.804	2.947	0	0
	1.238	11.885	15.805	-1.178	16.566	10.332	0	0
	1.857	16.013	12.635	-4.348	14.204	9.008	0	0
	2.476	17.326	9.692	-7.291	12.165	13.125	0	0
	3.095	16.243	9.448	-7.535	9.885	16.148	0	0
	3.714	17.224	7.242	-9.741	7.242	17.224	0	0
	4.333	15.825	4.276	-12.707	4.276	15.825	0	0
	4.952	11.593	1.088	-15.895	2.422	8.963	0	0
	5.571	5.29	1.236	-10.752	2.041	1.406	0	0
4	0	2.669	0.546	-2.041	22.922	0	-6.858	0
	0.619	5.29	10.752	-1.236	19.885	2.858	0	0
	1.238	11.593	15.895	-1.088	16.661	10.29	0	0
	1.857	15.825	12.707	-4.276	14.21	8.998	0	0
	2.476	17.224	9.741	-7.242	12.165	13.15	0	0
	3.095	16.243	7.535	-9.448	9.909	16.194	0	0
	3.714	17.326	7.291	-9.692	7.291	17.326	0	0
	4.333	16.013	4.348	-12.635	4.348	16.013	0	0
	4.952	11.885	1.178	-15.805	2.576	9.514	0	0
	5.571	6.237	1.459	-10.529	2.115	1.447	0	0
5	0	3.307	0.677	-2.528	22.677	0	-6.539	0
	0.619	5.281	10.773	-1.215	19.606	3.048	0	0
	1.238	11.562	16.037	-0.946	16.375	10.307	0	0

	1.857	15.874	12.826	-4.157	14.252	9.02	0	0
	2.476	17.294	9.811	-7.172	12.199	13.191	0	0
	3.095	16.282	9.63	-7.353	9.791	15.983	0	0
	3.714	17.093	6.845	-10.138	7.076	16.807	0	0
	4.333	15.381	3.79	-13.193	4.08	15.202	0	0
	4.952	10.841	0.892	-16.42	2.225	7.599	0	0
	5.571	4.309	1.471	-10.517	2.055	1.272	0	0
6	0	2.544	2.055	-0.411	24.372	0	-8.757	0
	0.619	5.071	11.078	-0.91	21.454	1.775	0	0
	1.238	11.427	17.94	0	18.192	10.18	0	0
	1.857	16.749	14.423	-2.56	14.845	9.266	0	0
	2.476	19.528	11.725	-5.258	13.136	14.286	0	0
	3.095	21.431	10.059	-6.924	11.077	18.28	0	0
	3.714	21.5	8.3	-8.683	8.658	20.613	0	0
	4.333	21.03	5.658	-11.325	6.479	19.506	0	0
	4.952	17.922	2.506	-14.477	4.608	15.321	0	0
	5.571	11.076	0	-17.893	2.688	8.849	0	0
	6.19	0	1.533	-21.475	1.533	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	21.475	-1.533	-1.533	0	0	0
	0.619	-0.949	0	-1.533	-2.688	8.849	0	0
	1.238	-1.897	0	-1.533	-4.608	15.321	0	0
	1.857	-2.846	0	-1.533	-6.479	19.506	0	0
	2.476	-3.795	0	-1.533	-8.658	20.613	0	0
	3.095	-4.743	0	-1.533	-11.077	18.28	0	0
	3.714	-5.692	0	-1.533	-13.136	14.286	0	0
	4.333	-6.641	0	-1.533	-14.845	9.266	0	0
	4.952	-7.589	0	-1.533	-18.192	10.18	0	0
	5.571	-10.108	0	-13.136	-21.454	1.775	0	0
2	0	-18.54	14.443	-14.099	-24.372	0	-8.757	0
	0.619	-10.777	2.528	0	-2.055	1.272	0	0
	1.238	-9.212	2.528	0	-2.225	7.599	0	0
	1.857	-8.427	1.268	0	-4.08	15.202	0	0
	2.476	-7.642	1.268	0	-7.076	16.807	0	0
	3.095	-6.859	1.258	0	-9.791	15.983	0	0
	3.714	-6.7	0	-0.404	-12.199	13.191	0	0
	4.333	-6.951	0	-0.404	-14.252	9.02	0	0
	4.952	-7.632	0	-2.055	-16.375	10.307	0	0
	5.571	-9.474	0	-12.543	-19.606	3.048	0	0
3	0	-17.446	13.23	-14.252	-22.677	0	-6.539	0
	0.619	-9.466	12.464	0	-2.115	1.447	0	0
	1.238	-7.438	2.041	0	-2.576	9.514	0	0
	1.857	-6.897	0.754	0	-4.348	16.013	0	0
	2.476	-6.43	0.754	0	-7.291	17.326	0	0
	3.095	-5.963	0.754	0	-9.909	16.194	0	0
	3.714	-6.368	0	-0.697	-12.165	13.15	0	0
	4.333	-6.799	0	-0.697	-14.21	8.998	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 12 FB 9

	4.952	-7.718	0	-2.115	-16.661	10.29	0	0
	5.571	-9.44	0	-12.165	-19.885	2.858	0	0
4	0	-17.39	14.21	-14.21	-22.922	0	-6.858	0
	0.619	-9.44	12.165	0	-2.041	1.406	0	0
	1.238	-7.718	2.115	0	-2.422	8.963	0	0
	1.857	-6.799	0.697	0	-4.276	15.825	0	0
	2.476	-6.368	0.697	0	-7.242	17.224	0	0
	3.095	-5.963	0	-0.754	-9.885	16.148	0	0
	3.714	-6.43	0	-0.754	-12.165	13.125	0	0
	4.333	-6.897	0	-0.754	-14.204	9.008	0	0
	4.952	-7.438	0	-2.041	-16.566	10.332	0	0
	5.571	-9.466	0	-12.464	-19.804	2.947	0	0
5	0	-17.446	14.252	-13.23	-22.861	0	-6.755	0
	0.619	-9.474	12.543	0	-2.528	1.742	0	0
	1.238	-7.632	2.055	0	-2.968	7.397	0	0
	1.857	-6.951	0.404	0	-4.157	15.874	0	0
	2.476	-6.7	0.404	0	-7.172	17.294	0	0
	3.095	-6.859	0	-1.258	-9.891	16.131	0	0
	3.714	-7.642	0	-1.268	-12.265	12.882	0	0
	4.333	-8.427	0	-1.268	-14.443	8.282	0	0
	4.952	-9.212	0	-2.528	-16.42	10.841	0	0
	5.571	-10.777	0	-2.528	-19.671	3.494	0	0
6	0	-18.54	14.099	-14.443	-22.765	0	-6.298	0
	0.619	-10.108	13.136	0	-0.91	5.071	0	0
	1.238	-7.589	1.533	0	-1.798	8.904	0	0
	1.857	-6.641	1.533	0	-2.823	12.234	0	0
	2.476	-5.692	1.533	0	-5.258	19.528	0	0
	3.095	-4.743	1.533	0	-6.924	21.431	0	0
	3.714	-3.795	1.533	0	-8.683	21.5	0	0
	4.333	-2.846	1.533	0	-11.325	21.03	0	0
	4.952	-1.897	1.533	0	-14.477	17.922	0	0
	5.571	-0.949	1.533	0	-17.893	11.076	0	0
	6.19	0	1.533	-21.475	-21.475	0	0	0

Support    React. Pos    React. Negative

1	1.533	-21.512
2	2.466	-28.622
3	3.205	-27.503
4	2.587	-27.428
5	3.205	-27.503
6	2.466	-28.622
7	1.533	-21.512

Id Group 5 Ohio 2F1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	19.955	-1.579	19.955	0	0	0
	0.619	10.803	17.452	-2.528	17.452	10.803	0	0
	1.238	18.516	14.956	-5.024	14.956	18.516	0	0
	1.857	23.258	12.524	-7.456	12.524	23.258	0	0
	2.476	25.275	10.208	-9.772	10.208	25.275	0	0
	3.095	25.065	8.099	-11.881	8.099	25.065	0	0
	3.714	22.704	6.113	-13.867	6.113	22.704	0	0
	4.333	18.585	4.289	-15.691	4.289	18.585	0	0
	4.952	13.193	2.664	-17.316	2.664	13.193	0	0
	5.571	7.107	1.276	-18.704	1.276	7.107	0	0
2	0	2.619	0.423	-2.115	19.966	0	-0.057	0
	0.619	6.995	17.83	-2.15	18.433	6.622	0	0
	1.238	12.664	16.562	-3.795	16.562	12.664	0	0
	1.857	17.43	14.451	-5.529	14.451	17.43	0	0
	2.476	20.459	12.21	-7.77	12.21	20.459	0	0
	3.095	21.665	10.002	-9.978	10.002	21.665	0	0
	3.714	20.786	7.756	-12.224	7.756	20.786	0	0
	4.333	17.886	5.563	-14.417	5.571	16.874	0	0
	4.952	13.254	3.515	-16.465	3.839	12.25	0	0
	5.571	7.403	1.703	-18.277	2.607	1.796	0	0
3	0	3.41	2.607	-0.698	19.669	1.396	0	0
	0.619	7.759	18.166	-1.814	18.166	7.759	0	0
	1.238	13.52	16.328	-3.652	16.328	13.52	0	0
	1.857	18.012	14.259	-5.721	14.428	16.922	0	0
	2.476	20.744	12.054	-7.926	12.354	20.114	0	0
	3.095	21.451	9.805	-10.175	10.14	21.424	0	0
	3.714	20.656	7.877	-12.103	7.877	20.656	0	0
	4.333	17.848	5.659	-14.321	5.659	17.848	0	0
	4.952	13.275	3.581	-16.399	3.69	12.242	0	0
	5.571	7.446	1.739	-18.241	2.185	1.505	0	0
4	0	2.858	2.185	-2.185	19.741	1.045	0	0
	0.619	7.446	18.241	-1.739	18.241	7.446	0	0
	1.238	13.275	16.399	-3.581	16.399	13.275	0	0
	1.857	17.848	14.321	-5.659	14.436	16.891	0	0
	2.476	20.656	12.103	-7.877	12.375	20.1	0	0
	3.095	21.451	10.175	-9.805	10.175	21.451	0	0
	3.714	20.744	7.926	-12.054	7.926	20.744	0	0
	4.333	18.012	5.721	-14.259	5.721	18.012	0	0
	4.952	13.52	3.652	-16.328	3.687	12.269	0	0
	5.571	7.759	1.814	-18.166	2.157	1.475	0	0
5	0	3.41	0.698	-2.607	19.75	1.014	0	0
	0.619	7.403	18.277	-1.703	18.277	7.403	0	0
	1.238	13.254	16.465	-3.515	16.465	13.254	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 12 FB 9

	1.857	17.886	14.417	-5.563	14.417	17.886	0	0
	2.476	20.786	12.224	-7.756	12.461	20.199	0	0
	3.095	21.665	9.978	-10.002	10.134	21.376	0	0
	3.714	20.459	7.77	-12.21	7.795	20.427	0	0
	4.333	17.43	5.529	-14.451	5.687	17.331	0	0
	4.952	12.664	3.795	-16.562	3.795	12.664	0	0
	5.571	6.995	2.15	-17.83	2.15	6.995	0	0
6	0	2.619	2.115	-0.423	19.971	0	-0.066	0
	0.619	7.107	18.704	-1.276	18.897	6.031	0	0
	1.238	13.193	17.316	-2.664	17.526	12.153	0	0
	1.857	18.585	15.691	-4.289	15.897	17.691	0	0
	2.476	22.704	13.867	-6.113	14.044	22.047	0	0
	3.095	25.065	11.881	-8.099	11.998	24.705	0	0
	3.714	25.275	9.772	-10.208	9.791	25.228	0	0
	4.333	23.258	7.456	-12.524	7.574	23.038	0	0
	4.952	18.516	5.024	-14.956	5.305	18.168	0	0
	5.571	10.803	2.528	-17.452	2.977	10.525	0	0
	6.19	0	1.579	-19.955	1.579	0	0	0

## Minimums table:

Span	Location	Moment(m)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	19.955	-1.579	-1.579	0	0	0
	0.619	-0.977	0	-1.579	-2.977	10.525	0	0
	1.238	-1.955	0	-1.579	-5.305	18.168	0	0
	1.857	-2.932	0	-1.579	-7.574	23.038	0	0
	2.476	-3.909	0	-1.579	-9.791	25.228	0	0
	3.095	-4.886	0	-1.579	-11.998	24.705	0	0
	3.714	-5.864	0	-1.579	-14.044	22.047	0	0
	4.333	-6.841	0	-1.579	-15.897	17.691	0	0
	4.952	-7.818	0	-1.579	-17.526	12.153	0	0
	5.571	-8.796	0	-1.579	-18.897	6.031	0	0
2	0	-12.725	2.607	-14.044	-19.971	0	-0.066	0
	0.619	-11.112	2.607	0	-2.15	6.995	0	0
	1.238	-9.518	1.764	0	-3.795	12.664	0	0
	1.857	-8.432	1.722	0	-5.687	17.331	0	0
	2.476	-7.366	1.722	0	-7.795	20.427	0	0
	3.095	-6.303	1.451	0	-10.134	21.376	0	0
	3.714	-6.524	0	-0.852	-12.461	20.199	0	0
	4.333	-7.088	0	-1.085	-14.417	17.886	0	0
	4.952	-7.857	0	-2.115	-16.465	13.254	0	0
	5.571	-9.166	0	-2.115	-18.277	7.403	0	0
3	0	-10.67	2.185	-12.816	-19.75	1.014	0	0
	0.619	-9.317	2.185	0	-2.157	1.475	0	0
	1.238	-7.964	2.185	0	-3.687	12.269	0	0
	1.857	-7.102	1.281	0	-5.721	18.012	0	0
	2.476	-6.341	1.092	0	-7.926	20.744	0	0
	3.095	-5.665	1.092	0	-10.175	21.451	0	0
	3.714	-6.296	0	-1.052	-12.375	20.1	0	0
	4.333	-7.012	0	-1.239	-14.436	16.891	0	0



## SECTION I

## CONSYS

## Section I Fascia 1 Unit 12 FB 9

	4.952	-7.869	0	-2.157	-16.399	13.275	0	0
	5.571	-9.204	0	-2.157	-18.241	7.446	0	0
4	0	-10.539	12.375	-12.375	-19.741	1.045	0	0
	0.619	-9.204	2.157	0	-2.185	1.505	0	0
	1.238	-7.869	2.157	0	-3.69	12.242	0	0
	1.857	-7.012	1.239	0	-5.659	17.848	0	0
	2.476	-6.296	1.052	0	-7.877	20.656	0	0
	3.095	-5.665	0	-1.092	-10.14	21.424	0	0
	3.714	-6.341	0	-1.092	-12.354	20.114	0	0
	4.333	-7.102	0	-1.281	-14.428	16.922	0	0
	4.952	-7.964	0	-2.185	-16.328	13.52	0	0
	5.571	-9.317	0	-2.185	-18.166	7.759	0	0
5	0	-10.67	12.816	-2.185	-19.669	1.396	0	0
	0.619	-9.166	2.115	0	-2.607	1.796	0	0
	1.238	-7.857	2.115	0	-3.839	12.25	0	0
	1.857	-7.088	1.085	0	-5.571	16.874	0	0
	2.476	-6.524	0.852	0	-7.756	20.786	0	0
	3.095	-6.303	0	-1.451	-10.002	21.665	0	0
	3.714	-7.366	0	-1.722	-12.21	20.459	0	0
	4.333	-8.432	0	-1.722	-14.451	17.43	0	0
	4.952	-9.518	0	-1.764	-16.562	12.664	0	0
	5.571	-11.112	0	-2.607	-18.433	6.622	0	0
6	0	-12.725	14.044	-2.607	-19.966	0	-0.057	0
	0.619	-8.796	1.579	0	-1.276	7.107	0	0
	1.238	-7.818	1.579	0	-2.664	13.193	0	0
	1.857	-6.841	1.579	0	-4.289	18.585	0	0
	2.476	-5.864	1.579	0	-6.113	22.704	0	0
	3.095	-4.886	1.579	0	-8.099	25.065	0	0
	3.714	-3.909	1.579	0	-10.208	25.275	0	0
	4.333	-2.932	1.579	0	-12.524	23.258	0	0
	4.952	-1.955	1.579	0	-14.956	18.516	0	0
	5.571	-0.977	1.579	0	-17.452	10.803	0	0
	6.19	0	1.579	-19.955	-19.955	0	0	0

Support    Reac. Pos   Reac. Negative

1	1.579	-19.98
2	2.539	-20.058
3	3.305	-18.941
4	2.77	-18.912
5	3.305	-18.941
6	2.539	-20.058
7	1.579	-19.98

Id Group 3, HS-20 Truck Operating: 1.3\*1.0\*(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	32.561	-2.655	32.561	0	0	0
	0.619	17.708	28.607	-3.361	28.607	17.708	0	0
	1.238	30.443	24.591	-7.377	24.591	30.443	0	0
	1.857	38.291	20.62	-11.348	20.62	38.291	0	0
	2.476	41.506	16.763	-15.205	16.763	41.506	0	0
	3.095	40.517	13.091	-18.877	13.091	40.517	0	0
	3.714	35.925	9.673	-22.295	9.673	35.925	0	0
	4.333	28.493	6.576	-25.392	6.576	28.493	0	0
	4.952	19.445	3.927	-28.041	3.927	19.445	0	0
	5.571	9.649	1.732	-30.236	1.732	9.649	0	0
2	0	4.388	0.709	-3.545	32.799	0	-1.147	0
	0.619	10.595	29.492	-2.476	30.414	10.025	0	0
	1.238	20.263	27.389	-5.469	27.389	20.263	0	0
	1.857	28.371	23.904	-8.064	23.904	28.371	0	0
	2.476	33.451	20.115	-11.853	20.115	33.451	0	0
	3.095	34.997	16.182	-15.786	16.182	34.997	0	0
	3.714	32.901	12.265	-19.703	12.265	32.901	0	0
	4.333	27.428	8.517	-23.451	8.517	27.428	0	0
	4.952	19.532	5.174	-26.794	5.174	19.532	0	0
	5.571	10.047	2.31	-29.658	4.171	2.874	0	0
3	0	5.837	3.17	-2.488	32.805	0	-1.216	0
	0.619	10.115	29.605	-2.363	30.539	9.476	0	0
	1.238	19.591	26.684	-5.284	27.592	19.532	0	0
	1.857	27.747	24.12	-7.848	24.148	27.663	0	0
	2.476	33.272	19.492	-12.476	20.369	32.888	0	0
	3.095	35.192	15.427	-16.541	16.42	34.629	0	0
	3.714	33.278	11.403	-20.565	12.462	32.711	0	0
	4.333	27.789	7.583	-24.385	8.661	27.366	0	0
	4.952	19.465	4.152	-27.816	5.177	19.223	0	0
	5.571	9.32	1.251	-30.717	3.492	2.405	0	0
4	0	5.42	2.898	-2.356	32.992	0	-1.698	0
	0.619	9.32	30.717	-1.251	30.765	9.113	0	0
	1.238	19.465	27.816	-4.152	27.838	19.385	0	0
	1.857	27.789	24.385	-7.583	24.4	27.741	0	0
	2.476	33.278	20.565	-11.403	20.627	33.128	0	0
	3.095	35.192	16.541	-15.427	16.653	34.99	0	0
	3.714	33.272	12.476	-19.492	12.637	33.083	0	0
	4.333	27.747	7.848	-24.12	8.735	27.555	0	0
	4.952	19.591	5.284	-26.684	5.284	19.591	0	0
	5.571	10.115	2.363	-29.605	3.673	2.513	0	0
5	0	5.837	2.488	-3.17	32.173	0	-1.213	0
	0.619	10.047	29.658	-2.31	29.83	9.302	0	0
	1.238	19.532	26.794	-5.174	26.873	19.238	0	0

	1.857	27.428	23.451	-8.517	23.509	27.248	0	0
	2.476	32.901	19.703	-12.265	19.938	32.319	0	0
	3.095	34.997	15.786	-16.182	16.215	34.201	0	0
	3.714	33.451	11.853	-20.115	12.472	32.684	0	0
	4.333	28.371	8.064	-23.904	8.846	27.887	0	0
	4.952	20.263	5.469	-27.389	5.469	20.263	0	0
	5.571	10.595	2.476	-29.492	3.545	2.194	0	0
6	0	4.388	3.545	-0.709	32.123	0	-1.158	0
	0.619	9.649	30.236	-1.732	30.367	8.918	0	0
	1.238	19.445	28.041	-3.927	28.104	19.134	0	0
	1.857	28.493	25.392	-6.576	25.436	28.305	0	0
	2.476	35.925	22.295	-9.673	22.47	35.275	0	0
	3.095	40.517	18.877	-13.091	19.196	39.529	0	0
	3.714	41.506	15.205	-16.763	15.665	40.365	0	0
	4.333	38.291	11.348	-20.62	11.929	37.213	0	0
	4.952	30.443	7.377	-24.591	8.038	29.625	0	0
	5.571	17.708	3.361	-28.607	4.045	17.284	0	0
	6.19	0	2.655	-32.561	2.655	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	32.561	-2.655	-2.655	0	0	0
	0.619	-1.644	0	-2.655	-4.045	17.284	0	0
	1.238	-3.287	0	-2.655	-8.038	29.625	0	0
	1.857	-4.931	0	-2.655	-11.929	37.213	0	0
	2.476	-6.574	0	-2.655	-15.665	40.365	0	0
	3.095	-8.218	0	-2.655	-19.196	39.529	0	0
	3.714	-9.861	0	-2.655	-22.47	35.275	0	0
	4.333	-11.505	0	-2.655	-25.436	28.305	0	0
	4.952	-13.148	0	-2.655	-28.104	19.134	0	0
	5.571	-14.792	0	-2.655	-30.367	8.918	0	0
2	0	-20.361	4.171	-22.47	-32.123	0	-1.158	0
	0.619	-17.779	4.171	0	-3.545	2.194	0	0
	1.238	-15.233	3.148	0	-5.469	20.263	0	0
	1.857	-13.376	2.834	0	-8.846	27.887	0	0
	2.476	-11.811	2.224	0	-12.472	32.684	0	0
	3.095	-10.834	1.053	0	-16.215	34.201	0	0
	3.714	-10.726	0	-0.739	-19.938	32.319	0	0
	4.333	-11.423	0	-1.503	-23.509	27.248	0	0
	4.952	-13.207	0	-3.292	-26.873	19.238	0	0
	5.571	-15.358	0	-3.545	-29.83	9.302	0	0
3	0	-17.552	22.732	-3.545	-32.173	0	-1.213	0
	0.619	-14.887	3.492	0	-3.673	2.513	0	0
	1.238	-12.725	3.492	0	-5.284	19.591	0	0
	1.857	-11.059	2.599	0	-8.735	27.555	0	0
	2.476	-9.788	1.644	0	-12.637	33.083	0	0
	3.095	-9.244	0.139	0	-16.653	34.99	0	0
	3.714	-9.819	0	-1.57	-20.627	33.128	0	0
	4.333	-11.272	0	-3.527	-24.4	27.741	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 12 FB 9

	4.952	-13.455	0	-3.527	-27.838	19.385	0	0
	5.571	-15.677	0	-3.673	-30.765	9.113	0	0
4	0	-17.951	22.989	-3.673	-32.992	0	-1.698	0
	0.619	-15.677	3.673	0	-3.492	2.405	0	0
	1.238	-13.455	3.527	0	-5.177	19.223	0	0
	1.857	-11.272	3.527	0	-8.661	27.366	0	0
	2.476	-9.819	1.57	0	-12.463	32.711	0	0
	3.095	-9.244	0	-0.139	-16.42	34.629	0	0
	3.714	-9.788	0	-1.644	-20.369	32.888	0	0
	4.333	-11.059	0	-2.599	-24.148	27.663	0	0
	4.952	-12.725	0	-3.492	-27.592	19.532	0	0
	5.571	-14.887	0	-3.492	-30.539	9.476	0	0
5	0	-17.552	3.545	-22.732	-32.805	0	-1.216	0
	0.619	-15.358	3.545	0	-4.171	2.874	0	0
	1.238	-13.207	3.292	0	-5.174	19.532	0	0
	1.857	-11.423	1.503	0	-8.517	27.428	0	0
	2.476	-10.726	0.739	0	-12.265	32.901	0	0
	3.095	-10.834	0	-1.053	-16.182	34.997	0	0
	3.714	-11.811	0	-2.224	-20.115	33.451	0	0
	4.333	-13.376	0	-2.834	-23.904	28.371	0	0
	4.952	-15.233	0	-3.148	-27.389	20.263	0	0
	5.571	-17.779	0	-4.171	-30.414	10.025	0	0
6	0	-20.361	22.47	-4.171	-32.799	0	-1.147	0
	0.619	-14.792	2.655	0	-1.732	9.649	0	0
	1.238	-13.148	2.655	0	-3.927	19.445	0	0
	1.857	-11.505	2.655	0	-6.576	28.493	0	0
	2.476	-9.861	2.655	0	-9.673	35.925	0	0
	3.095	-8.218	2.655	0	-13.091	40.517	0	0
	3.714	-6.574	2.655	0	-16.763	41.506	0	0
	4.333	-4.931	2.655	0	-20.62	38.291	0	0
	4.952	-3.287	2.655	0	-24.591	30.443	0	0
	5.571	-1.644	2.655	0	-28.607	17.708	0	0
	6.19	0	2.655	-32.561	-32.561	0	0	0

Support    React. Pos    React. Negative

1	2.655	-32.6
2	4.253	-33.079
3	5.658	-33.051
4	5.254	-33.518
5	5.658	-33.051
6	4.253	-33.079
7	2.655	-32.6

Id Group I, HS-20 Truck Inventory: 1.3\*1.67\*(truck+IM)\*DF  
 Type Combination

Maximum table:

Span	Location	Moment(kN-m)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	54.365	-4.433	54.365	0	0	0
	0.619	29.566	47.765	-5.611	47.765	29.566	0	0
	1.238	50.83	41.059	-12.317	41.059	50.83	0	0
	1.857	63.933	34.428	-18.948	34.428	63.933	0	0
	2.476	69.301	27.989	-25.387	27.989	69.301	0	0
	3.095	67.65	21.858	-31.518	21.858	67.65	0	0
	3.714	59.983	16.15	-37.225	16.15	59.983	0	0
	4.333	47.573	10.979	-42.397	10.979	47.573	0	0
	4.952	32.466	6.556	-46.82	6.556	32.466	0	0
	5.571	16.111	2.892	-50.484	2.892	16.111	0	0
2	0	7.327	1.184	-5.918	54.763	0	-1.916	0
	0.619	17.691	49.242	-4.134	50.781	16.738	0	0
	1.238	33.833	45.731	-9.131	45.731	33.833	0	0
	1.857	47.371	39.912	-13.464	39.912	47.371	0	0
	2.476	55.853	33.586	-19.79	33.586	55.853	0	0
	3.095	58.434	27.019	-26.357	27.019	58.434	0	0
	3.714	54.933	20.478	-32.898	20.478	54.933	0	0
	4.333	45.796	14.22	-39.156	14.22	45.796	0	0
	4.952	32.613	8.639	-44.737	8.639	32.613	0	0
	5.571	16.776	3.856	-49.52	6.964	4.798	0	0
3	0	9.747	5.294	-4.154	54.774	0	-2.03	0
	0.619	16.889	49.431	-3.945	50.989	15.823	0	0
	1.238	32.71	44.553	-8.823	46.069	32.612	0	0
	1.857	46.329	40.272	-13.104	40.319	46.188	0	0
	2.476	55.553	32.545	-20.831	34.01	54.912	0	0
	3.095	58.758	25.759	-27.617	27.415	57.819	0	0
	3.714	55.563	19.04	-34.336	20.808	54.617	0	0
	4.333	46.398	12.662	-40.714	14.461	45.692	0	0
	4.952	32.499	6.932	-46.444	8.644	32.097	0	0
	5.571	15.562	2.089	-51.287	5.83	4.016	0	0
4	0	9.05	4.839	-3.934	55.086	0	-2.835	0
	0.619	15.562	51.287	-2.089	51.368	15.216	0	0
	1.238	32.499	46.444	-6.932	46.48	32.366	0	0
	1.857	46.398	40.714	-12.662	40.74	46.319	0	0
	2.476	55.563	34.336	-19.04	34.44	55.312	0	0
	3.095	58.758	27.617	-25.759	27.806	58.421	0	0
	3.714	55.553	20.831	-32.545	21.1	55.238	0	0
	4.333	46.329	13.104	-40.272	14.585	46.007	0	0
	4.952	32.71	8.823	-44.553	8.823	32.71	0	0
	5.571	16.889	3.945	-49.431	6.133	4.196	0	0
5	0	9.747	4.154	-5.294	53.718	0	-2.026	0
	0.619	16.776	49.52	-3.856	49.807	15.532	0	0
	1.238	32.613	44.737	-8.639	44.87	32.12	0	0

	1.857	45.796	39.156	-14.22	39.253	45.495	0	0
	2.476	54.933	32.898	-20.478	33.29	53.961	0	0
	3.095	58.434	26.357	-27.019	27.073	57.105	0	0
	3.714	55.853	19.79	-33.586	20.825	54.571	0	0
	4.333	47.371	13.464	-39.912	14.77	46.562	0	0
	4.952	33.833	9.131	-45.731	9.131	33.833	0	0
	5.571	17.691	4.134	-49.242	5.918	3.663	0	0
6	0	7.327	5.918	-1.184	53.635	0	-1.934	0
	0.619	16.111	50.484	-2.892	50.703	14.889	0	0
	1.238	32.466	46.82	-6.556	46.924	31.948	0	0
	1.857	47.573	42.397	-10.979	42.469	47.26	0	0
	2.476	59.983	37.225	-16.15	37.518	58.898	0	0
	3.095	67.65	31.518	-21.858	32.051	66	0	0
	3.714	69.301	25.387	-27.989	26.156	67.397	0	0
	4.333	63.933	18.948	-34.428	19.917	62.133	0	0
	4.952	50.83	12.317	-41.059	13.421	49.464	0	0
	5.571	29.566	5.611	-47.765	6.754	28.859	0	0
	6.19	0	4.433	-54.365	4.433	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	54.365	-4.433	-4.433	0	0	0
	0.619	-2.744	0	-4.433	-6.753	28.859	0	0
	1.238	-5.488	0	-4.433	-13.421	49.464	0	0
	1.857	-8.233	0	-4.433	-19.917	62.133	0	0
	2.476	-10.977	0	-4.433	-26.156	67.397	0	0
	3.095	-13.721	0	-4.433	-32.051	66	0	0
	3.714	-16.465	0	-4.433	-37.518	58.898	0	0
	4.333	-19.209	0	-4.433	-42.469	47.26	0	0
	4.952	-21.954	0	-4.433	-46.924	31.948	0	0
	5.571	-24.698	0	-4.433	-50.703	14.889	0	0
2	0	-33.995	6.964	-37.518	-53.635	0	-1.934	0
	0.619	-29.685	6.964	0	-5.918	3.663	0	0
	1.238	-25.434	5.256	0	-9.131	33.833	0	0
	1.857	-22.334	4.732	0	-14.77	46.562	0	0
	2.476	-19.72	3.714	0	-20.825	54.571	0	0
	3.095	-18.089	1.759	0	-27.073	57.105	0	0
	3.714	-17.908	0	-1.234	-33.29	53.961	0	0
	4.333	-19.073	0	-2.51	-39.253	45.495	0	0
	4.952	-22.051	0	-5.497	-44.87	32.12	0	0
	5.571	-25.643	0	-5.918	-49.807	15.532	0	0
3	0	-29.307	37.954	-5.918	-53.718	0	-2.026	0
	0.619	-24.856	5.83	0	-6.133	4.196	0	0
	1.238	-21.247	5.83	0	-8.823	32.71	0	0
	1.857	-18.464	4.339	0	-14.585	46.007	0	0
	2.476	-16.343	2.746	0	-21.1	55.238	0	0
	3.095	-15.435	0.232	0	-27.806	58.421	0	0
	3.714	-16.394	0	-2.622	-34.44	55.312	0	0
	4.333	-18.82	0	-5.889	-40.74	46.319	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 12 FB 9

	4.952	-22.465	0	-5.889	-46.48	32.366	0	0
	5.571	-26.176	0	-6.133	-51.368	15.216	0	0
4	0	-29.973	38.385	-6.133	-55.086	0	-2.835	0
	0.619	-26.176	6.133	0	-5.83	4.016	0	0
	1.238	-22.465	5.889	0	-8.644	32.097	0	0
	1.857	-18.82	5.889	0	-14.461	45.692	0	0
	2.476	-16.394	2.622	0	-20.808	54.617	0	0
	3.095	-15.435	0	-0.232	-27.415	57.819	0	0
	3.714	-16.343	0	-2.746	-34.01	54.912	0	0
	4.333	-18.464	0	-4.339	-40.319	46.188	0	0
	4.952	-21.247	0	-5.83	-46.069	32.612	0	0
	5.571	-24.856	0	-5.83	-50.989	15.823	0	0
5	0	-29.307	5.918	-37.954	-54.774	0	-2.03	0
	0.619	-25.643	5.918	0	-6.964	4.798	0	0
	1.238	-22.051	5.497	0	-8.639	32.613	0	0
	1.857	-19.073	2.51	0	-14.22	45.796	0	0
	2.476	-17.908	1.234	0	-20.478	54.933	0	0
	3.095	-18.089	0	-1.759	-27.019	58.434	0	0
	3.714	-19.72	0	-3.714	-33.586	55.853	0	0
	4.333	-22.334	0	-4.732	-39.912	47.371	0	0
	4.952	-25.434	0	-5.256	-45.731	33.833	0	0
	5.571	-29.685	0	-6.964	-50.781	16.738	0	0
6	0	-33.995	37.518	-6.964	-54.763	0	-1.916	0
	0.619	-24.698	4.433	0	-2.892	16.111	0	0
	1.238	-21.954	4.433	0	-6.556	32.466	0	0
	1.857	-19.209	4.433	0	-10.979	47.573	0	0
	2.476	-16.465	4.433	0	-16.15	59.983	0	0
	3.095	-13.721	4.433	0	-21.858	67.65	0	0
	3.714	-10.977	4.433	0	-27.989	69.301	0	0
	4.333	-8.233	4.433	0	-34.428	63.933	0	0
	4.952	-5.488	4.433	0	-41.059	50.83	0	0
	5.571	-2.744	4.433	0	-47.765	29.566	0	0
	6.19	0	4.433	-54.365	-54.365	0	0	0

Support    Reac. Pos    Reac. Negative

1	4.433	-54.432
2	7.102	-55.231
3	9.447	-55.184
4	8.772	-55.964
5	9.447	-55.184
6	7.102	-55.231
7	4.433	-54.432

Id Group 4, HS-20 Lane Operating: 1.3\*1.0(Lane+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	27.711	-2.255	27.711	0	0	0
	0.619	10.695	17.08	-0.902	24.086	14.909	0	0
	1.238	18.365	14.438	-3.544	20.521	25.405	0	0
	1.857	23.116	11.854	-6.128	17.088	31.732	0	0
	2.476	25.127	9.357	-8.625	13.827	34.236	0	0
	3.095	24.649	6.975	-11.007	10.778	33.359	0	0
	3.714	22.005	4.738	-13.244	7.981	29.641	0	0
	4.333	17.587	2.674	-15.308	5.472	23.712	0	0
	4.952	11.866	1.036	-16.946	3.291	16.297	0	0
	5.571	5.866	0.679	-17.303	1.473	8.208	0	0
2	0	2.695	0.435	-2.177	28.384	0	-2.666	0
	0.619	6.3	16.95	-1.032	25.954	6.955	-1.654	0
	1.238	12.133	16.074	-1.908	23.174	15.741	-0.723	0
	1.857	17.069	13.855	-4.127	20.123	22.555	-0.104	0
	2.476	20.17	11.419	-6.563	16.913	26.817	0	0
	3.095	21.181	8.918	-9.064	13.654	28.226	0	0
	3.714	20.035	6.428	-11.554	10.457	26.755	0	0
	4.333	16.851	4.024	-13.958	7.428	22.644	0	0
	4.952	11.96	2.18	-15.802	4.676	16.399	0	0
	5.571	6.355	1.063	-16.919	3.815	2.956	0	0
3	0	3.885	2.758	-1.008	28.69	0	-1.964	0
	0.619	6.417	16.919	-1.063	25.992	6.771	-1.447	0
	1.238	12.039	15.759	-2.223	23.27	15.375	-0.542	0
	1.857	16.905	13.904	-4.078	20.246	22.166	0	0
	2.476	20.026	11.472	-6.51	17.04	26.496	0	0
	3.095	21.085	8.963	-9.019	13.766	28.011	0	0
	3.714	19.988	6.455	-11.527	10.54	26.642	0	0
	4.333	16.834	4.026	-13.956	7.474	22.604	0	0
	4.952	11.943	2.176	-15.806	4.68	16.384	0	0
	5.571	6.307	1.02	-16.962	3.194	2.508	0	0
4	0	3.275	2.307	-2.307	28.659	0	-2.2	0
	0.619	6.307	16.962	-1.02	26.041	6.641	-1.548	0
	1.238	11.943	15.806	-2.176	23.325	15.259	-0.619	0
	1.857	16.834	13.956	-4.026	20.306	22.08	0	0
	2.476	19.988	11.527	-6.455	17.102	26.449	0	0
	3.095	21.085	9.019	-8.963	13.829	28.008	0	0
	3.714	20.026	6.51	-11.472	10.602	26.682	0	0
	4.333	16.905	4.078	-13.904	7.533	22.681	0	0
	4.952	12.039	2.223	-15.759	4.733	16.488	0	0
	5.571	6.417	1.063	-16.919	3.187	2.553	0	0
5	0	3.885	1.008	-2.758	28.614	0	-1.965	0
	0.619	6.355	16.919	-1.063	25.992	6.69	-1.473	0
	1.238	11.96	15.802	-2.18	23.315	15.275	-0.595	0



	1.857	16.851	13.958	-4.024	20.334	22.11	-0.029	0
	2.476	20.035	11.554	-6.428	17.164	26.536	0	0
	3.095	21.181	9.064	-8.918	13.914	28.175	0	0
	3.714	20.17	6.563	-11.419	10.696	26.925	0	0
	4.333	17.069	4.127	-13.855	7.618	22.955	0	0
	4.952	12.133	1.908	-16.074	4.786	16.697	0	0
	5.571	6.3	1.032	-16.95	3.035	1.932	0	0
6	0	2.695	2.177	-0.435	28.694	0	-2.676	0
	0.619	5.866	17.303	-0.679	26.634	6.243	-1.597	0
	1.238	11.866	16.946	-1.036	24.49	15.188	-0.611	0
	1.857	17.587	15.308	-2.674	22.041	23.042	0	0
	2.476	22.005	13.244	-4.738	19.335	29.067	0	0
	3.095	24.649	11.007	-6.975	16.417	32.642	0	0
	3.714	25.127	8.625	-9.357	13.332	33.262	0	0
	4.333	23.116	6.128	-11.854	10.125	30.534	0	0
	4.952	18.365	3.544	-14.438	6.84	24.178	0	0
	5.571	10.695	0.902	-17.08	3.521	14.021	-0.023	0
	6.19	0	2.255	-27.711	2.255	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	27.711	-2.255	-2.255	0	0	0
	0.619	-1.069	0	-1.727	-3.521	14.021	-0.023	0
	1.238	-2.139	0	-1.727	-6.84	24.178	0	0
	1.857	-3.208	0	-1.727	-10.125	30.534	0	0
	2.476	-4.277	0	-1.728	-13.332	33.262	0	0
	3.095	-5.347	0	-1.728	-16.417	32.642	0	0
	3.714	-6.416	0	-1.728	-19.335	29.067	0	0
	4.333	-7.485	0	-1.728	-22.041	23.042	0	0
	4.952	-8.56	0	-1.951	-24.49	15.188	-0.611	0
	5.571	-14.125	0	-11.935	-26.634	6.243	-1.597	0
2	0	-23.157	15.68	-16.505	-28.694	0	-2.676	0
	0.619	-14.522	10.449	0	-3.035	1.932	0	0
	1.238	-9.773	0.784	0	-4.786	16.697	0	0
	1.857	-9.461	0.505	0	-7.618	22.955	0	0
	2.476	-9.148	0.505	0	-10.696	26.925	0	0
	3.095	-8.835	0.505	0	-13.914	28.175	0	0
	3.714	-8.522	0.505	0	-17.164	26.536	0	0
	4.333	-8.21	0.505	0	-20.334	22.11	-0.029	0
	4.952	-8.601	0	-2.379	-23.315	15.275	-0.595	0
	5.571	-13.124	0	-12.252	-25.992	6.69	-1.473	0
3	0	-21.689	15.376	-15.386	-28.614	0	-1.965	0
	0.619	-13.123	12.226	0	-3.187	2.553	0	0
	1.238	-8.212	3.689	0	-4.733	16.488	0	0
	1.857	-7.991	0.011	0	-7.533	22.681	0	0
	2.476	-7.984	0.011	0	-10.602	26.682	0	0
	3.095	-7.978	0.011	0	-13.829	28.008	0	0
	3.714	-7.971	0.011	0	-17.102	26.449	0	0
	4.333	-7.964	0.011	0	-20.306	22.08	0	0

	4.952	-8.735	0	-2.543	-23.325	15.259	-0.619	0
	5.571	-13.147	0	-12.252	-26.041	6.641	-1.548	0
4	0	-21.732	24.58	-15.402	-28.659	0	-2.2	0
	0.619	-13.147	12.252	0	-3.194	2.508	0	0
	1.238	-8.735	2.543	0	-4.68	16.384	0	0
	1.857	-7.964	0	-0.011	-7.474	22.604	0	0
	2.476	-7.971	0	-0.011	-10.54	26.642	0	0
	3.095	-7.978	0	-0.011	-13.766	28.011	0	0
	3.714	-7.984	0	-0.011	-17.04	26.496	0	0
	4.333	-7.991	0	-0.011	-20.246	22.166	0	0
	4.952	-8.212	0	-3.689	-23.27	15.375	-0.542	0
	5.571	-13.123	0	-12.226	-25.992	6.771	-1.447	0
5	0	-21.689	15.386	-15.376	-28.69	0	-1.964	0
	0.619	-13.124	12.252	0	-3.815	2.956	0	0
	1.238	-8.601	2.379	0	-4.676	16.399	0	0
	1.857	-8.21	0	-0.505	-7.428	22.644	0	0
	2.476	-8.522	0	-0.505	-10.457	26.755	0	0
	3.095	-8.835	0	-0.505	-13.654	28.226	0	0
	3.714	-9.148	0	-0.505	-16.913	26.817	0	0
	4.333	-9.461	0	-0.505	-20.123	22.555	-0.104	0
	4.952	-9.773	0	-3.191	-23.174	15.741	-0.723	0
	5.571	-14.522	0	-10.449	-25.954	6.955	-1.654	0
6	0	-23.157	16.505	-15.68	-28.384	0	-2.666	0
	0.619	-14.125	11.935	0	-1.473	8.208	0	0
	1.238	-8.56	1.951	0	-3.291	16.297	0	0
	1.857	-7.485	1.728	0	-5.472	23.712	0	0
	2.476	-6.416	1.728	0	-7.981	29.641	0	0
	3.095	-5.347	1.728	0	-10.778	33.359	0	0
	3.714	-4.277	1.728	0	-13.827	34.236	0	0
	4.333	-3.208	1.727	0	-17.088	31.732	0	0
	4.952	-2.139	1.727	0	-20.521	25.405	0	0
	5.571	-1.069	1.727	0	-24.086	14.909	0	0
	6.19	0	2.255	-27.711	-27.711	0	0	0

Support	Reac. Pos	Reac. Negative
1	2.255	-27.743
2	3.624	-30.901
3	5.088	-30.571
4	4.281	-30.693
5	5.088	-30.571
6	3.624	-30.901
7	2.255	-27.711

Id Group 2, HS-20 Lane Inventory: 1.3\*1.67\*(Lane+IM)\*DF  
 Type Combination

Maximum table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	46.267	-3.765	46.267	0	0	0
	0.619	17.857	28.519	-1.505	40.216	24.894	0	0
	1.238	30.663	24.107	-5.917	34.263	42.418	0	0
	1.857	38.596	19.793	-10.231	28.531	52.981	0	0
	2.476	41.954	15.623	-14.401	23.087	57.162	0	0
	3.095	41.156	11.646	-18.378	17.996	55.699	0	0
	3.714	36.741	7.91	-22.114	13.325	49.49	0	0
	4.333	29.364	4.464	-25.56	9.137	39.592	0	0
	4.952	19.813	1.729	-28.295	5.495	27.21	0	0
	5.571	9.794	1.134	-28.89	2.46	13.704	0	0
2	0	4.5	0.727	-3.635	47.392	0	-4.451	0
	0.619	10.519	28.301	-1.723	43.334	11.613	-2.761	0
	1.238	20.258	26.838	-3.186	38.694	26.282	-1.207	0
	1.857	28.5	23.133	-6.891	33.599	37.659	-0.173	0
	2.476	33.678	19.066	-10.958	28.238	44.776	0	0
	3.095	35.366	14.891	-15.133	22.798	47.129	0	0
	3.714	33.453	10.733	-19.291	17.459	44.672	0	0
	4.333	28.136	6.718	-23.306	12.403	37.808	0	0
	4.952	19.969	3.639	-26.385	7.807	27.381	0	0
	5.571	10.61	1.776	-28.248	6.369	4.935	0	0
3	0	6.487	4.605	-1.683	47.902	0	-3.28	0
	0.619	10.714	28.249	-1.775	43.399	11.306	-2.416	0
	1.238	20.101	26.312	-3.712	38.853	25.671	-0.906	0
	1.857	28.226	23.214	-6.81	33.805	37.01	0	0
	2.476	33.436	19.155	-10.869	28.451	44.24	0	0
	3.095	35.205	14.966	-15.058	22.985	46.769	0	0
	3.714	33.374	10.778	-19.246	17.598	44.484	0	0
	4.333	28.107	6.722	-23.302	12.48	37.74	0	0
	4.952	19.941	3.633	-26.391	7.815	27.355	0	0
	5.571	10.531	1.703	-28.321	5.332	4.188	0	0
4	0	5.469	3.851	-3.851	47.852	0	-3.674	0
	0.619	10.531	28.321	-1.703	43.479	11.088	-2.585	0
	1.238	19.941	26.391	-3.633	38.945	25.478	-1.033	0
	1.857	28.107	23.302	-6.722	33.905	36.866	-0.001	0
	2.476	33.374	19.246	-10.778	28.555	44.161	0	0
	3.095	35.205	15.058	-14.966	23.09	46.763	0	0
	3.714	33.436	10.869	-19.155	17.701	44.55	0	0
	4.333	28.226	6.81	-23.214	12.577	37.869	0	0
	4.952	20.101	3.712	-26.312	7.903	27.53	0	0
	5.571	10.714	1.775	-28.249	5.322	4.263	0	0
5	0	6.487	1.683	-4.605	47.776	0	-3.281	0
	0.619	10.61	28.248	-1.776	43.398	11.17	-2.46	0
	1.238	19.969	26.385	-3.639	38.928	25.504	-0.993	0

	1.857	28.136	23.306	-6.718	33.952	36.916	-0.049	0
	2.476	33.453	19.291	-10.733	28.658	44.306	0	0
	3.095	35.366	15.133	-14.891	23.232	47.043	0	0
	3.714	33.678	10.958	-19.066	17.859	44.957	0	0
	4.333	28.5	6.891	-23.133	12.72	38.327	0	0
	4.952	20.258	3.186	-26.838	7.991	27.878	0	0
	5.571	10.519	1.723	-28.301	5.068	3.227	0	0
6	0	4.5	3.635	-0.727	47.91	0	-4.468	0
	0.619	9.794	28.89	-1.134	44.47	10.424	-2.666	0
	1.238	19.813	28.295	-1.729	40.89	25.359	-1.019	0
	1.857	29.364	25.56	-4.464	36.802	38.473	0	0
	2.476	36.741	22.114	-7.91	32.283	48.532	0	0
	3.095	41.156	18.378	-11.646	27.411	54.501	0	0
	3.714	41.954	14.401	-15.623	22.26	55.536	0	0
	4.333	38.596	10.231	-19.793	16.905	50.982	0	0
	4.952	30.663	5.917	-24.107	11.421	40.369	0	0
	5.571	17.857	1.505	-28.519	5.878	23.411	-0.038	0
	6.19	0	3.765	-46.267	3.765	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	46.267	-3.765	-3.765	0	0	0
	0.619	-1.785	0	-2.884	-5.878	23.411	-0.038	0
	1.238	-3.571	0	-2.884	-11.421	40.369	0	0
	1.857	-5.356	0	-2.884	-16.905	50.982	0	0
	2.476	-7.142	0	-2.884	-22.26	55.536	0	0
	3.095	-8.927	0	-2.884	-27.411	54.501	0	0
	3.714	-10.713	0	-2.884	-32.283	48.532	0	0
	4.333	-12.498	0	-2.884	-36.802	38.473	0	0
	4.952	-14.292	0	-3.258	-40.89	25.359	-1.019	0
	5.571	-23.584	0	-19.927	-44.47	10.424	-2.666	0
2	0	-38.665	26.181	-27.558	-47.91	0	-4.468	0
	0.619	-24.248	17.446	0	-5.068	3.227	0	0
	1.238	-16.318	1.31	0	-7.991	27.878	0	0
	1.857	-15.796	0.844	0	-12.72	38.327	0	0
	2.476	-15.274	0.844	0	-17.859	44.957	0	0
	3.095	-14.752	0.844	0	-23.232	47.043	0	0
	3.714	-14.23	0.844	0	-28.658	44.306	0	0
	4.333	-13.707	0.844	0	-33.952	36.916	-0.049	0
	4.952	-14.361	0	-3.971	-38.928	25.504	-0.993	0
	5.571	-21.912	0	-20.456	-43.398	11.17	-2.46	0
3	0	-36.213	25.673	-25.69	-47.776	0	-3.281	0
	0.619	-21.911	20.413	0	-5.322	4.263	0	0
	1.238	-13.711	6.159	0	-7.903	27.53	0	0
	1.857	-13.342	0.018	0	-12.577	37.869	0	0
	2.476	-13.331	0.018	0	-17.701	44.55	0	0
	3.095	-13.32	0.018	0	-23.09	46.763	0	0
	3.714	-13.309	0.018	0	-28.555	44.161	0	0
	4.333	-13.297	0.018	0	-33.905	36.866	-0.001	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 12 FB 9

	4.952	-14.585	0	-4.245	-38.945	25.478	-1.033	0
	5.571	-21.95	0	-20.457	-43.479	11.088	-2.585	0
4	0	-36.285	41.041	-25.716	-47.852	0	-3.674	0
	0.619	-21.95	20.457	0	-5.332	4.188	0	0
	1.238	-14.585	4.245	0	-7.815	27.355	0	0
	1.857	-13.297	0	-0.018	-12.48	37.74	0	0
	2.476	-13.309	0	-0.018	-17.598	44.484	0	0
	3.095	-13.32	0	-0.018	-22.985	46.769	0	0
	3.714	-13.331	0	-0.018	-28.451	44.24	0	0
	4.333	-13.342	0	-0.018	-33.805	37.01	0	0
	4.952	-13.711	0	-6.159	-38.853	25.671	-0.906	0
	5.571	-21.911	0	-20.413	-43.399	11.306	-2.416	0
5	0	-36.213	25.69	-25.673	-47.902	0	-3.28	0
	0.619	-21.912	20.456	0	-6.369	4.935	0	0
	1.238	-14.361	3.971	0	-7.807	27.381	0	0
	1.857	-13.707	0	-0.844	-12.403	37.808	0	0
	2.476	-14.23	0	-0.844	-17.459	44.672	0	0
	3.095	-14.752	0	-0.844	-22.798	47.129	0	0
	3.714	-15.274	0	-0.844	-28.238	44.776	0	0
	4.333	-15.796	0	-0.844	-33.599	37.659	-0.173	0
	4.952	-16.318	0	-5.328	-38.694	26.282	-1.207	0
	5.571	-24.248	0	-17.446	-43.334	11.613	-2.761	0
6	0	-38.665	27.558	-26.181	-47.392	0	-4.451	0
	0.619	-23.584	19.927	0	-2.46	13.704	0	0
	1.238	-14.292	3.258	0	-5.495	27.21	0	0
	1.857	-12.498	2.884	0	-9.137	39.592	0	0
	2.476	-10.713	2.884	0	-13.325	49.49	0	0
	3.095	-8.927	2.884	0	-17.996	55.699	0	0
	3.714	-7.142	2.884	0	-23.087	57.162	0	0
	4.333	-5.356	2.884	0	-28.531	52.981	0	0
	4.952	-3.571	2.884	0	-34.263	42.418	0	0
	5.571	-1.785	2.884	0	-40.216	24.894	0	0
	6.19	0	3.765	-46.267	-46.267	0	0	0

Support	Reac. Pos	Reac. Negative
1	3.765	-46.322
2	6.052	-51.594
3	8.495	-51.044
4	7.148	-51.247
5	8.495	-51.044
6	6.052	-51.594
7	3.765	-46.267

Id Group 9, HS-15 Truck Fatigue: (truck+IM)\*DF  
 Type Combination

Maximumss table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	16.37	-1.301	16.37	0	0	0
	0.619	8.873	14.334	-1.978	14.334	8.873	0	0
	1.238	15.219	12.294	-4.018	12.294	15.219	0	0
	1.857	19.124	10.298	-6.013	10.298	19.124	0	0
	2.476	20.741	8.377	-7.935	8.377	20.741	0	0
	3.095	20.296	6.558	-9.754	6.558	20.296	0	0
	3.714	18.082	4.869	-11.443	4.869	18.082	0	0
	4.333	14.466	3.339	-12.973	3.339	14.466	0	0
	4.952	9.922	2.004	-14.308	2.004	9.922	0	0
	5.571	4.924	0.884	-15.428	0.884	4.924	0	0
2	0	2.158	0.349	-1.743	16.407	0	-0.178	0
	0.619	5.406	15.048	-1.263	15.164	5.335	0	0
	1.238	10.339	13.633	-2.791	13.633	10.339	0	0
	1.857	14.29	11.897	-4.415	11.897	14.29	0	0
	2.476	16.774	10.026	-6.285	10.026	16.774	0	0
	3.095	17.553	8.093	-8.219	8.093	17.553	0	0
	3.714	16.565	6.168	-10.143	6.168	16.565	0	0
	4.333	13.926	4.323	-11.988	4.323	13.926	0	0
	4.952	9.966	2.64	-13.672	2.64	9.966	0	0
	5.571	5.127	1.179	-15.133	2.168	1.64	0	0
3	0	2.982	2.168	-0.723	16.411	0	-0.193	0
	0.619	5.161	15.106	-1.206	15.225	5.08	0	0
	1.238	9.996	13.615	-2.696	13.731	9.989	0	0
	1.857	13.945	12.014	-4.298	12.014	13.945	0	0
	2.476	16.517	10.015	-6.297	10.147	16.492	0	0
	3.095	17.406	8.065	-8.247	8.205	17.36	0	0
	3.714	16.514	6.12	-10.191	6.263	16.46	0	0
	4.333	13.938	4.256	-12.056	4.395	13.891	0	0
	4.952	9.971	2.686	-13.625	2.686	9.971	0	0
	5.571	5.143	1.2	-15.112	1.782	1.227	0	0
4	0	2.33	1.782	-1.782	16.426	0	-0.214	0
	0.619	5.143	15.112	-1.2	15.252	5.046	0	0
	1.238	9.971	13.625	-2.686	13.767	9.961	0	0
	1.857	13.938	12.056	-4.256	12.056	13.938	0	0
	2.476	16.514	10.191	-6.12	10.191	16.514	0	0
	3.095	17.406	8.247	-8.065	8.247	17.406	0	0
	3.714	16.517	6.297	-10.015	6.297	16.517	0	0
	4.333	13.945	4.298	-12.014	4.414	13.931	0	0
	4.952	9.996	2.696	-13.615	2.696	9.996	0	0
	5.571	5.161	1.206	-15.106	1.784	1.221	0	0
5	0	2.982	0.723	-2.168	16.33	0	-0.193	0
	0.619	5.127	15.133	-1.179	15.155	5.032	0	0
	1.238	9.966	13.672	-2.64	13.682	9.929	0	0

## SECTION I

## CONSYS

## Section I Fascia 1 Unit 12 FB 9

	1.857	13.926	11.988	-4.323	11.996	13.903	0	0
	2.476	16.565	10.143	-6.168	10.173	16.491	0	0
	3.095	17.553	8.219	-8.093	8.273	17.451	0	0
	3.714	16.774	6.285	-10.026	6.364	16.677	0	0
	4.333	14.29	4.415	-11.897	4.514	14.229	0	0
	4.952	10.339	2.791	-13.633	2.791	10.339	0	0
	5.571	5.406	1.263	-15.048	1.743	1.079	0	0
6	0	2.158	1.743	-0.349	16.325	0	-0.185	0
	0.619	4.924	15.428	-0.884	15.444	4.833	0	0
	1.238	9.922	14.308	-2.004	14.316	9.884	0	0
	1.857	14.466	12.973	-3.339	12.986	14.41	0	0
	2.476	18.082	11.443	-4.869	11.473	17.969	0	0
	3.095	20.296	9.754	-6.558	9.803	20.145	0	0
	3.714	20.741	7.935	-8.377	8	20.58	0	0
	4.333	19.124	6.013	-10.298	6.092	18.979	0	0
	4.952	15.219	4.018	-12.294	4.103	15.114	0	0
	5.571	8.873	1.978	-14.334	2.064	8.819	0	0
	6.19	0	1.301	-16.37	1.301	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	16.37	-1.301	-1.301	0	0	0
	0.619	-0.805	0	-1.301	-2.064	8.819	0	0
	1.238	-1.61	0	-1.301	-4.103	15.114	0	0
	1.857	-2.415	0	-1.301	-6.092	18.979	0	0
	2.476	-3.22	0	-1.301	-8	20.58	0	0
	3.095	-4.025	0	-1.301	-9.803	20.145	0	0
	3.714	-4.83	0	-1.301	-11.473	17.969	0	0
	4.333	-5.635	0	-1.301	-12.986	14.41	0	0
	4.952	-6.44	0	-1.301	-14.316	9.884	0	0
	5.571	-7.245	0	-1.301	-15.444	4.833	0	0
2	0	-10.439	2.168	-11.473	-16.325	0	-0.185	0
	0.619	-9.096	2.168	0	-1.743	1.079	0	0
	1.238	-7.754	2.168	0	-2.791	10.339	0	0
	1.857	-6.513	1.951	0	-4.514	14.229	0	0
	2.476	-5.306	1.951	0	-6.364	16.677	0	0
	3.095	-4.098	1.951	0	-8.273	17.451	0	0
	3.714	-4.482	0	-1.534	-10.173	16.491	0	0
	4.333	-5.431	0	-1.534	-11.996	13.903	0	0
	4.952	-6.474	0	-1.743	-13.682	9.929	0	0
	5.571	-7.553	0	-1.743	-15.155	5.032	0	0
3	0	-8.699	1.782	-10.173	-16.33	0	-0.193	0
	0.619	-7.596	1.782	0	-1.784	1.221	0	0
	1.238	-6.493	1.782	0	-2.696	9.996	0	0
	1.857	-5.453	1.668	0	-4.414	13.931	0	0
	2.476	-4.421	1.668	0	-6.297	16.517	0	0
	3.095	-3.402	1.56	0	-8.247	17.406	0	0
	3.714	-4.369	0	-1.636	-10.191	16.514	0	0
	4.333	-5.406	0	-1.784	-12.056	13.938	0	0

	4.952	-6.511	0	-1.784	-13.767	9.961	0	0
	5.571	-7.615	0	-1.784	-15.252	5.046	0	0
4	0	-8.72	10.191	-10.191	-16.426	0	-0.214	0
	0.619	-7.615	1.784	0	-1.782	1.227	0	0
	1.238	-6.511	1.784	0	-2.686	9.971	0	0
	1.857	-5.406	1.784	0	-4.395	13.891	0	0
	2.476	-4.369	1.636	0	-6.263	16.46	0	0
	3.095	-3.402	0	-1.56	-8.205	17.36	0	0
	3.714	-4.421	0	-1.668	-10.147	16.492	0	0
	4.333	-5.453	0	-1.668	-12.014	13.945	0	0
	4.952	-6.493	0	-1.782	-13.731	9.989	0	0
	5.571	-7.596	0	-1.782	-15.225	5.08	0	0
5	0	-8.699	10.173	-1.782	-16.411	0	-0.193	0
	0.619	-7.553	1.743	0	-2.168	1.64	0	0
	1.238	-6.474	1.743	0	-2.64	9.966	0	0
	1.857	-5.431	1.534	0	-4.323	13.926	0	0
	2.476	-4.482	1.534	0	-6.168	16.565	0	0
	3.095	-4.098	0	-1.951	-8.093	17.553	0	0
	3.714	-5.306	0	-1.951	-10.026	16.774	0	0
	4.333	-6.513	0	-1.951	-11.897	14.29	0	0
	4.952	-7.754	0	-2.168	-13.633	10.339	0	0
	5.571	-9.096	0	-2.168	-15.164	5.335	0	0
6	0	-10.439	11.473	-2.168	-16.407	0	-0.178	0
	0.619	-7.245	1.301	0	-0.884	4.924	0	0
	1.238	-6.44	1.301	0	-2.004	9.922	0	0
	1.857	-5.635	1.301	0	-3.339	14.466	0	0
	2.476	-4.83	1.301	0	-4.869	18.082	0	0
	3.095	-4.025	1.301	0	-6.558	20.296	0	0
	3.714	-3.22	1.301	0	-8.377	20.741	0	0
	4.333	-2.415	1.301	0	-10.298	19.124	0	0
	4.952	-1.61	1.301	0	-12.294	15.219	0	0
	5.571	-0.805	1.301	0	-14.334	8.873	0	0
	6.19	0	1.301	-16.37	-16.37	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.301	-16.391
2	2.092	-16.529
3	2.891	-16.45
4	2.259	-16.47
5	2.891	-16.45
6	2.092	-16.529
7	1.301	-16.391



Id Group 8, Ohio 5C1 Operating: 1.3\*1.0(Truck+IM)\*DF  
 Type Combination

Maximums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	25.847	-1.83	25.847	0	0	0
	0.617	13.235	21.451	0	21.451	13.235	0	0
	1.234	21.323	17.28	-3.21	17.28	21.323	0	0
	1.851	24.901	13.453	-7.037	13.453	24.901	0	0
	2.468	26.556	10.76	-9.73	10.76	26.556	0	0
	3.085	26.211	8.496	-11.994	8.496	26.211	0	0
	3.702	23.577	6.369	-14.121	6.369	23.577	0	0
	4.319	19.824	3.077	-17.414	3.17	13.69	0	0
	4.936	13.087	0	-21.724	1.896	9.36	0	0
	5.553	4.524	0.815	-13.649	0.815	4.524	0	0
2	0	2.995	0.485	-2.405	27.475	0	-7.633	0
	0.621	4.799	13.346	-1.118	23.635	4.274	0	0
	1.242	13.098	19.46	-1.03	19.886	3.331	0	0
	1.863	18.452	15.695	-4.795	17.763	10.296	0	0
	2.484	20.373	11.997	-8.493	15.145	16.084	0	0
	3.105	19.878	12.089	-8.401	12.089	19.878	0	0
	3.726	20.997	8.648	-11.842	8.648	20.997	0	0
	4.347	18.898	4.882	-15.609	4.882	18.898	0	0
	4.968	13.27	0.913	-19.577	3.008	0.212	0	0
	5.589	4.829	1.108	-13.356	3.008	2.081	0	0
3	0	3.949	3.008	-0.807	27.487	0	-8.032	0
	0.621	5.84	13.101	-1.362	23.683	3.72	0	0
	1.242	13.7	19.286	-1.204	19.702	12.527	0	0
	1.863	19.189	15.335	-5.155	17.504	10.937	0	0
	2.484	21.178	11.634	-8.856	14.979	16.271	0	0
	3.105	20.072	8.302	-12.188	12.008	19.747	0	0
	3.726	20.687	8.637	-11.853	8.637	20.687	0	0
	4.347	18.531	4.916	-15.574	4.916	18.531	0	0
	4.968	12.933	0.973	-19.517	2.548	9.478	0	0
	5.589	4.894	1.139	-13.325	2.473	1.72	0	0
4	0	3.256	2.473	-0.672	27.126	0	-7.585	0
	0.621	4.628	13.372	-1.091	23.391	3.885	0	0
	1.242	13.344	19.258	-1.232	19.492	12.502	0	0
	1.863	18.803	15.335	-5.155	17.27	10.865	0	0
	2.484	20.853	11.673	-8.817	14.649	15.578	0	0
	3.105	19.916	8.396	-12.094	11.633	18.904	0	0
	3.726	19.753	8.232	-12.258	8.25	19.734	0	0
	4.347	17.561	4.49	-16	4.591	17.511	0	0
	4.968	11.99	0.726	-19.764	2.541	0.314	0	0
	5.589	4.39	1.022	-13.442	2.541	1.892	0	0
5	0	3.47	2.541	-0.801	25.486	0	-5.29	0
	0.574	5.189	21.676	0	21.829	4.616	0	0
	1.148	12.644	17.871	-2.619	19.531	3.282	0	0

	1.722	17.128	14.258	-6.232	17.341	8.993	0	0
	2.296	18.877	11.02	-9.47	14.733	13.556	0	0
	2.87	18.41	8.202	-12.288	11.754	16.364	0	0
	3.444	16.923	8.43	-12.06	8.447	16.908	0	0
	4.018	14.784	4.857	-15.633	4.919	14.764	0	0
	4.592	9.772	1.222	-19.268	2.961	0.777	0	0
	5.166	4.966	1.239	-19.251	2.961	2.477	0	0
6	0	4.177	2.961	-1.361	23.132	0	-8.175	0
	0.307	3.984	19.048	-1.442	22.203	0	-4.734	0
	0.614	7.649	17.376	-3.114	21.009	0	-1.274	0
	0.921	10.703	15.51	-4.981	19.563	1.992	0	0
	1.228	12.92	13.476	-7.014	17.874	4.819	0	0
	1.535	14.105	11.301	-9.189	15.947	6.973	0	0
	1.842	14.097	9.01	-11.48	13.791	8.227	0	0
	2.149	12.765	6.631	-13.86	11.411	8.361	0	0
	2.456	10.01	4.187	-16.303	8.816	7.168	0	0
	2.763	5.766	1.707	-18.783	6.011	4.445	0	0
	3.07	0	4.096	-21.25	4.096	0	0	0

## Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	25.847	-1.83	-1.83	0	0	0
	0.617	-1.129	0	-1.83	-2.594	11.042	0	0
	1.234	-2.258	0	-1.83	-5.152	18.927	0	0
	1.851	-3.387	0	-1.83	-7.643	23.779	0	0
	2.468	-4.516	0	-1.83	-10.459	24.758	0	0
	3.085	-5.645	0	-1.83	-13.408	21.849	0	0
	3.702	-6.774	0	-1.83	-15.92	16.918	0	0
	4.319	-7.903	0	-1.83	-17.997	10.767	0	0
	4.936	-9.032	0	-1.83	-21.888	12.277	0	0
	5.553	-12.551	0	-15.92	-25.825	2.196	0	0
2	0	-22.796	17.763	-17.088	-29.35	0	-10.455	0
	0.621	-12.865	3.008	0	-2.405	1.501	0	0
	1.242	-10.996	3.008	0	-2.471	9.183	0	0
	1.863	-9.63	2.196	0	-4.885	18.397	0	0
	2.484	-8.34	2.064	0	-8.508	20.354	0	0
	3.105	-7.436	1.08	0	-11.833	19.289	0	0
	3.726	-7.495	0	-0.967	-14.78	15.799	0	0
	4.347	-8.106	0	-1.049	-17.306	10.564	0	0
	4.968	-8.955	0	-2.405	-19.79	12.475	0	0
	5.589	-11.762	0	-15.008	-23.693	3.671	0	0
3	0	-21.678	16.448	-17.306	-27.402	0	-7.951	0
	0.621	-11.636	14.979	0	-2.388	1.64	0	0
	1.242	-9.033	2.473	0	-2.846	10.545	0	0
	1.863	-8	1.557	0	-5.155	19.189	0	0
	2.484	-7.072	1.464	0	-8.856	21.178	0	0
	3.105	-6.289	1.092	0	-12.188	20.072	0	0
	3.726	-6.955	0	-1.33	-15.106	16.473	0	0
	4.347	-7.791	0	-1.422	-17.569	11.084	0	0

## SECTION I

## CONSYS

## Section I Fascia 2 Unit 19 FB 1

	4.968	-8.742	0	-2.388	-19.92	12.432	0	0
	5.589	-11.669	0	-15.106	-23.922	3.482	0	0
4	0	-21.714	17.249	-16.541	-27.718	0	-8.389	0
	0.621	-11.765	15.264	0	-1.832	1.266	0	0
	1.242	-9.153	2.541	0	-2.559	9.376	0	0
	1.863	-7.663	1.788	0	-5.155	18.803	0	0
	2.484	-6.557	1.658	0	-8.817	20.853	0	0
	3.105	-5.595	1.293	0	-12.094	19.916	0	0
	3.726	-5.638	0	-0.51	-14.944	16.606	0	0
	4.347	-6.079	0	-0.891	-17.333	11.624	0	0
	4.968	-6.698	0	-1.832	-19.958	11.966	0	0
	5.589	-11.235	0	-14.944	-23.935	3.045	0	0
5	0	-20.868	17.341	-15.79	-27.699	0	-8.678	0
	0.574	-11.815	14.733	0	-1.196	4.512	0	0
	1.148	-9.422	2.961	0	-2.743	8.891	0	0
	1.722	-7.722	2.961	0	-6.232	17.128	0	0
	2.296	-6.022	2.961	0	-9.47	18.877	0	0
	2.87	-4.322	2.961	0	-12.288	18.41	0	0
	3.444	-3.011	0	-0.1	-14.678	16.291	0	0
	4.018	-3.094	0	-0.283	-16.632	13.104	0	0
	4.592	-3.444	0	-1.027	-19.424	9.731	0	0
	5.166	-9.824	0	-12.727	-23.227	1.883	0	0
6	0	-17.506	15.947	-14.02	-26.795	0	-8.183	0
	0.307	-12.942	13.791	0	-1.442	3.984	0	0
	0.614	-10.059	4.096	0	-3.114	7.649	0	0
	0.921	-8.802	4.096	0	-4.981	10.703	0	0
	1.228	-7.545	4.096	0	-7.014	12.92	0	0
	1.535	-6.287	4.096	0	-9.189	14.105	0	0
	1.842	-5.03	4.096	0	-11.48	14.097	0	0
	2.149	-3.772	4.096	0	-13.86	12.765	0	0
	2.456	-2.515	4.096	0	-16.303	10.01	0	0
	2.763	-1.257	4.096	0	-18.783	5.766	0	0
	3.07	0	4.096	-21.25	-21.25	0	0	0

Support	Reac. Pos	Reac. Negative
1	1.83	-25.892
2	2.891	-34.9
3	3.815	-33.754
4	3.146	-33.789
5	3.342	-33.131
6	4.322	-30.874
7	4.096	-21.275

# GIRDERS SUMMARY SHEET

## East Approach - Section I

**CUY-2-1441 Load Rating Analysis  
Main Ave Bridge**

Calculated: RAH 3/28/2012

Checked: DBH 4/2/2012

The Rating Factor Summary below was developed using truck trains as per the long span rating approach. Values below reflect the maximum positive and negative moments and maximum shears at supports as well as at locations with deficiencies.

Rating Factor Summary (Main Girders)					
Item	Location/Member	HS20 Inventory	HS20 Operating	5C1 Operating	Fatigue
N. Girder As Built	Pier 37	3.74	6.24	8.46	n/a
N. Girder As Built	Span 1, 57.1' from Pier 37	1.90	3.17	n/a	n/a
N. Girder As Built	Span 1, 68.5' from Pier 37	n/a	n/a	3.90	n/a
N. Girder As Built	Pier 38	1.07	1.79	2.29	n/a
N. Girder As Insp.	Span 2, 26' from Pier 38	2.02	3.37	4.06	n/a
N. Girder As Built	Span 2, 135' from Pier 38	1.03	1.71	2.15	n/a
N. Girder As Built	Pier 39	1.02	1.70	2.19	n/a
N. Girder As Insp.	Span 3, 27' from Pier 39	1.62	2.70	3.18	n/a
N. Girder As Built	Span 3, 117' from Pier 39	0.94	1.57	2.00	n/a
N. Girder As Built	Pier 40	1.02	1.70	2.19	n/a
N. Girder As Built	Span 4, 126' from Pier 40	1.00	1.66	2.11	n/a
N. Girder As Built	East Abutment	2.50	4.18	5.14	n/a
C. Girder As Built	Pier 37	5.63	9.40	9.95	n/a
C. Girder As Built	Span 1, 69.3' from Pier 37	2.15	3.59	3.85	n/a
C. Girder As Built	Pier 38	3.58	5.98	5.96	n/a
C. Girder As Insp.	Span 2, 26' from Pier 38	3.99	6.67	6.55	n/a
C. Girder As Built	Span 2, 135' from Pier 38	2.53	4.23	4.41	n/a
C. Girder As Built	Pier 39	3.87	6.47	6.50	n/a
C. Girder As Insp.	Span 3, 16' from Pier 39	5.47	9.14	9.05	n/a
C. Girder As Built	Span 3 102' from Pier 39	n/a	n/a	4.64	n/a
C. Girder As Built	Span 3, 119' from Pier 39	2.80	4.68	n/a	n/a
C. Girder As Built	Pier 40	3.18	5.31	5.41	n/a
C. Girder As Insp.	Span 4, 58' from Pier 40	2.85	4.76	5.03	n/a
C. Girder As Built	Span 4, 124' from Pier 40	2.27	3.79	3.96	n/a
C. Girder As Built	East Abutment	4.79	8.00	8.19	n/a
S. Girder As Built	Pier 37	2.84	4.73	5.93	n/a
S. Girder As Insp.	Span 1, 43.53' from Pier 37	n/a	n/a	n/a	192.74
S. Girder As Built	Span 1, 81.6' from Pier 37	0.98	1.63	2.06	n/a
S. Girder As Built	Pier 38	1.21	2.01	2.55	n/a
S. Girder As Built	Span 2, 136' from Pier 38	1.04	1.74	2.18	n/a
S. Girder As Insp.	Span 2, 263' from Pier 38	0.88	1.46	1.84	n/a
S. Girder As Built	Pier 39	0.96	1.60	2.02	n/a
S. Girder As Built	Span 3, 71.9' from Pier 39	n/a	n/a	3.50	n/a
S. Girder As Built	Span 3, 86.3' from Pier 39	1.62	2.71	n/a	n/a
S. Girder As Built	Pier 40	0.89	1.49	1.88	n/a
S. Girder As Insp.	Span 4, 55' from Pier40	1.29	2.15	2.65	n/a
S. Girder As Built	Span 4, 122' from Pier 40	1.04	1.73	2.17	n/a
S. Girder As Built	East Abutment	2.44	4.07	4.87	n/a

Where no deficiencies exist, the As Inspected Rating Factor is the same as As Built Rating Factor unless otherwise noted. At locations where deficiencies exist, only the As Inspected Rating Factor is provided.



# GIRDERS SUMMARY SHEET

## East Approach - Section I

CUY-2-1441 Load Rating Analysis  
Main Ave Bridge

Calculated: RAH 3/28/2012  
Checked: DBH 4/2/2012

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 TT Inventory	0.88	31.68	HS17.6
HS20 Operating	1.46	52.56	HS29.2
5C1 Operating	1.84	73.60	185%
Fatigue	192.74 years remaining		

**Section I**

**FOR SPANS > 200 FT.**

**North Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER PIER 37**

*As Inspected:		*As Built:		From Section properties:
M <sub>Cm</sub> =	N/A	K-FT	N/A	K-FT
V <sub>Cm</sub> =	1699.63	K	1699.63	K
F <sub>y</sub> (ksi)=	33			

\*No deficiencies at Location

Unfactored Moment (k-ft)		Unfactored Shear (k)		C*	RF	RF	C*	RF	RF	
M+	M-	V (kip)								
D (k-ft)	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
0.00	0.00	0.00	115.44	191.03		N/A	N/A	1699.63	3.74	6.24
As Inspected HS20 Train Truck										
0.00	0.00	0.00	115.44	191.03		N/A	N/A	1699.63	3.74	6.24
As Built Ohio 5C1 Train Truck										
0.00	0.00	0.00	115.44	140.82		N/A	N/A	1699.63	---	8.46
As Inspected Ohio 5C1 Train Truck										
0.00	0.00	0.00	115.44	140.82		N/A	N/A	1699.63	---	8.46



Made By RAH  
 Checked By DBH

Date 3/26/2012  
 Date 3/27/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Span 1 (57.1' from pier 37 for HS20 TT and 68.5' from pier 37 for OH5C1 TT)**

\*As Inspected: From Section properties:  
 Fy= 33 \*As Built  
 \*\*MCm = 20466.60 K-FT 20466.60 K-FT  
 \*\*VCm = 1699.63 K 1699.63 K

\*No deficiencies at Location

\*\*Moment and Shear Capacity constant @ segment 1 on north girder from Pier 37 to 93.38' (from Pier 37)

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
556.34	4792.75	N/A	N/A	N/A	20466.60	1.90	3.17	N/A	N/A	N/A
As Inspected HS20 Train Truck										
556.34	4792.75	N/A	N/A	N/A	20466.60	1.90	3.17	N/A	N/A	N/A
As Built Ohio 5C1 Train Truck										
-1120.96	3753.34	N/A	N/A	N/A	20466.60	---	3.90	N/A	---	N/A
As Inspected Ohio 5C1 Train Truck										
-1120.96	3753.34	N/A	N/A	N/A	20466.60	---	3.90	N/A	---	N/A



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Pier 38**

*As Inspected:		*As Built	From Section properties:
Fy=	33		
MCm =	50194.21 K-FT	50194.21 K-FT	
VCm =	2713.10 K	2713.10 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-20596.55	N/A	10049.87	528.43	264.97	50194.21	1.07	1.79	2713.10	3.52	5.88
As Inspected HS20 Train Truck										
-20596.55	N/A	10049.87	528.43	264.97	50194.21	1.07	1.79	2713.10	3.52	5.88
As Built Ohio 5C1 Train Truck										
-20596.55	N/A	7851.52	528.43	210.83	50194.21	---	2.29	2713.10	---	7.39
As Inspected Ohio 5C1 Train Truck										
-20596.55	N/A	7851.52	528.43	210.83	50194.21	---	2.29	2713.10	---	7.39





Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Span 2 (Section loss located 26' from Pier 38)**

*As Inspected:	*As Built	From Section properties:
Fy= 33		
MCm = 28842.94 K-FT	30218.27 K-FT	
VCm = 1710.25 K	2085.93 K	

\*Section Loss @ Web

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-8492.87	N/A	4068.79	424.08	239.13	30218.27	2.17	3.63	2085.93	2.96	4.94
As Inspected HS20 Train Truck										
-8492.87	N/A	4068.79	424.08	239.13	28842.94	2.02	3.37	1710.25	2.23	3.73
As Built Ohio 5C1 Train Truck										
-8492.87	N/A	3374.30	424.08	210.08	30218.27	---	4.37	2085.93	---	5.62
As Inspected Ohio 5C1 Train Truck										
-8492.87	N/A	3374.30	424.08	210.08	28842.94	---	4.06	1710.25	---	4.24



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Span 2 (135' from pier 38 for HS20 TT and OH5C1 TT)**

*As Inspected:		*As Built	From Section properties:
Fy=	33		
MCm =	39666.64 K-FT	39666.64 K-FT	
VCm =	1749.87 K	1749.87 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
14594.46	9291.51	N/A	N/A	N/A	39666.64	1.03	1.71		N/A	N/A
As Inspected HS20 Train Truck										
14594.46	9291.51	N/A	N/A	N/A	39666.64	1.03	1.71		N/A	N/A
As Built Ohio 5C1 Train Truck										
14594.46	7409.21	N/A	N/A	N/A	39666.64	---	2.15		---	N/A
As Inspected Ohio 5C1 Train Truck										
14594.46	7409.21	N/A	N/A	N/A	39666.64	---	2.15		---	N/A

**Section I**

**FOR SPANS > 200 FT.**

**North Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Pier 39**

\*As Inspected:

Fy= 33

MCm = 55144.43 K-FT

VCm = 2499.64 K

\*As Built

55144.43 K-FT

2499.64 K

From Section properties:

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-24200.07	N/A	10703.54	-558.80	278.50	55144.43	1.02	1.70	2499.64	2.93	4.90
As Inspected HS20 Train Truck										
-24200.07	N/A	10703.54	-558.80	278.50	55144.43	1.02	1.70	2499.64	2.93	4.90
As Built Ohio 5C1 Train Truck										
-24200.07	N/A	8318.88	-558.80	249.48	55144.43	---	2.19	2499.64	---	5.47
As Inspected Ohio 5C1 Train Truck										
-24200.07	N/A	8318.88	-558.80	249.48	55144.43	---	2.19	2499.64	---	5.47



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Span 3 (Section loss located 27' from Pier 39)**

*As Inspected:		*As Built	
Fy=	33		From Section properties:
MCm =	39548.96 K-FT	44610.99 K-FT	
VCm =	1274.29 K	2527.05 K	

\*Section Loss @ Web

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-12569.44	N/A	5533.97	357.66	230.55	44610.99	2.35	3.93	2527.05	4.12	6.88
As Inspected HS20 Train Truck										
-12569.44	N/A	5533.97	357.66	230.55	39548.96	1.93	3.23	1274.29	1.62	2.70
As Built Ohio 5C1 Train Truck										
-12569.44	N/A	4566.69	357.66	195.49	44610.99	---	4.76	2527.05	---	8.11
As Inspected Ohio 5C1 Train Truck										
-12569.44	N/A	4566.69	357.66	195.49	39548.96	---	3.91	1274.29	---	3.18



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Span 3 (117' from pier 39 for HS20 TT and OH5C1 TT)**

*As Inspected:		*As Built	
Fy =	33		From Section properties:
MCm =	20466.60 K-FT	20466.60 K-FT	
VCm =	1699.63 K	1699.63 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
3898.70	7529.23	N/A	N/A	N/A	20466.60	0.94	1.57		N/A	N/A
As Inspected HS20 Train Truck										
3898.70	7529.23	N/A	N/A	N/A	20466.60	0.94	1.57		N/A	N/A
As Built Ohio 5C1 Train Truck										
3898.70	5922.37	N/A	N/A	N/A	20466.60	---	2.00		---	N/A
As Inspected Ohio 5C1 Train Truck										
3898.70	5922.37	N/A	N/A	N/A	20466.6	---	2.00		---	N/A

**Section I**

**FOR SPANS > 200 FT.**

**North Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Pier 40**

\*As Inspected:

Fy = 33

MCm = 49118.80 K-FT

VCm = 2790.61 K

\*As Built

49118.80 K-FT

2790.61 K

From Section properties:

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-21000.28	N/A	9858.96	537.72	306.26	49118.80	1.02	1.70	2790.61	3.15	5.25
As Inspected HS20 Train Truck										
-21000.28	N/A	9858.96	537.72	306.26	49118.80	1.02	1.70	2790.61	3.15	5.25
As Built Ohio 5C1 Train Truck										
-21000.28	N/A	7660.88	537.72	241.82	49118.80	---	2.19	2790.61	---	6.65
As Inspected Ohio 5C1 Train Truck										
-21000.28	N/A	7660.88	537.72	241.82	49118.80	---	2.19	2790.61	---	6.65



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER Span 4 (126' from pier 40 for HS20 TT and OH5C1 TT)**

*As Inspected:		*As Built	
Fy=	33		From Section properties:
MCm =	39666.64 K-FT	39666.64 K-FT	
VCm =	1749.87 K	1749.87 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
14707.48	9505.87	N/A	N/A	N/A	39666.64	1.00	1.66		N/A	N/A
As Inspected HS20 Train Truck										
14707.48	9505.87	N/A	N/A	N/A	39666.64	1.00	1.66		N/A	N/A
As Built Ohio 5C1 Train Truck										
14707.48	7502.22	N/A	N/A	N/A	39666.64	---	2.11		---	N/A
As Inspected Ohio 5C1 Train Truck										
14707.48	7502.22	N/A	N/A	N/A	39666.64	---	2.11		---	N/A



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER East Abutment**

*As Inspected:		*As Built	From Section properties:
Fy=	33		
MCm =	20466.60 K-FT	20466.60 K-FT	
VCm =	1699.63 K	1699.63 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)		Unfactored Shear (k)		C*	RF	RF	C*	RF	RF	
M+	M-	V (kip)								
D (k-ft)	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
0.00	0.00	0.00	-342.04	230.99		N/A	N/A	1699.63	2.50	4.18
As Inspected HS20 Train Truck										
0.00	0.00	0.00	-342.04	230.99		N/A	N/A	1699.63	2.50	4.18
As Built Ohio 5C1 Train Truck										
0.00	0.00	0.00	-342.04	187.93		N/A	N/A	1699.63	---	5.14
As Inspected Ohio 5C1 Train Truck										
0.00	0.00	0.00	-342.04	187.93		N/A	N/A	1699.63	---	5.14



**Section I**

**FOR SPANS > 200 FT.**

**Center Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER      PIER 37**

*As Inspected:		*As Built:		From Section properties:
MCm =	20466.6	K-FT	20466.6	K-FT
VCm =	1699.632	K	1699.632	K
Fy(ksi)=	33			

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	**M+	**M-	**V (kip)							
D (k-ft)	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built      HS20 Train Truck										
0.00	0.00	0.00	150.32	123.14		N/A	N/A	1699.63	5.63	9.40
As Inspectec HS20 Train Truck										
0.00	0.00	0.00	150.32	123.14		N/A	N/A	1699.63	5.63	9.40
As Built      Ohio 5C1 Train Truck										
0.00	0.00	0.00	150.32	116.31		N/A	N/A	1699.63	---	9.95
As Inspectec Ohio 5C1 Train Truck										
0.00	0.00	0.00	150.32	116.31		N/A	N/A	1699.63	---	9.95

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Span 1 (69.3' from pier 37 for HS20 TT and for OH5C1 TT)**

\*As Inspected: From Section properties:  
 Fy= 33 \*As Built  
 MCm = 20466.60 K-FT 20466.60 K-FT  
 VCm = 1699.63 K 1699.63 K

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
2879.15	3581.93	N/A	N/A	N/A	20466.60	2.15	3.59	N/A	N/A	N/A
As Inspected HS20 Train Truck										
2879.15	3581.93	N/A	N/A	N/A	20466.60	2.15	3.59	N/A	N/A	N/A
As Built Ohio 5C1 Train Truck										
2879.15	3337.30	N/A	N/A	N/A	20466.60	---	3.85	N/A	---	N/A
As Inspected Ohio 5C1 Train Truck										
2879.15	3337.30	N/A	N/A	N/A	20466.60	---	3.85	N/A	---	N/A

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)

**Section I**

**FOR SPANS > 200 FT.**

**Center Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Pier 38**

\*As Inspected:                      \*As Built                      From Section properties:  
 Fy=                      33  
 MCm =                      53037.44 K-FT                      53037.44 K-FT  
 VCm =                      2714.82 K                      2714.82 K

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-19656.36	N/A	3533.88	477.12	131.01	53037.44	3.58	5.98	2714.82	7.36	12.30
As Inspected HS20 Train Truck										
-19656.36	N/A	3533.88	477.12	131.01	53037.44	3.58	5.98	2714.82	7.36	12.30
As Built Ohio 5C1 Train Truck										
-19656.36	N/A	3546.67	477.12	137.15	53037.44	---	5.96	2714.82	---	11.75
As Inspected Ohio 5C1 Train Truck										
-19656.36	N/A	3546.67	477.12	137.15	53037.44	---	5.96	2714.82	---	11.75

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Span 2 (Section loss located 26' from Pier 38)**

*As Inspected:		*As Built	From Section properties:
Fy=	33		
MCm =	29170.91 K-FT	30630.54 K-FT	
VCm =	1565.41 K	1952.28 K	

\*Section Loss @ Web

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-8256.85	N/A	1924.08	383.86	122.99	30630.54	4.76	7.95	1952.28	5.44	9.09
As Inspectec HS20 Train Truck										
-8256.85	N/A	1924.08	383.86	122.99	29170.91	4.41	7.37	1565.41	3.99	6.67
As Built Ohio 5C1 Train Truck										
-8256.85	N/A	1917.35	383.86	125.16	30630.54	---	7.98	1952.28	---	8.93
As Inspectec Ohio 5C1 Train Truck										
-8256.85	N/A	1917.35	383.86	125.16	29170.91	---	7.40	1565.41	---	6.55

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Span 2 (135' from pier 38 for HS20 TT and OH5C1 TT)**

\*As Inspected:                      \*As Built                      From Section properties:  
 Fy=                                      33  
 MCm =                      45528.02 K-FT                      45528.02 K-FT  
 VCm =                      1764.23 K                                      1764.23 K

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
13956.42	4976.90	N/A	N/A	N/A	45528.02	2.53	4.23		N/A	N/A
As Inspected HS20 Train Truck										
13956.42	4976.90	N/A	N/A	N/A	45528.02	2.53	4.23		N/A	N/A
As Built Ohio 5C1 Train Truck										
13956.42	4774.78	N/A	N/A	N/A	45528.02	---	4.41		---	N/A
As Inspected Ohio 5C1 Train Truck										
13956.42	4774.78	N/A	N/A	N/A	45528.02	---	4.41		---	N/A

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)

Section I

FOR SPANS > 200 FT.

Center Girder



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

CENTER GIRDER Pier 39

\*As Inspected: \*As Built  
Fy= 33 From Section properties:  
MCm = 48676.07 K-FT 48676.07 K-FT  
VCm = 2707.93 K 2707.93 K

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-16604.67	N/A	3221.28	-456.54	139.33	48676.07	3.87	6.47	2707.93	6.99	11.67
As Inspectec HS20 Train Truck										
-16604.67	N/A	3221.28	-456.54	139.33	48676.07	3.87	6.47	2707.93	6.99	11.67
As Built Ohio 5C1 Train Truck										
-16604.67	N/A	3203.60	-456.54	137.41	48676.07	---	6.50	2707.93	---	11.84
As Inspectec Ohio 5C1 Train Truck										
-16604.67	N/A	3203.60	-456.54	137.41	48676.07	---	6.50	2707.93	---	11.84

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)



Made By RAH  
 Checked By DBH

Date 3/26/2012  
 Date 4/2/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Span 3 (Section loss located 16' from Pier 39)**

*As Inspected:		*As Built	
Fy=	33		From Section properties:
MCm =	46731.97 K-FT	48676.07 K-FT	
VCm =	2260.19 K	2707.93 K	

\*Section Loss @ Web

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-11343.64	N/A	2691.56	288.65	119.27	48676.07	5.81	9.70	2707.93	9.01	15.04
As Inspectec HS20 Train Truck										
-11343.64	N/A	2691.56	288.65	119.27	46731.97	5.47	9.14	2260.19	7.28	12.16
As Built Ohio 5C1 Train Truck										
-11343.64	N/A	2718.43	288.65	118.87	48676.07	---	9.60	2707.93	---	15.09
As Inspectec Ohio 5C1 Train Truck										
-11343.64	N/A	2718.43	288.65	118.87	46731.97	---	9.05	2260.19	---	12.20

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)

**Section I**

**FOR SPANS > 200 FT.**

**Center Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Span 3 (119' from pier 39 for HS20 TT and 102' from pier 39 OH5C1 TT)**

\*As Inspected:                      \*As Built  
 Fy=                                      33                                      From Section properties:  
 \*\*MCm =    20466.60 K-FT              20466.60 K-FT  
 \*\*VCm =    1699.63 K                      1699.63 K

\*No deficiencies at Location

\*\*Moment and Shear Capacity constant @ segment 22 on center girder from Pier 39 to 156.172' (from Pier 39)

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
899.87	3168.85	N/A	N/A	N/A	20466.60	2.80	4.68		N/A	N/A
As Inspectec HS20 Train Truck										
899.87	3168.85	N/A	N/A	N/A	20466.60	2.80	4.68		N/A	N/A
As Built Ohio 5C1 Train Truck										
1348.62	3101.01	N/A	N/A	N/A	20466.60	---	4.64		---	N/A
As Inspectec Ohio 5C1 Train Truck										
1348.62	3101.01	N/A	N/A	N/A	20466.60	---	4.64		---	N/A

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)



**Section I**

**FOR SPANS > 200 FT.**

**Center Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Pier 40**

*As Inspected:		*As Built	
Fy=	33		From Section properties:
MCm =	39013.64 K-FT	39013.64 K-FT	
VCm =	2642.47 K	2642.47 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-14350.86	N/A	2949.94	430.30	137.29	39013.64	3.18	5.31	2642.47	6.99	11.67
As Inspectec HS20 Train Truck										
-14350.86	N/A	2949.94	430.30	137.29	39013.64	3.18	5.31	2642.47	6.99	11.67
As Built Ohio 5C1 Train Truck										
-14350.86	N/A	2896.19	430.30	136.43	39013.64	---	5.41	2642.47	---	11.75
As Inspectec Ohio 5C1 Train Truck										
-14350.86	N/A	2896.19	430.30	136.43	39013.64	---	5.41	2642.47	---	11.75

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)



Made By RAH  
 Checked By DBH

Date 3/26/2012  
 Date 4/2/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Span 4 (Section Loss 58' from pier 40 for HS20 TT and OH5C1 TT)**

\*As Inspected:                      \*As Built  
 Fy=                                      33                                      From Section properties:  
 MCm =    25254.18 K-FT              26943.96 K-FT  
 VCm =    1675.66 K                      2090.09 K

\*Section Loss @ Web

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
4985.25	3034.81	N/A	238.37	100.02	26943.96	3.11	5.19	2090.09	8.20	13.69
As Inspected HS20 Train Truck										
4985.25	3034.81	N/A	238.37	100.02	25254.18	2.85	4.76	1675.66	6.29	10.50
As Built Ohio 5C1 Train Truck										
4985.25	2868.43	N/A	238.37	92.90	26943.96	---	5.49	2090.09	---	14.74
As Inspected Ohio 5C1 Train Truck										
4985.25	2868.43	N/A	238.37	92.90	25254.18	---	5.03	1675.66	---	11.31

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)

**Section I**

**FOR SPANS > 200 FT.**

**Center Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER Span 4 (124' from pier 40 for HS20 TT and OH5C1 TT)**

\*As Inspected:                      \*As Built  
 Fy=                                      33                                      From Section properties:  
 MCm =    40838.18 K-FT              40838.18 K-FT  
 VCm =    1752.75 K                      1752.75 K

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
13161.34	4819.93	N/A	N/A	N/A	40838.18	2.27	3.79		N/A	N/A
As Inspected HS20 Train Truck										
13161.34	4819.93	N/A	N/A	N/A	40838.18	2.27	3.79		N/A	N/A
As Built Ohio 5C1 Train Truck										
13161.34	4609.12	N/A	N/A	N/A	40838.18	---	3.96		---	N/A
As Inspected Ohio 5C1 Train Truck										
13161.34	4609.12	N/A	N/A	N/A	40838.18	---	3.96		---	N/A

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**CENTER GIRDER East Abutment**

*As Inspected:		*As Built	From Section properties:
Fy=	33		
MCm =	20466.60 K-FT	20466.60 K-FT	
VCm =	1699.63 K	1699.63 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	**M+	**M-	**V (kip)							
D (k-ft)	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
0.00	0.00	0.00	-296.42	126.41		N/A	N/A	1699.63	4.79	8.00
As Inspected HS20 Train Truck										
0.00	0.00	0.00	-296.42	126.41		N/A	N/A	1699.63	4.79	8.00
As Built Ohio 5C1 Train Truck										
0.00	0.00	0.00	-296.42	123.37		N/A	N/A	1699.63	---	8.19
As Inspected Ohio 5C1 Train Truck										
0.00	0.00	0.00	-296.42	123.37		N/A	N/A	1699.63	---	8.19

\*\*Unfactored LL+IM Shear/Moment includes the 0.9 reduction factor (3 lanes as most critical combination for HS20 & OH5C1)

**Section I**

**FOR SPANS > 200 FT.**

**South Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER PIER 37**

*As Inspected:		*As Built:		From Section properties:
M <sub>Cm</sub> =	N/A	K-FT	N/A	K-FT
V <sub>Cm</sub> =	1699.632	K	1699.632	K
F <sub>y</sub> (ksi)=	33			

\*No deficiencies at Location

Unfactored Moment (k-ft)		Unfactored Shear (k)		C*	RF	RF	C*	RF	RF	
M+	M-	V (kip)								
D (k-ft)	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
0.00	0.00	0.00	236.68	226.14		N/A	N/A	1699.63	2.84	4.73
As Inspected HS20 Train Truck										
0.00	0.00	0.00	236.68	226.14		N/A	N/A	1699.63	2.84	4.73
As Built Ohio 5C1 Train Truck										
0.00	0.00	0.00	236.68	180.45		N/A	N/A	1699.63	---	5.93
As Inspected Ohio 5C1 Train Truck										
0.00	0.00	0.00	236.68	180.45		N/A	N/A	1699.63	---	5.93



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Span 1 (81.6' from pier 37 for HS20 TT and OH5C1 TT)**

\*As Inspected: From Section properties:  
 Fy= 33 \*As Built  
 \*\*M<sub>Cm</sub> = 24878.90 K-FT 24878.90 K-FT  
 \*\*V<sub>Cm</sub> = 1711.12 K 1711.12 K

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
6773.72	7579.58	N/A	N/A	N/A	24878.90	0.98	1.63	N/A	N/A	N/A
As Inspected HS20 Train Truck										
6773.72	7579.58	N/A	N/A	N/A	24878.90	0.98	1.63	N/A	N/A	N/A
As Built Ohio 5C1 Train Truck										
6773.72	6007.38	N/A	N/A	N/A	24878.90	---	2.06	N/A	---	N/A
As Inspected Ohio 5C1 Train Truck										
6773.72	6007.38	N/A	N/A	N/A	24878.90	---	2.06	N/A	---	N/A



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Pier 38**

*As Inspected:		*As Built	From Section properties:
Fy=	33		
MCm =	63433.41 K-FT	63433.41 K-FT	
VCm =	2735.49 K	2735.49 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-27717.08	N/A	10466.13	589.57	294.50	63433.41	1.21	2.01	2735.49	3.08	5.14
As Inspected HS20 Train Truck										
-27717.08	N/A	10466.13	589.57	294.50	63433.41	1.21	2.01	2735.49	3.08	5.14
As Built Ohio 5C1 Train Truck										
-27717.08	N/A	8268.54	589.57	231.96	63433.41	---	2.55	2735.49	---	6.53
As Inspected Ohio 5C1 Train Truck										
-27717.08	N/A	8268.54	589.57	231.96	63433.41	---	2.55	2735.49	---	6.53



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Span 2 (136' from pier 38 for HS20 TT and OH5C1 TT)**

*As Inspected:		*As Built	From Section properties:
Fy=	33		
MCm =	40838.18 K-FT	40838.18 K-FT	
VCm =	1752.75 K	1752.75 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
15072.34	9383.65	N/A	N/A	N/A	40838.18	1.04	1.74		N/A	N/A
As Inspected HS20 Train Truck										
15072.34	9383.65	N/A	N/A	N/A	40838.18	1.04	1.74		N/A	N/A
As Built Ohio 5C1 Train Truck										
15072.34	7499.94	N/A	N/A	N/A	40838.18	---	2.18		---	N/A
As Inspected Ohio 5C1 Train Truck										
15072.34	7499.94	N/A	N/A	N/A	40838.18	---	2.18		---	N/A





Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Span 2 (Section loss located 263' from Pier 38)**

*As Inspected:		*As Built	
Fy=	33		From Section properties:
MCm =	31853.41 K-FT	33581.07 K-FT	
VCm =	1910.51 K	2330.68 K	

\*Section Loss @ Web

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-13017.79	N/A	7841.33	-471.38	290.65	33581.07	0.98	1.63	2330.68	2.72	4.55
As Inspected HS20 Train Truck										
-13017.79	N/A	7841.33	-471.38	290.65	31853.41	0.88	1.46	1910.51	2.06	3.43
As Built Ohio 5C1 Train Truck										
-13017.79	N/A	6247.59	-471.38	232.08	33581.07	---	2.05	2330.68	---	5.69
As Inspected Ohio 5C1 Train Truck										
-13017.79	N/A	6247.59	-471.38	232.08	31853.41	---	1.84	1910.51	---	4.30

**Section I**

**FOR SPANS > 200 FT.**

**South Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Pier 39**

\*As Inspected:

Fy = 33  
M<sub>Cm</sub> = 41845.72 K-FT  
V<sub>Cm</sub> = 2471.21 K

\*As Built

41845.72 K-FT  
2471.21 K

From Section properties:

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-16577.82	N/A	9763.44	-501.45	302.08	41845.72	0.96	1.60	2471.21	2.77	4.63
As Inspected HS20 Train Truck										
-16577.82	N/A	9763.44	-501.45	302.08	41845.72	0.96	1.60	2471.21	2.77	4.63
As Built Ohio 5C1 Train Truck										
-16577.82	N/A	7731.35	-501.45	248.47	41845.72	---	2.02	2471.21	---	5.63
As Inspected Ohio 5C1 Train Truck										
-16577.82	N/A	7731.35	-501.45	248.47	41845.72	---	2.02	2471.21	---	5.63



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Span 3 (86.3' from pier 39 for HS20 TT and 71.9' from pier 39 for OH5C1 TT)**

*As Inspected:		*As Built	
Fy=	33		From Section properties:
**M <sub>Cm</sub> =	20473.41 K-FT	20473.41 K-FT	
**V <sub>Cm</sub> =	1700.06 K	1700.06 K	

\*No deficiencies at Location

\*\*Moment and Shear Capacity constant @ segment 24 on south girder between Piers 39 and 40

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
-1084.14	5414.20	N/A	N/A	N/A	20473.41	1.62	2.71		N/A	N/A
As Inspected HS20 Train Truck										
-1084.14	5414.20	N/A	N/A	N/A	20473.41	1.62	2.71		N/A	N/A
As Built Ohio 5C1 Train Truck										
-1084.14	4194.67	N/A	N/A	N/A	20473.41	---	3.50		---	N/A
As Inspected Ohio 5C1 Train Truck										
-1084.14	4194.67	N/A	N/A	N/A	20473.41	---	3.50		---	N/A

**Section I**

**FOR SPANS > 200 FT.**

**South Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Pier 40**

\*As Inspected:

Fy = 33  
M<sub>Cm</sub> = 33785.10 K-FT  
V<sub>Cm</sub> = 2504.66 K

\*As Built

33785.10 K-FT  
2504.66 K

From Section properties:

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	D	L+I							
As Built HS20 Train Truck										
-14160.34	N/A	7949.78	494.16	226.16	33785.10	0.89	1.49	2504.66	3.79	6.33
As Inspected HS20 Train Truck										
-14160.34	N/A	7949.78	494.16	226.16	33785.10	0.89	1.49	2504.66	3.79	6.33
As Built Ohio 5C1 Train Truck										
-14160.34	N/A	6286.82	494.16	221.18	33785.10	---	1.88	2504.66	---	6.48
As Inspected Ohio 5C1 Train Truck										
-14160.34	N/A	6286.82	494.16	221.18	33785.10	---	1.88	2504.66	---	6.48

**Section I**

**FOR SPANS > 200 FT.**

**South Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Span 4 (Section Loss 55' from pier 40 for HS20 TT and OH5C1 TT)**

*As Inspected:		*As Built	
Fy =	33		From Section properties:
MCm =	22854.37 K-FT	24298.77 K-FT	
VCm =	1551.63 K	1935.05 K	

\*Section Loss @ Web

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
**M+	**M-	**V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
7080.62	4882.85	N/A	275.73	182.47	24298.77	1.42	2.38	1935.05	3.98	6.65
As Inspected HS20 Train Truck										
7080.62	4882.85	N/A	275.73	182.47	22854.37	1.29	2.15	1551.63	3.01	5.03
As Built Ohio 5C1 Train Truck										
7080.62	3955.42	N/A	275.73	103.02	24298.77	---	2.94	1935.05	---	11.77
As Inspected Ohio 5C1 Train Truck										
7080.62	3955.42	N/A	275.73	103.02	22854.37	---	2.65	1551.63	---	8.91

**Section I**

**FOR SPANS > 200 FT.**

**South Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER Span 4 (122' from pier 40 for HS20 TT and OH5C1 TT)**

*As Inspected:		*As Built	
Fy=	33		From Section properties:
MCm =	40838.18 K-FT	40838.18 K-FT	
VCm =	1752.75 K	1752.75 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V (kip)								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
16229.19	8783.54	N/A	N/A	N/A	40838.18	1.04	1.73		N/A	N/A
As Inspected HS20 Train Truck										
16229.19	8783.54	N/A	N/A	N/A	40838.18	1.04	1.73		N/A	N/A
As Built Ohio 5C1 Train Truck										
16229.19	6987.80	N/A	N/A	N/A	40838.18	---	2.17		---	N/A
As Inspected Ohio 5C1 Train Truck										
16229.19	6987.80	N/A	N/A	N/A	40838.18	---	2.17		---	N/A

**Section I**

**FOR SPANS > 200 FT.**

**South Girder**



Made By RAH  
Checked By DBH

Date 3/26/2012  
Date 3/27/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER East Abutment**

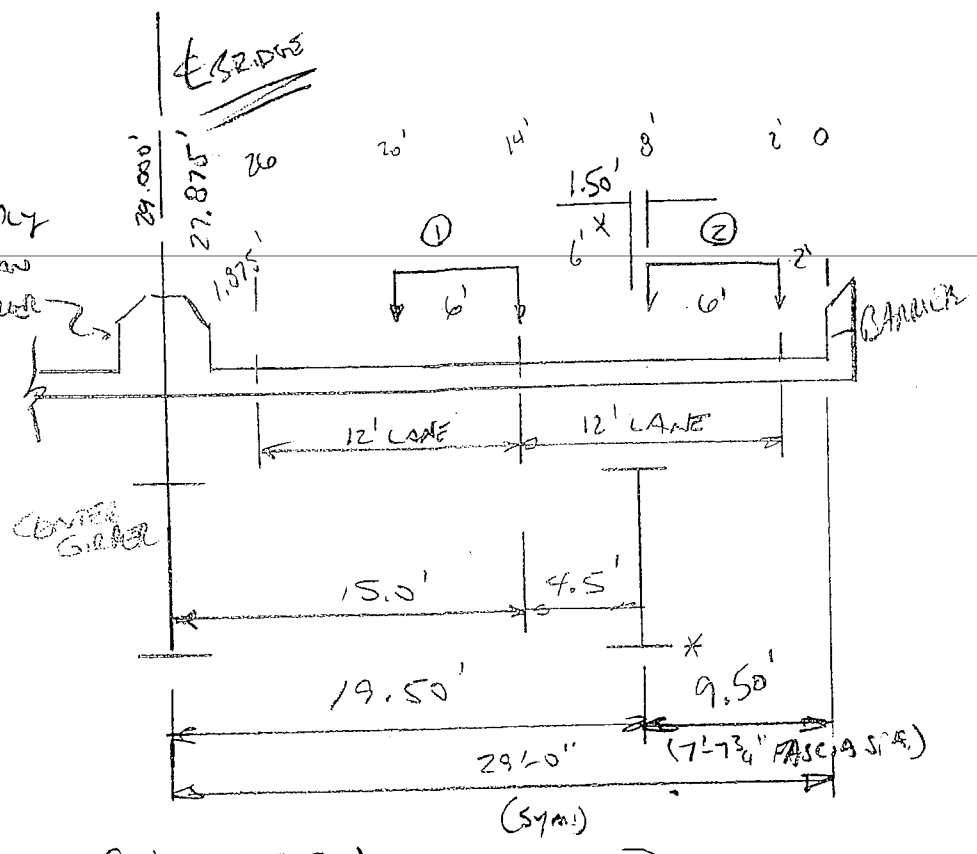
*As Inspected:		*As Built	From Section properties:
Fy=	33		
MCm =	20466.60 K-FT	20466.60 K-FT	
VCm =	1699.63 K	1699.63 K	

\*No deficiencies at Location

Unfactored Moment (k-ft)		Unfactored Shear (k)		C*	RF	RF	C*	RF	RF	
M+	M-	V (kip)								
D (k-ft)	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Train Truck										
0.00	0.00	0.00	-361.13	232.65		N/A	N/A	1699.63	2.44	4.07
As Inspected HS20 Train Truck										
0.00	0.00	0.00	-361.13	232.65		N/A	N/A	1699.63	2.44	4.07
As Built Ohio 5C1 Train Truck										
0.00	0.00	0.00	-361.13	194.22		N/A	N/A	1699.63	---	4.87
As Inspected Ohio 5C1 Train Truck										
0.00	0.00	0.00	-361.13	194.22		N/A	N/A	1699.63	---	4.87

DISTRIBUTION FACTOR  
EXTERIOR GIRDERS

S/S DOES NOT APPLY  
DUETO  $S > 14'$  MEDIAN  
USE:  
LEVER RULE  
FOR TOTAL M.F.V.



SPAN 1 & 2 USE:  
MOMENT & SHEAR

VEHICLE 1 :  $\frac{P}{2} \left( \frac{9}{19.5} \right) + \frac{P}{2} \left( \frac{15}{19.5} \right)$   
 $0.2308 + 0.3846 = 0.6154$

VEHICLE 2 :  $\frac{P}{2} + \frac{P}{2} = 1.0$

USE FOR  
TRUCK TRAIN  
LOADING &  
TANGENT SECTIONS  
OF BRIDGE  
W/ SINGLE TRK  
APPLICATIONS

(TOTAL DF SHALL BE USED FOR ONLY SINGLE VEHICLE (TRUCK)  
ANALYSIS W/IN CONSYS - NOT TO BE APPLIED TO TRUCK TRAIN  
APPLICATION PER BDM 917.

SPAN 3 & 4

\* OVERHANG VARIES IN SPAN 3 (SOUL. GIRDERS) & SPAN 4  
(WORTH SOUL. GIRDERS)

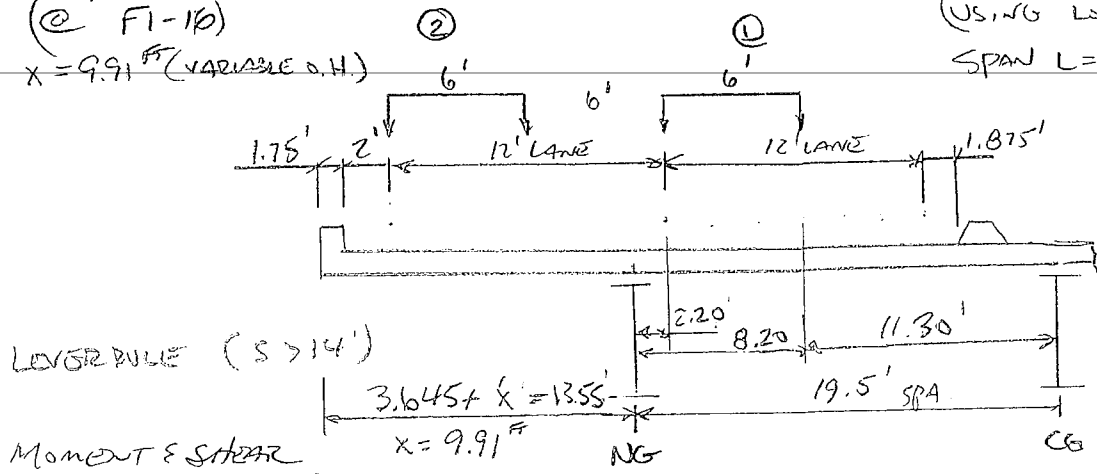
CALC DF'S FOR SPAN 3 & 4 VARIABLE DF'S W/  
SINGLE VEHICLE APPLICATION. (ONLY)



## DISTRIBUTION FACTORS

WORST CASE NORTH GIRDER  
SPAN 4 (MAX)  
(@ F1-16)  
 $x = 9.91'$  (VARIABLE O.H.)

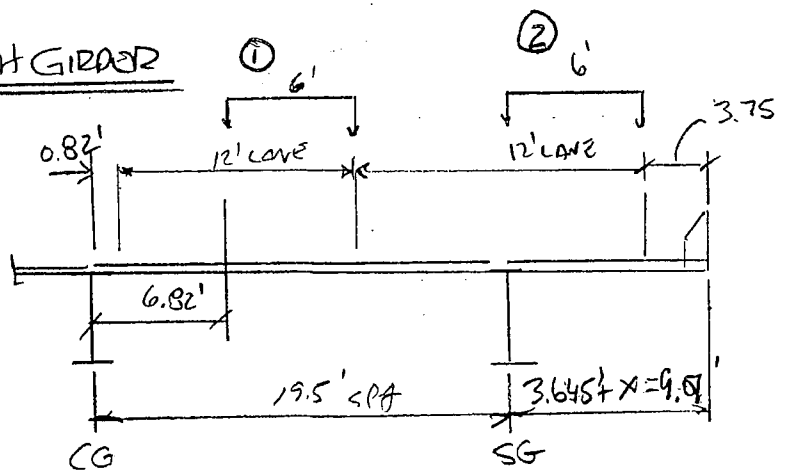
USE BPM DIRECTION FOR LOAD  
PLACEMENT (V/IN 12' LANES) (927.2)  
(USING LONGITUDINAL TO LOCATE)  
SPAN  $L = 214.0732'$  +/-  
LOCATED @ MID PT



LEVER RULE ( $S > 14'$ )  
MOMENT & SHEAR  
 $x = 9.91'$  NG

$$\left. \begin{aligned} \text{VEHICLE ① } & \frac{P}{2} \left( \frac{11.30}{19.5} \right) + \frac{P}{2} \left( \frac{17.30}{19.5} \right) = 0.733 \\ \text{VEHICLE ② } & = 1.000 \end{aligned} \right\} 1.733$$

SPAN 4 (MIN) SOUTH GIRDER  
(@ F2-16)  
 $x = 5.42'$  (VARIABLE O.H.)



MOMENT & SHEAR

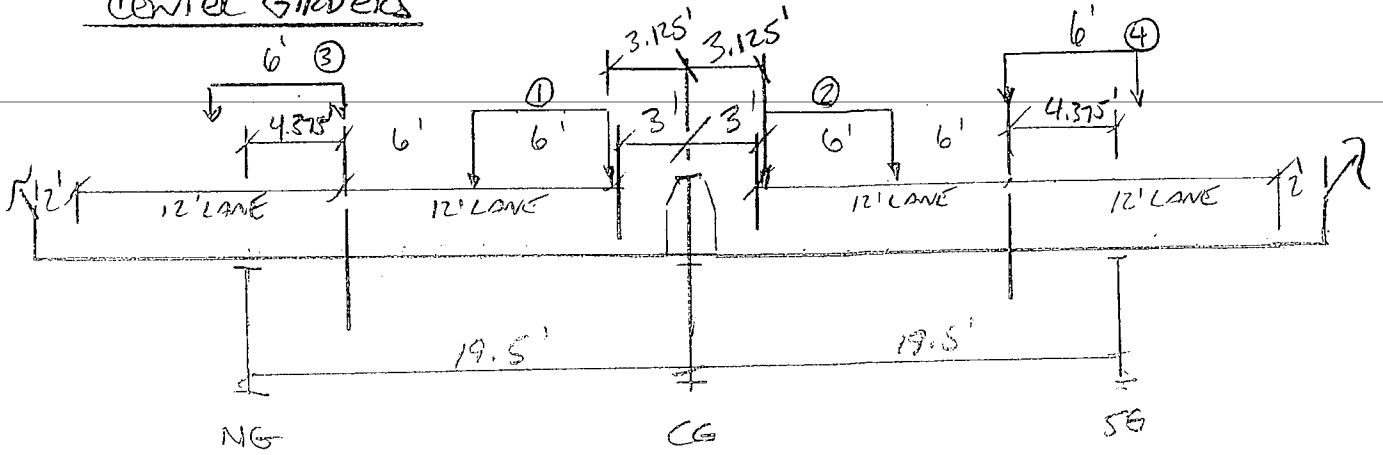
$$\left. \begin{aligned} \text{VEHICLE ① } & \frac{P}{2} \left( \frac{6.82}{19.5} \right) + \frac{P}{2} \left( \frac{12.82}{19.5} \right) = 0.504 \\ \text{VEHICLE ② } & = 1.000 \end{aligned} \right\} 1.504$$

FOR SPAN 3 SOUTH OVERHANG VARIES @ END WORST CASE SIMILAR TO  
SKETCH FOR NORTH GIRDER ABOVE  $x = 8.825'$  & OVERHANG = 12.470'  
 $DF_{MAX} = 1 + \frac{P}{2} \left( \frac{16.22}{19.5} \right) + \frac{P}{2} \left( \frac{19.22}{19.5} \right) = 1.678$

SPAN 1 & 2  
DISTRIBUTION FACTORS

SINGLE VEHICLES w/ TRAIN LOADING  
BETWEEN EXTERIOR & INTERIOR GIRDERS

CENTER GIRDERS



$$\text{VEHICLE 1: } \frac{P}{2} \left( \frac{16.375}{19.5} \right) + \frac{P}{2} \left( \frac{10.375}{19.5} \right) = 0.686$$

$$\text{VEHICLE 3: } \frac{P}{2} \left( \frac{4.375}{19.5} \right) = 0.112$$

VEHICLE 1 = VEHICLE 2, VEHICLE 3 = VEHICLE 4

COMPARE LANE COMBINATIONS - 2, 3, 4 LANES LOADED  
(APPLY MULTILANE REDUCTION FACTOR TO DETERMINE CONTROLLING DF.)

$$2 \text{ LANES} = (0.686 \times 2) \times 1.0 = 1.372$$

$$4 \text{ LANES} = (0.686 + 0.112) \times 2 \times 0.75 = 1.197$$

$$3 \text{ LANES} = ((0.686 \times 2) + 0.112) \times 0.90 = 1.326$$

USE 2 LANES DF = 1.372



Made By RAH Date 3/13/2012 Job No. P402110046  
 Checked By DBH Date 3/13/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

BDM 905: Long span bridge: Any single or multi span bridge that has at least one span greater than 200 ft.

BDM SECTION 927.2: LOADS TO BE USED

Rate all bridges for Ohio legal loads (2F1, 3F1, 4F1, 5C1)

Transverse spacing of legal loads at 6'-0" (between wheel groups)

LONG SPAN BRIDGES (SPANS >200 FEET) per BDM Section 905, use the special load configurations

Per BDM Section 917. Span between Pier 38 and Pier 39 is > 200 ft for each girder.

[61 m]	SPAN 1	SPAN 2	SPAN 3	SPAN 4	
1	137.93 ft	270.83 ft	234.67 ft	216.06 ft	Section I begins at Pier 37 and continues to East Abutment
2	166.23 ft	270.83 ft	203.88 ft	212.48 ft	
3	195.86 ft	271.08 ft	172.59 ft	209.54 ft	

BDM SECTION 917: LOAD RATING OF LONG SPAN BRIDGES

BDM 917.2.2: INVENTORY & OPERATING LEVEL USING HS20 TRUCK

This truck is defined as a series of trucks simulating a train long enough to produce the maximum load effect on the component to be rated.

Truck trains to be located in the far right hand lane with one additional (single) variable axle spacing vehicle in the adjacent lane - similar type.

**Current configuration using the 3 girders at 19'-6" with a median barrier separating two travel lanes in each direction, no additional travel lanes exists in the same direction thus only the two vehicles mentioned above can be placed for the analysis of the exterior girders (thus no multi-presence factor can be used for the exterior girders)**

BDM 917.2.3 OPERATING LEVEL RATING USING OHIO LEGAL LOADS

BDM 927 defines the rating approach and states that the operating level rating shall apply the live loads as per BDM 917 using the truck train approach.

Due to the nonsymmetrical span arrangements, multiple truck trains shall be developed to be able to fit the OH5C1 TT or the HS20 TT into a particular span without extending into the adjacent spans. The Analysis program STAAD PRO will be used to move the truck trains along the spans that contribute to the most critical condition (for moment or Shear ) at each span. On the other hand, the program CONSYS will be used as the LL generator for the single vehicles adjacent to the Truck trains.

Only those loading values produced by a specific load application for a specific component rating will be provided for rating.



Made By RAH Date 3/13/2012 Job No. P402110046  
 Checked By DBH Date 3/13/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

AASHTO 3.8.2: IMPACT

$I = 50 / (L + 125)$  Less than or equal to 0.30

### MOMENT IMPACT FACTOR

L is the length of the span to produce max stress

#### North Girder

Span	Length	Pos Mom IM	Neg Mom IM
1	137.93	1.190	1.152
2	270.83	1.126	1.132
3	234.67	1.139	1.143
4	216.06	1.147	

For continuous spans: length of span under consideration for positive moment and average of adjacent loaded spans for negative moment.

Shear due to truck loads: length of the loaded portion of the span from point under consideration to the far reaction.

#### Center Girder

Span	Length	Pos Mom IM	Neg Mom IM
1	166.23	1.172	1.146
2	270.83	1.126	1.138
3	203.88	1.152	1.150
4	212.48	1.148	

#### South Girder

Span	Length	Pos Mom IM	Neg Mom IM
1	195.86	1.156	1.139
2	271.08	1.126	1.144
3	172.59	1.168	1.158
4	209.54	1.149	



Made By RAH Date 3/13/2012 Job No. P402110046  
 Checked By DBH Date 3/13/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SHEAR IMPACT FACTOR**

Use MAX value due to reversal of truck

**North Girder**

SPAN 1				SPAN 2			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	13.793	1.300	1.300	0.1	27.083	1.300	1.300
0.2	27.586	1.300	1.300	0.2	54.166	1.279	1.279
0.3	41.379	1.300	1.300	0.3	81.249	1.242	1.242
0.4	55.172	1.278	1.278	0.4	108.332	1.214	1.214
0.5	68.965	1.258	1.258	0.5	135.415	1.192	1.192
0.6	82.758	1.241	1.278	0.6	162.498	1.174	1.214
0.7	96.551	1.226	1.300	0.7	189.581	1.159	1.242
0.8	110.344	1.212	1.300	0.8	216.664	1.146	1.279
0.9	124.137	1.201	1.300	0.9	243.747	1.136	1.300
1	137.93	1.190	1.300	1	270.83	1.1263	1.3

SPAN 3				SPAN 4			
x/L	L	Shear IM	MAX IM	x/L	L	Shear IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	23.467	1.300	1.300	0.1	21.606	1.300	1.300
0.2	46.934	1.291	1.291	0.2	43.212	1.297	1.297
0.3	70.401	1.256	1.256	0.3	64.818	1.263	1.263
0.4	93.868	1.228	1.228	0.4	86.424	1.236	1.236
0.5	117.335	1.206	1.206	0.5	108.03	1.215	1.215
0.6	140.802	1.188	1.228	0.6	129.636	1.196	1.236
0.7	164.269	1.173	1.256	0.7	151.242	1.181	1.263
0.8	187.736	1.160	1.291	0.8	172.848	1.168	1.297
0.9	211.203	1.149	1.300	0.9	194.454	1.157	1.300
1	234.67	1.139	1.300	1	216.06	1.147	1.300



Made By RAH Date 3/13/2012  
 Checked By DBH Date 3/13/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

### SHEAR IMPACT FACTOR

#### Center Girder

Use MAX value due to reversal of truck

SPAN 1				SPAN 2			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	16.623	1.300	1.300	0.1	27.083	1.300	1.300
0.2	33.246	1.300	1.300	0.2	54.166	1.279	1.279
0.3	49.869	1.286	1.286	0.3	81.249	1.242	1.242
0.4	66.492	1.261	1.261	0.4	108.332	1.214	1.214
0.5	83.115	1.240	1.240	0.5	135.415	1.192	1.192
0.6	99.738	1.222	1.261	0.6	162.498	1.174	1.214
0.7	116.361	1.207	1.286	0.7	189.581	1.159	1.242
0.8	132.984	1.194	1.300	0.8	216.664	1.146	1.279
0.9	149.607	1.182	1.300	0.9	243.747	1.136	1.300
1	166.23	1.172	1.300	1	270.83	1.126	1.300

SPAN 3				SPAN 4			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	20.388	1.300	1.300	0.1	21.248	1.300	1.300
0.2	40.776	1.300	1.300	0.2	42.496	1.299	1.299
0.3	61.164	1.269	1.269	0.3	63.744	1.265	1.265
0.4	81.552	1.242	1.242	0.4	84.992	1.238	1.238
0.5	101.94	1.220	1.220	0.5	106.24	1.216	1.216
0.6	122.328	1.202	1.242	0.6	127.488	1.198	1.238
0.7	142.716	1.187	1.269	0.7	148.736	1.183	1.265
0.8	163.104	1.174	1.300	0.8	169.984	1.170	1.299
0.9	183.492	1.162	1.300	0.9	191.232	1.158	1.300
1	203.88	1.152	1.3	1	212.48	1.148	1.300



Made By RAH Date 3/13/2012 Job No. P402110046  
 Checked By DBH Date 3/13/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

### SHEAR IMPACT FACTOR

#### South Girder

Use MAX value due to reversal of truck

SPAN 1				SPAN 2			
L(ft)= 195.86				L(ft)= 271.08			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	19.586	1.300	1.300	0.1	27.108	1.300	1.300
0.2	39.172	1.300	1.300	0.2	54.216	1.279	1.279
0.3	58.758	1.272	1.272	0.3	81.324	1.242	1.242
0.4	78.344	1.246	1.246	0.4	108.432	1.214	1.214
0.5	97.93	1.224	1.224	0.5	135.54	1.192	1.192
0.6	117.516	1.206	1.246	0.6	162.648	1.174	1.214
0.7	137.102	1.191	1.272	0.7	189.756	1.159	1.242
0.8	156.688	1.178	1.300	0.8	216.864	1.146	1.279
0.9	176.274	1.166	1.300	0.9	243.972	1.136	1.300
1	195.86	1.156	1.300	1	271.08	1.126	1.300

SPAN 3				SPAN 4			
L(ft)= 172.59				L(ft)= 209.54			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	17.259	1.300	1.300	0.1	20.954	1.300	1.300
0.2	34.518	1.300	1.300	0.2	41.908	1.300	1.300
0.3	51.777	1.283	1.283	0.3	62.862	1.266	1.266
0.4	69.036	1.258	1.258	0.4	83.816	1.239	1.239
0.5	86.295	1.237	1.237	0.5	104.77	1.218	1.218
0.6	103.554	1.219	1.258	0.6	125.724	1.199	1.239
0.7	120.813	1.203	1.283	0.7	146.678	1.184	1.266
0.8	138.072	1.190	1.300	0.8	167.632	1.171	1.300
0.9	155.331	1.178	1.300	0.9	188.586	1.159	1.300
1	172.59	1.168	1.300	1	209.54	1.1495	1.300



Made By DBH Date 3/16/2012 Job No. P402110046  
 Checked By RAH Date 3/17/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

VARIABLE DISTRIBUTION FACTOR FOR SPAN 4

NORTH GIRDER: Due to the curvature of the bridge, the overhang varies requiring a variable DF.  
 Using long chord mid ordinate, use this as the longest point and adjust linearly in each direction.

Length:	214.0732 ft	Use DF from tangent portion of bridge	
Mid Point:	107.0366 ft	as base line for adjustment:	1.6154
		Worst DF from prev.calc.:	<u>1.733</u>
		Total Change;	0.1176

Check Point along Girder	x/l	Percent increase	Applied DF
0	0.000	0.000	1.6154
9.075	0.042	0.085	1.6254
21.606	0.100	0.202	1.6391
22.038	0.102	0.206	1.6396
43.212	0.200	0.404	1.6629
64.818	0.300	0.606	1.6866
65.466	0.303	0.612	1.6873
77.566	0.359	0.725	1.7006
86.424	0.400	0.807	1.7104
93.554	0.433	0.874	1.7182
108.03	0.500	0.991	1.7319
129.636	0.600	0.789	1.7082
151.242	0.700	0.587	1.6844
155.563	0.720	0.547	1.6797
171.984	0.796	0.393	1.6616
172.848	0.800	0.385	1.6607
185.163	0.857	0.270	1.6472
194.454	0.900	0.183	1.6370
216.06	1.000		1.6154





Made By DBH Date 3/16/2012 Job No. P402110046  
 Checked By RAH Date 3/17/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

VARIABLE DISTRIBUTION FACTOR FOR SPAN 3 & 4

SOUTH GIRDER: Use average "UNIT" overhang to establish percent change in DF

SPAN 3					Use DF from tangent portion of bridge as base line for adjustment: 1.6154
UNIT	AVG OH L	Beg UNIT in SPAN	x/l	Applied DF	
10	7.690	0.000	0.000	1.6154	Worst DF from prev.calc.: <u>1.678</u>
11	7.700	55.688	0.323	1.6356	
12	7.870	98.146	0.569	1.6510	Total Change; <u>0.0626</u>
13	8.825	135.271	0.784	1.6645	
end		172.590	1.000	1.6780	

SPAN 4					Use DF from tangent portion of bridge as base line for adjustment: 1.6154
UNIT	AVG OH L	Beg UNIT in SPAN	x/l	Applied DF	
14	8.450	0.000	0.000	1.6154	Worst DF from prev.calc.: <u>1.733</u>
15	6.605	32.396	0.155	1.6336	
16	5.420	69.521	0.332	1.6544	Total Change; <u>0.1176</u>
17	5.685	106.646	0.509	1.6753	
18	7.245	143.771	0.686	1.6961	
19	9.660	180.896	0.863	1.7169	
end		209.540	1.000	1.7330	



Made By DBH Date 3/16/2012 Job No. P402110046  
 Checked By RAH Date 3/17/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

SPAN 3 SOUTH GIRDER

Use Existing Check points and interpolate for DF

	Calc DF	Interpolated DF
0.000	1.6154	
0.064		1.6194
0.100		1.6217
0.165		1.6257
0.200		1.6279
0.300		1.6342
0.323	1.6356	1.6356
0.374		1.6388
0.400		1.6404
0.500		1.6467
0.569	1.6510	1.6510
0.600		1.6530
0.700		1.6592
0.770		1.6636
0.784	1.6645	1.6645
0.800		1.6655
0.900		1.6717
0.904		1.6720
1.000	1.6780	1.6780

SPAN 3 L= 172.590

Use DF from tangent portion of bridge  
 as base line for adjustment: 1.6154  
 Worst DF from prev.calc.: 1.678  
 Total Change; 0.0626

SPAN 3  
 USE BELOW DF at  
 CHECK POINTS

Ck Pt
0.000
0.064
0.100
0.165
0.200
0.300
0.374
0.400
0.500
0.600
0.700
0.770
0.800
0.900
0.904
1.000

DF-M	DF-V
1.6154	1.6154
1.6194	1.6194
1.6217	1.6217
1.6257	1.6257
1.6279	1.6279
1.6342	1.6342
1.6388	1.6388
1.6404	1.6404
1.6467	1.6467
1.6530	1.6530
1.6592	1.6592
1.6636	1.6636
1.6655	1.6655
1.6717	1.6717
1.6720	1.6720
1.6780	1.6780



Made By DBH Date 3/16/2012 Job No. P402110046  
 Checked By RAH Date 3/17/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

SPAN 4 SOUTH GIRDER

Use Existing Check points and interpolate for DF

	Calc DF	Interpolated DF
0.000	1.6154	
0.052		1.6215
0.100		1.6272
0.155	1.6336	1.6336
0.200		1.6389
0.264		1.6464
0.300		1.6507
0.319		1.6529
0.332	1.6544	1.6544
0.391		1.6614
0.400		1.6624
0.500		1.6742
0.509	1.6753	1.6753
0.600		1.6860
0.686	1.6961	1.6961
0.700		1.6977
0.749		1.7035
0.800		1.7095
0.818		1.7116
0.863	1.7169	1.7169
0.870		1.7177
0.900		1.7212
1.000	1.7330	1.7330

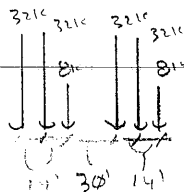
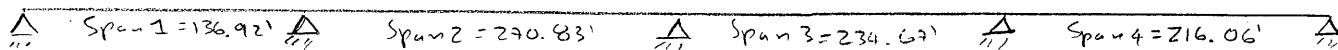
Use DF from tangent portion of bridge  
 as base line for adjustment: 1.6154  
 Worst DF from prev.calc.: 1.733  
 Total Change; 0.1176

SPAN 4  
 USE BELOW DF at  
 CHECK POINTS

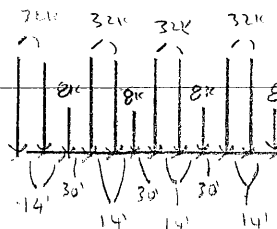
Ck Pt

DF-M	DF-V
1.6154	1.6154
1.6215	1.6215
1.6272	1.6272
1.6389	1.6389
1.6464	1.6464
1.6507	1.6507
1.6529	1.6529
1.6614	1.6614
1.6624	1.6624
1.6742	1.6742
1.6860	1.6860
1.6977	1.6977
1.7035	1.7035
1.7095	1.7095
1.7116	1.7116
1.7177	1.7177
1.7212	1.7212
1.7330	1.7330

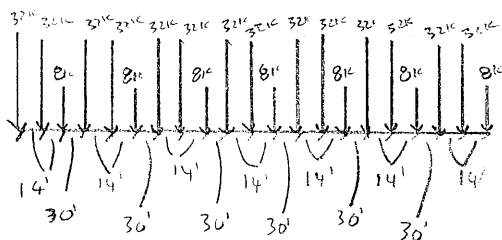
## North Grid H&ZOTT (North W/ARDS)



CASE IA

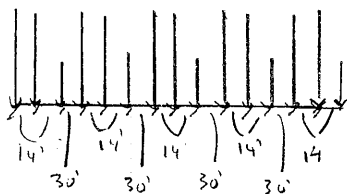
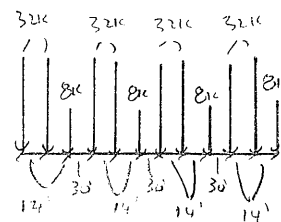


CASE IB

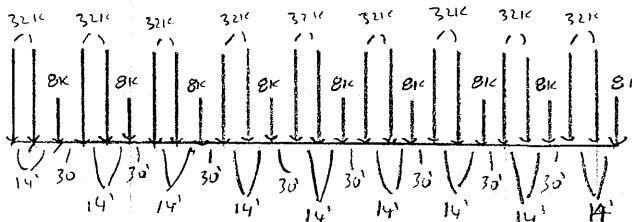


CASE IC

CASE ID

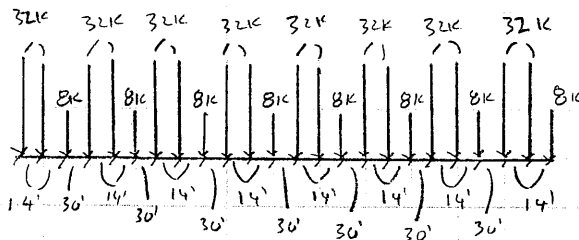


CASE IE



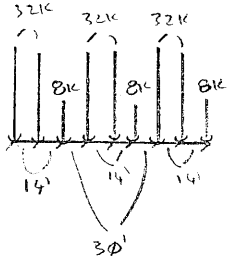
CASE IF

CASE IG

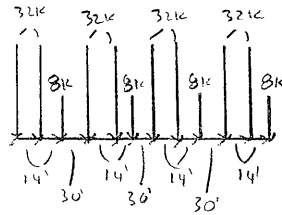


## CENTER Girder HS 20 TT (NORTH WARD)

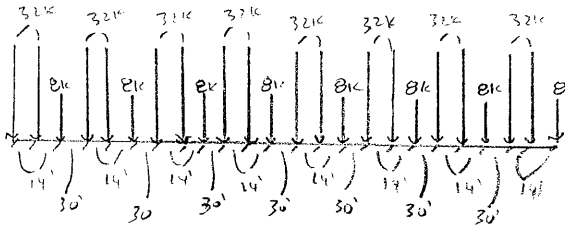
Span 1 = 166.23'    Span 2 = 270.82'    Span 3 = 203.88'    Span 4 = 212.45'



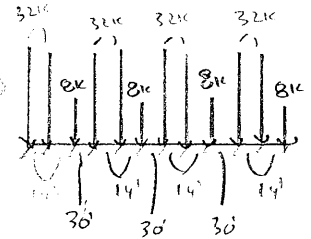
CASE IA



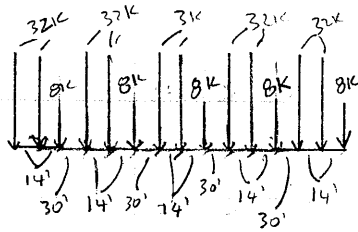
CASE IB



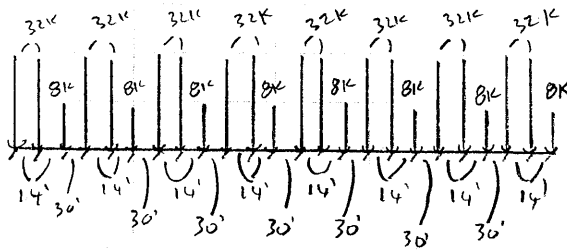
CASE IC



CASE ID

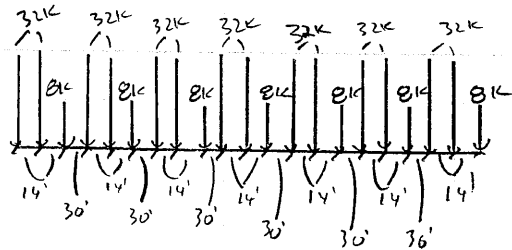


CASE IE



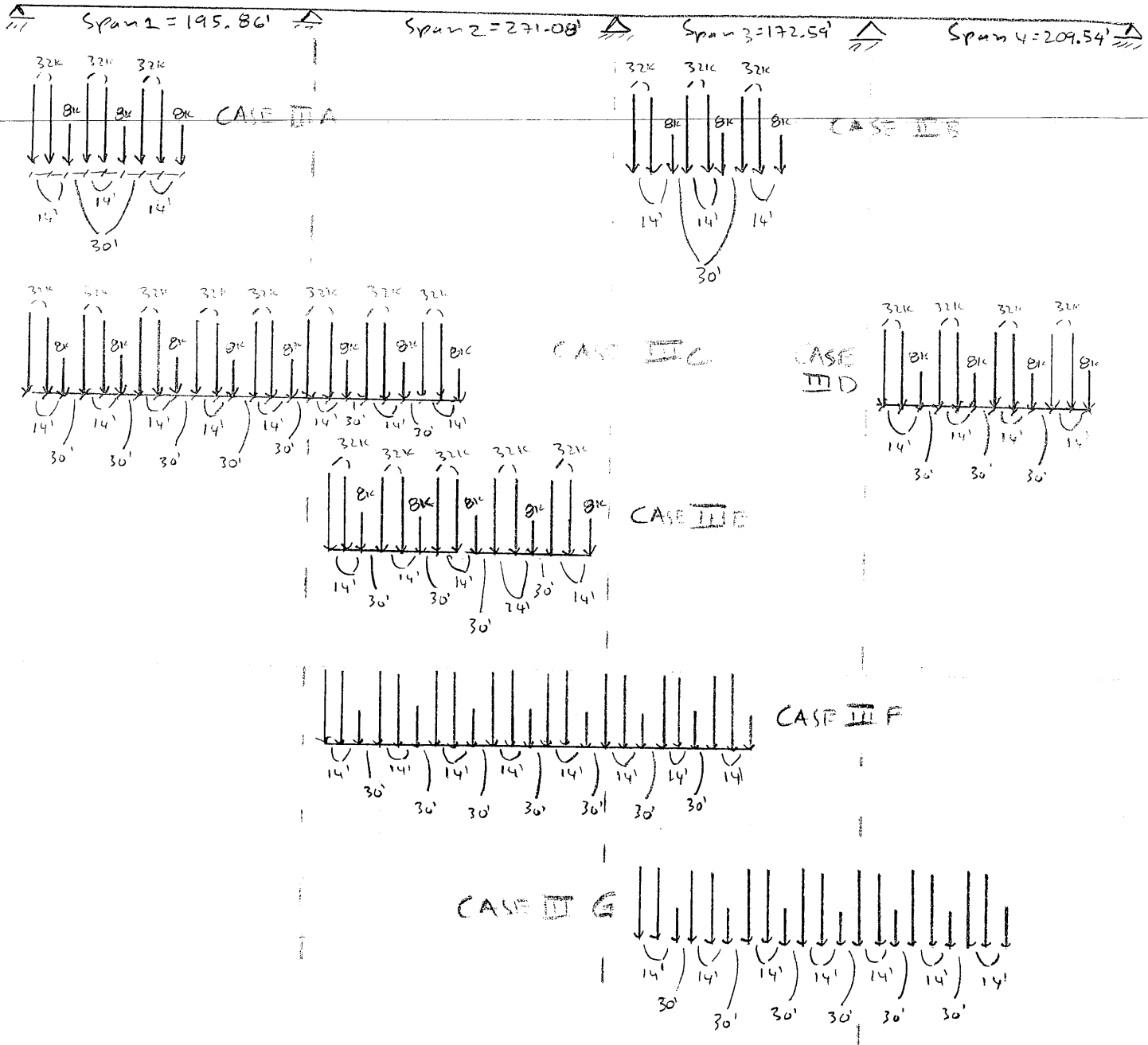
CASE IIF

CASE IIG



South Girder

H&20TT (NORTHWARDS)



H/S 20 TT (HEADING NORTH)

Mouth Girder

Span 1

LC 446 (CONTRIBUTION FROM CASE IB)

LC 131 (CASE JA)

$$\text{Max (+) Mom} = 14015 \left( \frac{57.1'}{136.92'} \right) \text{K-in} + 29200 \text{K-in} \quad (\text{@ } 57.1' \text{ Location})$$

$$= 35044.7 \text{K-in} = 2920.4 \text{K-ft}$$

Span 3

LC 428 (CASE IB)

LC 123 (CONTRIBUTION FROM CASE IA)

$$\text{Max (+) Mom} = 61355 \text{K-in} \quad (\text{@ } 117' \text{ Location}) + 1402.28 \text{K-in}$$

$$= 5229.8 \text{K-ft}$$

Span 1

LC 88 (CASE IA)

LC 444 (CASE IB CONTRIBUTION)

$$\text{Max Shear (Pier 37)} = 97.9 \text{Kip} + 8.53 \text{Kip}$$

$$= 106.43 \text{Kip}$$

LC 1069 (CASE IC)

LC 1663 (CASE ID CONTRIBUTION)

$$\text{Span 1-2 Max Mom (-)} = 85475 \text{K-in} + 3834 \text{K-in}$$

$$= 7442.42 \text{K-ft}$$

Max Shear (Pier 38)

$$= 158 \text{Kip} + 2.33 \text{Kip} = 160.33 \text{Kip}$$

LC 1044 (CASE IC)      LC 1667 (CASE ID CONTRIBUTION)

Span 1 Max(-) Mom = from uplift due to CASE ID + CASE IE (Midspan @ 57.1' Location)

$$= 3833 \text{K-in} \left( \frac{57.1'}{136.92'} \right) + 72269 \text{K-in} \left( \frac{57.1'}{136.92'} \right)$$

LC 1662 (CASE ID)      LC 2135 (CASE IE)

$$= 31736.96 \text{K-in} = 2644.75 \text{K-ft} \therefore \text{Max (+) Mom @ Span 1 DUE TO CASE IA \& IB CONTROL OVER MAX (-) MOM @ LOCATION 57.1ft}$$

Span 3 Max(-) Mom from UPLIFT due to CASE ID + CASE IE (Midspan @ 117' Location)

$$= 16864.11 \text{K-in} + 21605.513 \text{K-in} = 38469.62 \text{K-in}$$

LC 1664 (CASE ID)      LC 2130 (CASE IE)

$$= 3205.8 \text{K-ft}$$

\therefore Max (+) Mom @ Span 3 (CASE ID + CASE IE) CONTROL OVER MAX (-) MOM @ LOCATION

H/S 20 TT

NORTH GIRDER

SPAN 2

$$\text{MAX MOM. (+)} = \underbrace{73759 \text{ K-in}}_{\substack{\text{LC 2131} \\ \text{(CASE IE)} \\ \text{@ 135'}}} + \underbrace{3839 \text{ K-in}}_{\substack{\text{LC 1662} \\ \text{(CASE ID)} \\ \text{@ 135'}}} = 6466.5 \text{ K-ft}$$

SPAN 4

$$\text{MAX (+) MOM.} = \underbrace{68027 \text{ K-in}}_{\substack{\text{LC 1658} \\ \text{(CASE ID)} \\ \text{@ 126'}}} + \underbrace{15103 \text{ K-in}}_{\substack{\text{LC 2129} \\ \text{(CASE IE} \\ \text{CONTRIBUTION)}}} \left( \frac{90.06'}{216.06'} \right) = 74322.4 \text{ K-in} \\ = 6193.53 \text{ K-ft}$$

Span 2-3

$$\text{Max Mom. (-)} = \underbrace{100312 \text{ K-in}}_{\text{LC 2890 (case IF)}} = 8359.33 \text{ K-ft}$$

$\neq$  Max Shear = 171 Kip.  
 (Pic. 39)

$$\text{Span 2 Max (+)} = \underbrace{4764.6 \text{ K-in}}_{\substack{\text{LC 123} \\ \text{(CASE IA)}}} + \underbrace{14037.8 \text{ K-in}}_{\substack{\text{LC 446} \\ \text{(CASE IB)}}} = 18802.4 \text{ K-in} \\ \text{Mom From Uplift} = 1566.9 \text{ K-ft} \\ \text{due to Case IA} \therefore \text{Max (+) Mom.} \\ \text{+ CASE IB (Midspan)} \text{ @ Span 2 Due} \\ \text{@ 135' Location)} \text{ to CASE IE \& ID} \\ \text{Controls @ Location} \\ \text{135'}$$

$$\text{Span 4 Max (-)} = \underbrace{981 \text{ K-in}}_{\substack{\text{LC 123} \\ \text{(CASE IA)}}} \left( \frac{216.06' - 126'}{216.06'} \right) + \underbrace{43495 \text{ K-in}}_{\substack{\text{LC 450} \\ \text{(CASE IB)}}} \left( \frac{216.06' - 126'}{216.06'} \right) \\ \text{Mom From Uplift} = 18538.9 \text{ K-in} \\ \text{due to Case IA} = 1544.9 \text{ K-ft} \therefore \text{Max (+) Mom} \\ \text{+ CASE IB (Midspan)} \text{ @ Span 4 Due to Cases ID \& IE} \\ \text{@ 126' Location)} \text{ Controls @ Location} \\ \text{126'}$$



Span 3-4  
 Max. Mom (-)  
 & Max Shear  
 (Pier 40)

$$= \underbrace{88703 \text{ K-in}}_{\substack{\text{LC 3844} \\ \text{(CASE IG)}}} + \underbrace{981 \text{ Kip-in}}_{\substack{\text{LC 123} \\ \text{(CASE IA)}}} = 89684 \text{ K-in} = 7473.7 \text{ K-ft}$$

$$= \underbrace{192 \text{ Kip}}_{\substack{\text{LC 3831} \\ \text{(CASE IG)}}} + \underbrace{0.378 \text{ Kip}}_{\substack{\text{LC 125} \\ \text{(CASE IA)}}} = 192.378 \text{ Kip}$$

Span 4  
 Max. Shear  
 (END BENT)

$$= \underbrace{130 \text{ Kip}}_{\substack{\text{LC 1662} \\ \text{(CASE ID)}}} + \underbrace{5.83 \text{ Kip}}_{\substack{\text{LC 123} \\ \text{(CASE IE)}}} = 135.83 \text{ Kip}$$

H & Z TT (HEADING NORTH)

CENTER GIRDER

Span 1  
 Max (+) Mom =

$$= \underbrace{43249 \text{ Kip-in}}_{\substack{\text{LC 157} \\ \text{(@ 69.3' location)} \\ \text{CASE IA}}} + \underbrace{8898 \text{ Kip-in}}_{\substack{\text{LC 515} \\ \text{(CONTRIBUTION} \\ \text{FROM CASE IB)}}} \left( \frac{69.3'}{166.23'} \right) = 46958.51 \text{ K-in}$$

$$= 3913.21 \text{ K-ft}$$

Span 3  
 Max (+) Mom =

$$= \underbrace{46404 \text{ Kip-in}}_{\substack{\text{LC 516} \\ \text{(@ 119' location)} \\ \text{CASE IB}}} + \underbrace{1845.78 \text{ Kip-in}}_{\substack{\text{LC 161} \\ \text{(CONTRIBUTION FROM)} \\ \text{(CASE IA)}}} = 48250.28 \text{ K-in}$$

$$= 4021 \text{ K-ft}$$

Span 1  
 Max Shear  
 @ Pier 37 =

$$= \underbrace{118 \text{ Kip}}_{\substack{\text{LC 146} \\ \text{(CASE IA)}}} + \underbrace{4.48 \text{ Kip}}_{\substack{\text{LC 516} \\ \text{(CONTRIBUTION} \\ \text{FROM CASE IB)}}} = 122.48 \text{ Kip}$$

Span 1-2  
 Max. Mom (-)  
 & MAX. Shear  
 (Pier 39) =

$$= \underbrace{87383 \text{ Kip-in}}_{\substack{\text{LC 1155 (CASE IC)}}} + \underbrace{3366 \text{ Kip-in}}_{\substack{\text{LC 1793 (CASE ID)}}} = 90749 \text{ K-in} = 7562.42 \text{ K-ft}$$

$$= \underbrace{134.34 \text{ Kip}}_{\substack{\text{LC 1155} \\ \text{CASE IC}}} + \underbrace{1.68 \text{ Kip}}_{\substack{\text{LC 1800} \\ \text{CASE ID} \\ \text{(CONTRIBUTION)}}} = 136.02 \text{ Kip}$$

Span 1 Max (-) Mom from uplift due to Case ID + CASE IE (Midspan @ 69.3' location) =  $\underbrace{3358 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 1803} \\ \text{(CASE ID)}}} \left( \frac{69.3'}{166.23'} \right) + \underbrace{65822 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2276} \\ \text{(CASE IE)}}} \left( \frac{69.3'}{166.23'} \right)$   
 = 2403.38 K-ft ∴ Max (+) Mom (controls)

Span 3 Max (-) Mom from uplift due to Case ID + CASE IE (Midspan @ 119' location) =  $\underbrace{22427.08 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 1803} \\ \text{(CASE ID)}}} + \underbrace{17318.13 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2271} \\ \text{(CASE IE)}}$

= 3312.1 Kip-ft  
 LC 2272 (CASE IE) @ 135' location      LC 1803 (CASE ID)  
 Span 2 Max. Mom (+) =  $\underbrace{74373 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2272 (CASE IE) @ 135' location} \\ \text{LC 1803 (CASE ID)}}} + 3725.986 \text{ K}\cdot\text{in}$   
 = 6508.2 K-ft

Span 4 Max Mom (+) =  $\underbrace{64680 \text{ K}\cdot\text{in}}_{\substack{\text{(CASE ID)} \\ \text{LC 1801 @ 124' location}}} + \underbrace{15464 \text{ K}\cdot\text{in}}_{\substack{\text{(CASE IE)} \\ \text{LC 2271}}} \left( \frac{212.45' - 124'}{212.45'} \right)$   
 = 5926.515 K-ft

Span 2-3 Max (-) Mom =  $\underbrace{92580 \text{ K}\cdot\text{in}}_{\substack{\text{LC (2977)} \\ \text{(CASE IF)}}} = 7715 \text{ K}\cdot\text{ft}$   
 & Max Shear =  $\underbrace{201 \text{ Kip}}_{\substack{\text{LC 2995} \\ \text{(CASE IF)}}$   
 (Pic. 39)

Span 2 Max (-) Mom From uplift due to Case IA + Case IB (Midspan @ 135' location) =  $\underbrace{7887.67 \text{ K}\cdot\text{in}}_{\substack{\text{LC 162} \\ \text{(CASE IA)}}} + \underbrace{9913.76 \text{ K}\cdot\text{in}}_{\substack{\text{LC 516} \\ \text{(CASE IB)}}} = 17801.43 \text{ K}\cdot\text{in}$   
 = 1483.45 K-ft  
 ∴ Max (+) Mom (controls) @ Span 2

Span 4 Max (-) Mom From uplift due to Case IA + Case IB (Midspan @ 124' location) =  $1648 \text{ K}\cdot\text{in} \left( \frac{212.45' - 124'}{212.45'} \right) + 31005 \text{ K}\cdot\text{in} \left( \frac{212.45' - 124'}{212.45'} \right)$   
 + Case IB (Midspan @ 124' location) =  $13730 \text{ K}\cdot\text{in} + 12253 \text{ K}\cdot\text{in} = 1132.9 \text{ K}\cdot\text{ft}$  ∴ Max (+) Mom (controls) @ Span 4

Span 3-4  
 Max. Mom (-) =  $\underbrace{76946 \text{ K}\cdot\text{in}}_{\substack{\text{LC 3862} \\ \text{(CASE II G)}}} + \underbrace{1648 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 162} \\ \text{(CASE II A)}}} = 78594 \text{ K}\cdot\text{in}$   
 & Max. Shear =  $\underbrace{187 \text{ Kip}}_{\substack{\text{LC 3852} \\ \text{(CASE II G)}}} + \underbrace{0.646 \text{ Kip}}_{\substack{\text{LC 161} \\ \text{(CASE II A)}}} = 187.646 \text{ Kip}$   
 (Pier 40)

Span 4  
 Max Shear @ End Bent =  $\underbrace{126 \text{ Kip}}_{\substack{\text{LC 1803} \\ \text{(CASE II D)}}} + \underbrace{6.07 \text{ Kip}}_{\substack{\text{LC 2272} \\ \text{(CASE II E)}}} = 132.07 \text{ Kip}$

4' 20" TT (HEADIN G NORTH)  
 SOUTH Gravel

Span 1 Max(+) Mom =  $\underbrace{57529 \text{ K}\cdot\text{in}}_{\substack{\text{CASE II A} \\ \text{LC 169 @ 81.6' location}}} + \underbrace{5804 \text{ K}\cdot\text{in}}_{\substack{\text{CASE II B} \\ \text{LC 503}}} \left(\frac{81.6'}{195.86'}\right) = 4995.6 \text{ K}\cdot\text{ft}$

Span 3 Max(+) Mom =  $\underbrace{37642 \text{ K}\cdot\text{in}}_{\substack{\text{CASE II B} \\ \text{LC 501 @ 86.3' location}}} + \underbrace{4124.12 \text{ K}\cdot\text{in}}_{\substack{\text{CASE II A} \\ \text{LC 181}}} = 41766.12 \text{ K}\cdot\text{in} = 3480.51 \text{ K}\cdot\text{ft}$

Span 1 Max Shear =  $\underbrace{130 \text{ Kip}}_{\substack{\text{CASE II A} \\ \text{LC 146}}} + \underbrace{2.47 \text{ Kip}}_{\substack{\text{CASE II B} \\ \text{LC 505}}} = 132.47 \text{ Kip}$

Span 1 & 2 Max Neg. Mom =  $\underbrace{93277 \text{ K}\cdot\text{in}}_{\substack{\text{CASE III C} \\ \text{LC 1123}}} + \underbrace{2950 \text{ K}\cdot\text{in}}_{\substack{\text{CASE III D} \\ \text{LC 1775}}} = 8018.92 \text{ K}\cdot\text{ft}$   
 & Shear @ Pier 38 =  $\underbrace{182 \text{ Kip}}_{\substack{\text{CASE III C} \\ \text{LC 1100}}} + \underbrace{1.25 \text{ Kip}}_{\substack{\text{CASE III D} \\ \text{LC 1769}}} = 183.25 \text{ Kip}$

Span 1 Max(-) Mom from Uplift (cases III D & III E @ 81.6' location) =  $\underbrace{2933 \text{ K}\cdot\text{in}}_{\substack{\text{LC 1769} \\ \text{(CASE III D)}}} \left(\frac{81.6'}{195.86'}\right) + \underbrace{6008 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2240} \\ \text{(CASE III E)}}} \left(\frac{81.6'}{195.86'}\right) = 2185.2 \text{ K}\cdot\text{ft} \therefore \text{Max(+) Mom. Controls}$

Span 3 Max(-) Mom from Uplift (cases III D & III E @ 86.3' location) =  $\underbrace{18704.67 \text{ K}\cdot\text{in}}_{\substack{\text{LC 1769} \\ \text{(CASE III D)}}} + \underbrace{26776.55 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2237} \\ \text{(CASE III E)}}} = 3790.1 \text{ K}\cdot\text{ft}$

737 of 1221  $\therefore \text{Max(+) Mom still Controls since the combined effect of HIST}$

$$\text{Span 2 Max (+) Mom} = \underbrace{74566 \text{ K}\cdot\text{in}}_{\substack{\text{CASE III E} \\ \text{LC 2238} \\ \text{@ 136' Location}}} + \underbrace{3613.64 \text{ Kip}\cdot\text{in}}_{\substack{\text{CASE III D} \\ \text{LC 1769} \\ \text{@ 136' Location}}} = 6514.97 \text{ K}\cdot\text{ft}$$

$$\text{Span 4 Max (+) Mom} = \underbrace{61660 \text{ K}\cdot\text{in}}_{\substack{\text{CASE III D} \\ \text{LC 1768} \\ \text{@ 122' Location}}} + \underbrace{15571 \text{ K}\cdot\text{in} \left( \frac{209.54^2 - 122^2}{209.54} \right)}_{\substack{\text{LC 2237} \\ \text{CASE III E} \\ \text{@ 122' Location}}} = 5680.43 \text{ K}\cdot\text{ft}$$

$$\text{Span 2-3 Max (-) Mom} = 89046 \text{ K}\cdot\text{in} = 7420.5 \text{ K}\cdot\text{ft}$$

& Max Shear = 189 Kip

LC 2947  
CASE III F

$$\text{Span 2 Max (-) Mom} = \underbrace{11288.8 \text{ K}\cdot\text{in}}_{\substack{\text{LC 181} \\ \text{CASE III A}}} + \underbrace{7152.32 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 504} \\ \text{CASE III B}}} = 1536.8 \text{ K}\cdot\text{ft}$$

from uplift @ 136' location

∴ Max (+) Mom. Controls

$$\text{Span 4 (Max (-) Mom from uplift @ 122' location)} = \underbrace{2398 \text{ K}\cdot\text{in} \left( \frac{209.54^2 - 122^2}{209.54} \right)}_{\substack{\text{LC 181} \\ \text{CASE III A}}} + \underbrace{21504 \text{ Kip}\cdot\text{in} \left( \frac{209.54^2 - 122^2}{209.54} \right)}_{\substack{\text{LC 506} \\ \text{CASE III B}}} = 9985.59 \text{ K}\cdot\text{in} = 832.133 \text{ K}\cdot\text{ft}$$

$$\text{Span 3-4 Max (-) Mom} = \underbrace{68067 \text{ K}\cdot\text{in}}_{\substack{\text{LC 3764} \\ \text{CASE III G}}} + \underbrace{2398 \text{ K}\cdot\text{in}}_{\substack{\text{LC 181} \\ \text{CASE III A}}} = 5872.1 \text{ K}\cdot\text{ft}$$

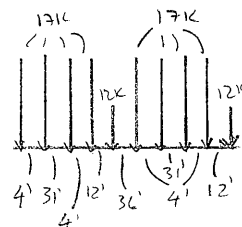
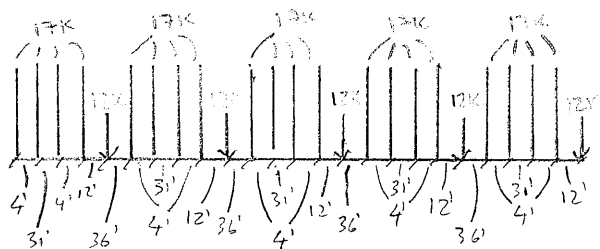
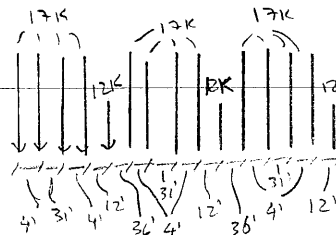
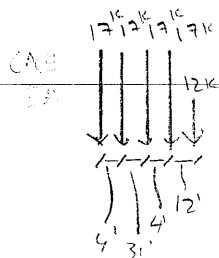
& Shear = 120 Kip + 6.3 Kip = 126.3 Kip

LC 3764 CASE III G      LC 181 CASE III A

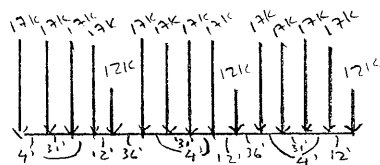
$$\text{Span 4 Max Shear @ END BENT} = \underbrace{123 \text{ Kip}}_{\substack{\text{LC 1769} \\ \text{CASE III D}}} + \underbrace{6.19 \text{ Kip}}_{\substack{\text{LC 2236} \\ \text{CASE III E}}} = 129.19 \text{ Kip}$$

## North Girder OH5C1 TT (North WARD'S)

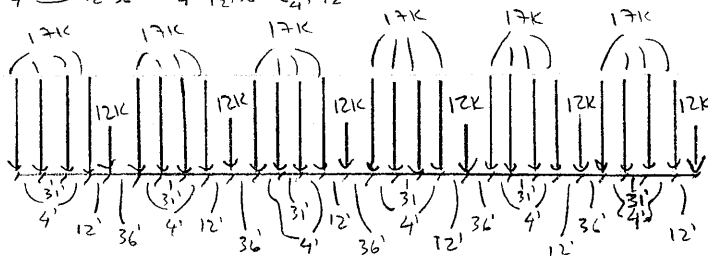
Span 1 = 136.92'    Span 2 = 270.82'    Span 3 = 234.62'    Span 4 = 216.06'



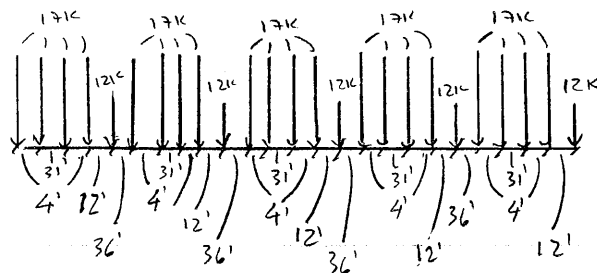
CASE II



CASE III



CASE IV



OH 5C1 TT (Heading North)

North Girder

Span 1 Max(+) Mom =  $20622 \text{ K}\cdot\text{in} + 10297 \text{ K}\cdot\text{in} \left( \frac{68.5'}{136.92'} \right) = 25773.7 \text{ K}\cdot\text{ft}$   
 LC 86 (CASE IA) @ 68.5'      LC 425 (CASE IB) @ 68.5'

Span 3 Max(+) Mom =  $45436 \text{ K}\cdot\text{in} + 902.36 \text{ kip}\cdot\text{in} = 3861.5 \text{ K}\cdot\text{ft}$   
 LC 416 (CASE IB) @ 117'      LC 105 (CASE IA) @ 117'

Span 1 Max Shear @ Pier 37 =  $63.5 \text{ kip} + 6.26 \text{ kip} = 69.76 \text{ kip}$   
 LC 53 (CASE IA)      LC 423 (CASE IB)

Span 1-2 Max Mom(-) & Shear @ Pier 38 =  $62355 \text{ Kip}\cdot\text{in} + 2722 \text{ Kip}\cdot\text{in} = 5423.1 \text{ K}\cdot\text{ft}$   
 LC 1049 (CASE IC)      LC 1627 (CASE ID)  
 =  $114 \text{ kip} + 1.66 \text{ kip} = 115.66 \text{ kip}$   
 LC 1058      LC 1628

Span 1 Max(-) Mom from Uplift @ 68.5' Location =  $2722 \text{ Kip}\cdot\text{in} \left( \frac{68.5'}{136.92'} \right) + 54005 \text{ Kip}\cdot\text{in} \left( \frac{68.5'}{136.92'} \right)$   
 LC 1628 (CASE ID)      LC 2057 (CASE IE)  
 =  $28380.1 \text{ Kip}\cdot\text{in} = 2365.0 \text{ Kip}\cdot\text{ft}$  ∴ Max(+) Mom Controls (SEE FURTHER EXPLANATION)

Span 3 Max(-) Mom from uplift @ 117' Location =  $11975.21 \text{ Kip}\cdot\text{in} + 16128.01 \text{ Kip}\cdot\text{in} = 2341.9 \text{ Kip}\cdot\text{ft}$   
 LC 1628 (CASE ID)      LC 2066 (CASE IE)  
 ∴ Max(+) Mom Controls @ Span 3

Span 2 Max(+) Mom =  $54973 \text{ K}\cdot\text{in} + 2726.75 \text{ K}\cdot\text{in} = 4808.31 \text{ K}\cdot\text{ft}$   
 LC 2050 (CASE IE) @ 135'      LC 1628 (CASE ID) @ 135'

Span 4 Max(+) Mom =  $48755 \text{ Kip}\cdot\text{in} + 11274 \text{ Kip}\cdot\text{in} \left( \frac{216.06' - 126'}{216.06'} \right) = 4454.5 \text{ K}\cdot\text{ft}$   
 LC 1740 or 12314 (CASE ID) @ 126'      LC 2066 (CASE IE) @ 126'

$$\begin{aligned} \text{Span 2-3 Max(-) Mom} &= \underbrace{73968 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2812} \\ \text{CASE IF}}} = 6164 \text{ Kip}\cdot\text{ft} \\ &\text{(@ Pier 3a)} \\ \& \text{ Max Shear} &= \underbrace{146 \text{ Kip}}_{\substack{\text{LC 2799} \\ \text{CASE IF}}} \end{aligned}$$

$$\begin{aligned} \text{Span 2 Max(-) Mom} &= \underbrace{3063.77 \text{ K}\cdot\text{in}}_{\substack{\text{LC 106} \\ \text{CASE IA}}} + \underbrace{10297.24 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 423} \\ \text{CASE IB}}} \\ &\text{from uplift} \\ &= 1113.42 \text{ K}\cdot\text{ft} \quad \text{Max(+)} \text{ Mom.} \\ &\quad \text{Controls on Spans} \end{aligned}$$

$$\begin{aligned} \text{Span 4 Max(-) Mom} &= \underbrace{630 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 107} \\ \text{CASE IA}}} \left( \frac{216.06' - 126'}{216.06'} \right) + 32024 \text{ Kip}\cdot\text{in} \left( \frac{216.06' - 126'}{216.06'} \right) \\ &\text{from uplift} \end{aligned}$$

$$\begin{aligned} &= 1134.26 \text{ K}\cdot\text{ft} \\ &\quad \underbrace{\text{LC 3738 (CASE IG)}}_{\substack{\text{LC 106} \\ \text{CASE IA}}} \end{aligned}$$

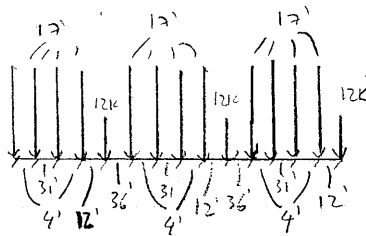
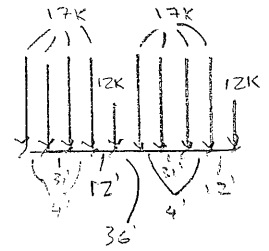
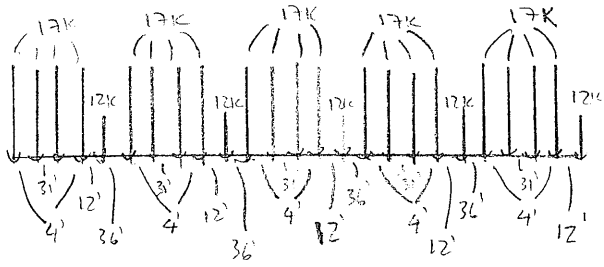
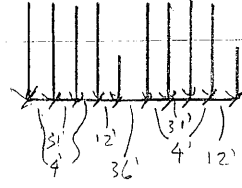
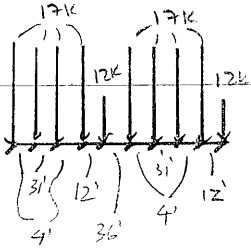
$$\begin{aligned} \text{Span 3-4 Max(-) Mom} &= 64936 \text{ Kip}\cdot\text{in} + 630 \text{ Kip}\cdot\text{in} = 5463.8 \text{ K}\cdot\text{ft} \\ \& \text{ Shear} \\ &\text{(Pier 4a)} \\ &= \underbrace{140 \text{ Kip}}_{\substack{\text{LC 3725} \\ \text{(CASE IG)}}} + \underbrace{0.243 \text{ Kip}}_{\substack{\text{LC 106} \\ \text{(CASE IA)}}} = 140.243 \text{ Kip} \end{aligned}$$

$$\begin{aligned} \text{Span 4 Max Shear} &= \underbrace{97.9 \text{ Kip}}_{\substack{\text{LC 1673} \\ \text{(CASE ID)}}} + \underbrace{4.35 \text{ Kip}}_{\substack{\text{LC 2069} \\ \text{(CASE IE)}}} = 102.25 \text{ Kip} \\ &\text{@ END BENT} \end{aligned}$$

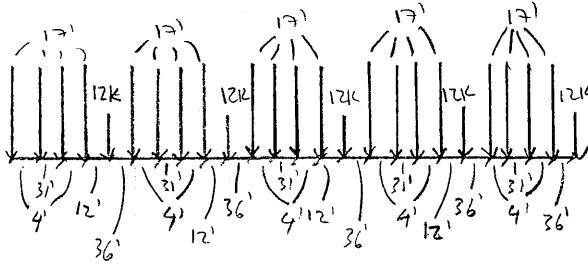
\* THE (+) Max Mom @ Span 1 > (-) Max Mom since THE OVERALL SUM OF THE OH5C1 SINGLE + OH5C1 TT (+) Mom > Sum of OH5C1 SINGLE + OH5C1 TT (-)

CENTER GIRDER OH 5C1 TT (NORTHWARD)

Span 1 = 166.23'    Span 2 = 270.82'    Span 3 = 203.88'    Span 4 = 212.45'

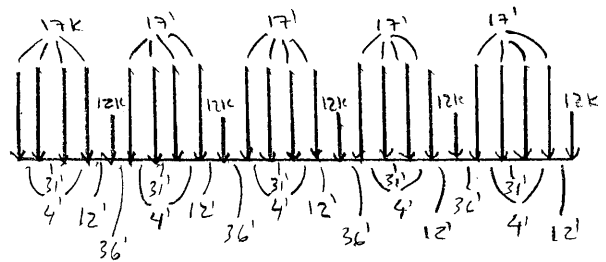


CASE II



CASE III

CASE





# CENTER GIRDER OH SCI TT (NORTH WARD)

$$\text{Span 1 Max (+) Mom} = \underbrace{31836 \text{ K}\cdot\text{in}}_{\substack{\text{LC 167} \\ \text{CASE IIA @ 69.3}}} + \underbrace{2816.6 \text{ K}\cdot\text{in}}_{\substack{\text{LC 470} \\ \text{CASE IIB}}} = 2887.7 \text{ K}\cdot\text{ft}$$

$$\text{Span 3 Max (+) Mom} = \underbrace{34944 \text{ K}\cdot\text{in}}_{\substack{\text{LC 460} \\ \text{CASE IIB @ 102'}}} + \underbrace{1907.2 \text{ K}\cdot\text{in}}_{\substack{\text{LC 156} \\ \text{CASE IIA @ 102'}}} = 3671.0 \text{ K}\cdot\text{ft}$$

$$\text{Span 1 Max Shear} = \underbrace{86.8 \text{ Kip}}_{\substack{\text{LC 140} \\ \text{CASE IIA}}} + \underbrace{3.39 \text{ Kip}}_{\substack{\text{LC 470} \\ \text{CASE IIB}}} = 90.19 \text{ Kip}$$

@ Pier 37

$$\text{Span 1-2 Max. Mom} = \underbrace{65975 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 1062 (CASE IIC)} \\ \text{LC 1655 (CASE IID)}}} + \underbrace{2413 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 1659} \\ \text{(CASE IID)}}} = 5699 \text{ K}\cdot\text{ft}$$

PShear =  $\underbrace{124 \text{ Kip}}_{\substack{\text{LC 1076} \\ \text{(CASE IIC)}}} + \underbrace{1.21 \text{ Kip}}_{\substack{\text{LC 1659} \\ \text{(CASE IID)}}} = 125.21 \text{ Kip}$

@ Pier 38

$$\text{Span 1 Max (-) Mom} = \underbrace{1005.947 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 1656} \\ \text{(CASE IID)}}} + \underbrace{20507.93 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 2082} \\ \text{(CASE IIE)}}} = 1792.8 \text{ Kip}\cdot\text{ft}$$

due to uplift

Span 1 Max (+) Mom Controls

$$\text{Span 3 Max (-) Mom} = \underbrace{12699.76 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 1656} \\ \text{(CASE IID) @ 102'}}} + \underbrace{17829.12 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2091} \\ \text{(CASE IIE) @ 102'}}} = 2544.1 \text{ K}\cdot\text{ft}$$

due to uplift

Span 3 Max (+) Mom Controls

$$\text{Span 2 Max (+) Mom} = \underbrace{55453 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 2075} \\ \text{(CASE IIE) @ 135'}}} + \underbrace{2677.36 \text{ K}\cdot\text{in}}_{\substack{\text{LC 1656} \\ \text{(CASE IID) @ 135'}}} = 4844.2 \text{ K}\cdot\text{ft}$$

Span 2 Max (+) Mom Controls

$$\text{Span 4 Max (+) Mom} = \underbrace{46678 \text{ K}\cdot\text{in}}_{\substack{\text{LC 1661} \\ \text{(CASE IID) @ 124'}}} + \underbrace{4805.99 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2091} \\ \text{(CASE IIE) @ 124'}}} = 4290.33 \text{ K}\cdot\text{ft}$$

Span 4 Max (+) Mom Controls

LC 2764 (CASE IIF)

$$\begin{aligned} \text{Span 2-3 Max(-) Mom} &= \overbrace{69001}^{\text{LC 2764 (CASE IIF)}} \text{ kip}\cdot\text{in} = 575\phi.1 \text{ K}\cdot\text{ft} \\ &\neq \text{Shear} \\ &\text{@ Pier 39} \\ &= \underbrace{132}_{\text{LC 2794 (CASE IIF)}} \text{ kip} \end{aligned}$$

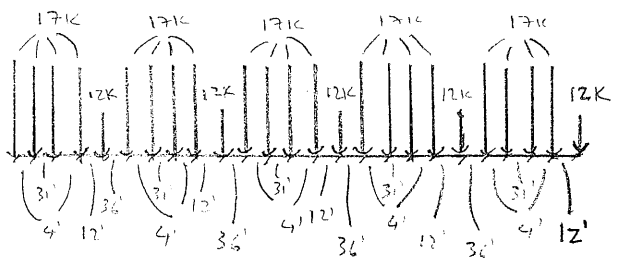
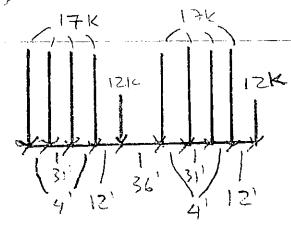
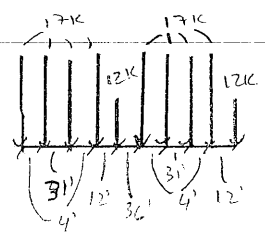
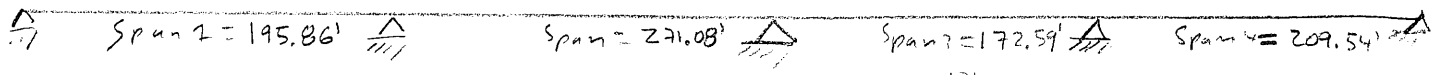
$$\begin{aligned} \text{Span 2 Max(-) Mom} &= \underbrace{5909.95}_{\text{LC 156 (CASE IIA)}} \text{ kip}\cdot\text{in} + \underbrace{7496.38}_{\text{LC 470 (CASE IIR)}} \text{ kip}\cdot\text{in} \\ \text{from uplift} &= 1117.2 \text{ K}\cdot\text{ft} \\ &\text{Max (+) Mom @ Span 2 Center} \end{aligned}$$

$$\begin{aligned} \text{Span 4 Max (-) Mom} &= \underbrace{514.102}_{\text{LC 156 (CASE IIA)}} \text{ kip}\cdot\text{in} + \underbrace{9574.82}_{\text{LC 488 (CASE IIR)}} \text{ kip}\cdot\text{in} \\ \text{from uplift} &= 84\phi.7 \text{ K}\cdot\text{ft} \\ &\text{Max (+) Mom @ Span 4 Controls} \end{aligned}$$

$$\begin{aligned} \text{Span 3-4 Max(-) Mom} &= \underbrace{56967}_{\text{LC 3617 (CASE IIG)}} \text{ kip}\cdot\text{in} + \underbrace{1235}_{\text{LC 155 (CASE IIA)}} \text{ kip}\cdot\text{in} = 485\phi.2 \text{ K}\cdot\text{ft} \\ &\neq \text{Shear} \\ &\text{(Pier 40)} \\ &= \underbrace{131}_{\text{LC 3607 (CASE IIG)}} \text{ kip} + \underbrace{0.484}_{\text{LC 155 (CASE IIA)}} \text{ kip} = 131.484 \text{ kip} \end{aligned}$$

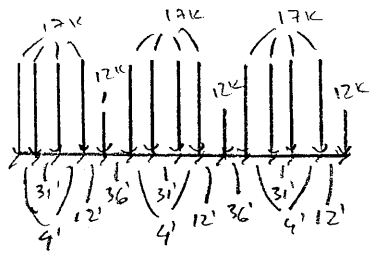
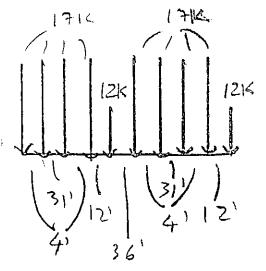
$$\begin{aligned} \text{Span 4 Max Shear} &= \underbrace{96.1}_{\text{LC 1618 (CASE IID)}} \text{ kip} + \underbrace{4.53}_{\text{LC 2089 (CASE IIE)}} \text{ kip} = 100.63 \text{ kip} \\ \text{@ END BENT} & \end{aligned}$$

# South Girder OH 5C1 TT (Northward)

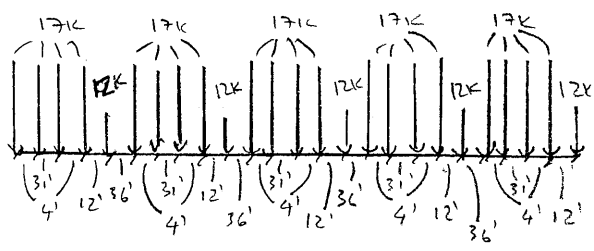


CASE I

CASE II

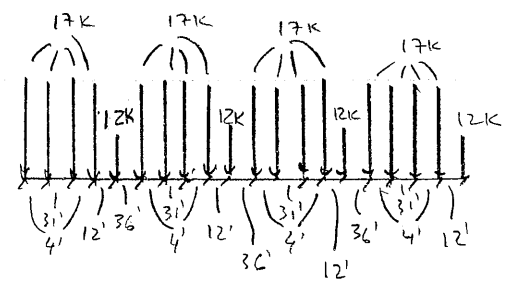


CASE III



CASE IV

CASE V



## South Girder OH5C1 Truck Train (Northwards)

$$\text{Span 1 Max (+) Mom} = \underbrace{42202 \text{ K}\cdot\text{in}}_{\substack{\text{LC 182} \\ \text{(CASE IIIA) @ 81.6'}}} + \underbrace{1805.43 \text{ K}\cdot\text{in}}_{\substack{\text{LC 491} \\ \text{(CASE IIIB) @ 81.6'}}} = 3667.3 \text{ K}\cdot\text{ft}$$

$$\text{Span 3 Max (+) Mom} = \underbrace{26850 \text{ K}\cdot\text{in}}_{\substack{\text{LC 507} \\ \text{(CASE IIIR) @ 71.9'}}} + \underbrace{3889.92 \text{ K}\cdot\text{in}}_{\substack{\text{LC 175} \\ \text{(CASE IIIA) @ 71.9'}}} = 2561.7 \text{ K}\cdot\text{ft}$$

$$\text{Span 1 Max Shear} = \underbrace{95.7 \text{ Kip}}_{\substack{\text{LC 140} \\ \text{CASE IIIA}}} + \underbrace{1.84 \text{ Kip}}_{\substack{\text{LC 491} \\ \text{CASE IIIB}}} = 97.54 \text{ Kip}$$

(Pier 37)

LC 1084 (CASE III C)      LC 1682 (CASE IIID)

$$\text{Span 1-2 Max (-) Mom} = \underbrace{69765 \text{ K}\cdot\text{in}}_{\substack{\text{LC 1063} \\ \text{(CASE III C)}}} + \underbrace{2132 \text{ K}\cdot\text{in}}_{\substack{\text{LC 1681} \\ \text{(CASE IIID)}}} = 5991.42 \text{ K}\cdot\text{ft}$$

Shear =  $\underbrace{131 \text{ Kip}}_{\substack{\text{LC 1063} \\ \text{(CASE III C)}}} + \underbrace{0.907 \text{ Kip}}_{\substack{\text{LC 1681} \\ \text{(CASE IIID)}}} = 131.907 \text{ Kip}$

@ Pier 38

$$\text{Span 1 Max (-) Mom} = \underbrace{888.097 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 1682} \\ \text{CASE IIID}}} + \underbrace{18723.38 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 2106} \\ \text{CASE IIIE}}} = 1634.3 \text{ K}\cdot\text{ft}$$

from uplift

Max (+) Mom. Still control from controls on Span 2

$$\text{Span 3 Max (-) Mom} = \underbrace{10100.64 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 1682} \\ \text{CASE IIID}}} + \underbrace{25259.82 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 2115} \\ \text{CASE IIIE}}} = 2946.7 \text{ K}\cdot\text{ft}$$

from uplift

Max (+) Mom. Still control Strip OH single OH train is more critical on (+) Mo

$$\text{Span 2 Max (+) Mom} = \underbrace{55599 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 2099} \\ \text{CASE IIIE @ 136'}}} + \underbrace{2626.6 \text{ K}\cdot\text{in}}_{\substack{\text{LC 1681} \\ \text{CASE IIID}}} = 4852.13 \text{ K}\cdot\text{ft}$$

$$\text{Span 4 Max (+) Mom} = \underbrace{44739 \text{ K}\cdot\text{in}}_{\substack{\text{LC 1686} \\ \text{CASE IIID @ 122'}}} + \underbrace{4855.203 \text{ K}\cdot\text{in}}_{\substack{\text{LC 2115} \\ \text{CASE IIIE}}} = 4132.85 \text{ K}\cdot\text{ft}$$

LC 2785 (CASE IIIF)

$$\text{Span 2-3 Max (-) Mom} = \underbrace{66537 \text{ Kip}\cdot\text{in}}_{\substack{\text{LC 2801} \\ \text{CASE IIIE}}} = 5544.75 \text{ Kip}\cdot\text{ft}$$

Shear =  $\underbrace{740.011221 \text{ Kip}}_{\substack{\text{LC 2801} \\ \text{CASE IIIE}}}$

@ Pier 39

$$\text{Span 2 Max (+) Mom} = \underbrace{8423.91 \text{ k}\cdot\text{in}}_{\substack{\text{LC 175} \\ \text{CASE III A}}} + \underbrace{5339.84 \text{ k}\cdot\text{in}}_{\substack{\text{LC 491} \\ \text{CASE III C}}} = 1146.98 \text{ k}\cdot\text{ft}$$

∴ Max (+) Mom on Span 2 Controls

$$\text{Span 4 max (-) Mom} = \underbrace{747.624 \text{ k}\cdot\text{in}}_{\substack{\text{LC 174} \\ \text{CASE III A}}} + \underbrace{6728.25 \text{ k}\cdot\text{in}}_{\substack{\text{LC 494} \\ \text{CASE III C}}} = 622.99 \text{ k}\cdot\text{ft}$$

∴ Max (+) Mom on Span 4 Controls

$$\text{Span 3-4 Max Neg Mom} = \underbrace{50500 \text{ kip}\cdot\text{in}}_{\text{LC 3538 (CASE III G)}} + \underbrace{1790 \text{ kip}\cdot\text{in}}_{\text{LC 175 (CASE III A)}} = 4357.5 \text{ k}\cdot\text{ft}$$

∓ Shear @ Pier 40 =  $\underbrace{115 \text{ kip}}_{\text{LC 3547 (CASE III G)}} + \underbrace{4.7 \text{ kip}}_{\text{LC 176 (CASE III A)}} = 119.7 \text{ kip}$

$$\text{Span 4 Max Shear @ EWD BENT} = \underbrace{94.6 \text{ kip}}_{\substack{\text{LC 1722} \\ \text{(CASE III D)}}} + \underbrace{4.62 \text{ kip}}_{\substack{\text{LC 2113} \\ \text{(CASE III E)}}} = 99.22 \text{ kip}$$

A total of 7 Deficiencies Found on all 3 Main Girders:

a) North Girder	Segment 17	26'	From Pier 38 (Between P38 & P39)
b) " "	Segment 19	27'	" Pier 39 ( " P39 & P40)
c) Center Girder	Segment 7	26'	" Pier 38 ( " P38 & P39)
d) " "	Segment 19	16'	" Pier 39 ( " P39 & P40)
e) " "	Segment 26	58'	" Pier 40 ( " P40 & EB)
f) South Girder	Segment 19	263'	" Pier 38 ( " P38 & P39)
g) " "	Segment 28	55'	" Pier 40 (Between P40 & EB)

(a) NG Segment 17 26' from Pier 38 (Between P38 & P39)  
 ISSUE LOCATED WITHIN DL CONTRAFLEXURE POINTS  
 ∴ CASES "IC" + "ID" WILL CONTROL (HS20 & OH5CI) -

HS20 TRAIN {

$$M(-) = 33435.723 \text{ k.in} = 2786.31 \text{ k.ft (LC1068) CASE "IC"}$$

$$= 2355.15 \text{ k.in} = 196.26 \text{ k.ft (LC1662) CASE "ID"}$$

Shear = 138.282 kIP (LC1059) CASE "IC"  
 = 4.735 kIP (LC1662) CASE "ID"

OH5CI TRAIN {

$$M(-) = 26344.39 \text{ k.in} = 2195.4 \text{ k.ft (LC1050) CASE "IC"}$$

$$= 1672.653 \text{ k.in} = 139.4 \text{ kIP CASE "ID"}$$

Shear = 115.27 kIP (LC1049) CASE "IC"  
 = 3.36 kIP (LC1631) CASE "ID"

(b) NG Segment 19 27' from Pier 39 (Between P39 & P40)  
 ISSUE LOCATED WITHIN DL CONTRAFLEXURE POINTS  
 ∴ CASE "IF" WILL CONTROL (HS20 & OH5CI)

HS20 TRAIN {

$$M(-) = 47685.56 \text{ k.in} = 3973.8 \text{ k.ft (LC2890) CASE "IF"}$$

$$= 138.564 \text{ kIP (LC2889) CASE "IF"}$$

OH5CI TRAIN {

$$M(-) = 36496.168 \text{ k.in} = 3041.35 \text{ k.ft}$$

$$\text{Shear} = 110.42 \text{ kIP}$$

Ⓒ CG Segment 7 26' from pier 38 (Between P38 & P39)  
 ISSUE LOCATED WITHIN DL CONTRAFLEXURE POINTS  
 ∴ CASES "II C" + "II D" WILL CONTROL (HS 20 & OH SCI)

HS 20 TRAIN

$$\left\{ \begin{aligned} M(-) &= 35\,236.27 \text{ k}\cdot\text{in} = 2936.36 \text{ k}\cdot\text{ft} \text{ (LC 1155) CASE "II C"} \\ &= 1993.61 \text{ k}\cdot\text{in} = 166.13 \text{ k}\cdot\text{ft} \text{ (LC 1803) CASE "II D"} \\ \text{Shear} &= 1283 \text{ kip (LC 1153) CASE "II C"} \\ &= 4.373 \text{ kip (LC 1803) CASE "II D"} \end{aligned} \right.$$

OH SCI TRAIN

$$\left\{ \begin{aligned} M(-) &= 26\,475.05 \text{ k}\cdot\text{in} = 2206.3 \text{ k}\cdot\text{ft} \text{ (LC 1662) CASE "II C"} \\ &= 1432.35 \text{ k}\cdot\text{in} = 119.4 \text{ k}\cdot\text{ft} \text{ (LC 1657) CASE "II D"} \\ \text{Shear} &= 107.84 \text{ kip (LC 1048) CASE "II C"} \\ &= 3.142 \text{ kip (LC 1656) CASE "II D"} \end{aligned} \right.$$

Ⓓ CG Segment 19 16' From Pier 39 (Between P39 & P40)  
 ISSUE LOCATED WITHIN DL CONTRAFLEXURE POINTS  
 ∴ CASE "II F" CONTROLS (HS 20 & OH SCI)

HS 20 TRAIN

$$\left\{ \begin{aligned} M(-) &= 63\,766.97 \text{ k}\cdot\text{in} = 5314 \text{ kip}\cdot\text{ft} \text{ (LC 2977) CASE "II F"} \\ \text{Shear} &= 118.07 \text{ kip (LC 3010) CASE "II F"} \end{aligned} \right.$$

OH SCI TRAIN

$$\left\{ \begin{aligned} M(-) &= 47\,214.512 \text{ k}\cdot\text{in} = 3934.54 \text{ k}\cdot\text{ft} \text{ (LC 2764) CASE "II F"} \\ \text{Shear} &= 98.28 \text{ kip (LC 2794) CASE "II F"} \end{aligned} \right.$$

Ⓔ CG Segment 26 58' From Pier 40 (Between P40 & P41)  
 ISSUE LOCATED ON POSITIVE MOMENT REGION Span 4  
 ∴ CASES "II C" + "II D" WILL CONTROL (HS 20 & OH SCI)

HS 20 TRAIN

$$\left\{ \begin{aligned} M(+) &= 10096.34 \text{ k}\cdot\text{in} = 841.36 \text{ k}\cdot\text{ft} \text{ (LC 1153) CASE "II C"} \\ &= 33376.547 \text{ k}\cdot\text{in} = 2781.4 \text{ k}\cdot\text{ft} \text{ (LC 1801) CASE "II D"} \\ \text{Shear} &= 5.45 \text{ kip (LC 1153) CASE "II C"} \\ &= 181.84 \text{ kip (LC 1794) CASE "II D"} \end{aligned} \right.$$

OH SCI TRAIN

$$\left\{ \begin{aligned} M(+) &= 7502.86 \text{ k}\cdot\text{in} = 625.24 \text{ k}\cdot\text{ft} \text{ (LC 1071) CASE "II C"} \\ &= 24674.03 \text{ k}\cdot\text{in} = 2056.2 \text{ k}\cdot\text{ft} \text{ (LC 1661) CASE "II D"} \\ \text{Shear} &= 4.05 \text{ kip (LC 1071) CASE "II C"} \\ &= 749 \text{ of } 1221.68 \text{ kip} \end{aligned} \right.$$

or 8.08' From Pier 39

(F) South Girder Segment 19 263' from Pier 38 (Between P38 & P39)  
 ISSUE LOCATED WITHIN DL CONTRAFLEXURE POINTS  
 ∴ CASE "III F" WILL CONTROL (HS 20 & OH 5C1)

$$\text{HS 20 TRAIN} \begin{cases} M(-) = 71468.2 \text{ k}\cdot\text{in} = 5955.7 \text{ kft (LC 2941) CASE "III F"} \\ \text{Shear} = 180.94 \text{ kip (LC 2947) CASE "III F"} \end{cases}$$

$$\text{OH 5C1 TRAIN} \begin{cases} M(-) = 53805.42 \text{ k}\cdot\text{in} = 4483.8 \text{ kft (LC 2785) CASE "III F"} \\ \text{Shear} = 133.374 \text{ kip (LC 2801) CASE "III F"} \end{cases}$$

(G) S G Segment 28 55' from Pier 40 (Between P40 & P41)  
 ISSUE LOCATED ON POSITIVE MOMENT REGION, Span 4  
 ∴ CASES "III D" & "III C" WILL CONTROL (HS 20 & OH 5C1)

$$\text{HS 20 TRAIN} \begin{cases} M(+): 9734.79 \text{ k}\cdot\text{in} = 811.23 \text{ kft (LC 1118) CASE "III C"} \\ M(+): 27982.12 \text{ k}\cdot\text{in} = 2331.84 \text{ kft (LC 1768) CASE "III D"} \\ \text{Shear}: 5.25 \text{ kip (LC 1120) CASE "III C"} \\ \text{Shear}: 100.863 \text{ kip (LC 1763) CASE "III D"} \end{cases}$$

$$\text{OH 5C1 TRAIN} \begin{cases} M(+): 7322.09 \text{ k}\cdot\text{in} = 610.2 \text{ kft (LC 1103) CASE "III C"} \\ \text{Shear}: 3.95 \text{ kip (LC 1104) CASE "III C"} \\ M(+): 21067.92 \text{ k}\cdot\text{in} = 1755.7 \text{ kft (LC 1686) CASE "III D"} \\ \text{Shear}: 39.66 \text{ kip (LC 1652) CASE "III D"} \end{cases}$$



**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo. - Ctr Gdr HS20**



Made By RAH  
Check By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING HS20 TRUCKS (SINGLE OR TRAIN)**

Single HS20/Single OH5C1 Shear/Mom. DF= 0.686

Train HS20/Train OH5C1 Shear/Mom. DF= 0.112

Shear in Kips, Moments in K-ft

**Pier 37**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	66.71	0.00	N/A	0.00	45.77	0.00
Single HS20 Train Vehicle	1	N/A	0.00	122.48	0.00	13.72	0.00
(2)XHS20 Single	1	66.71	0.00	N/A	N/A	91.53	0.00
(2)XHS20 Train	1	N/A	0.00	122.48	0.00	27.44	0.00
HS20 Single + HS20 Train	1	66.71	0.00	122.48	0.00	59.48	0.00
HS20 Single + (2)XHS20 Train	0.9	66.71	0.00	122.48	0.00	65.88	0.00
HS20 Train + (2)XHS20 Single	0.9	66.71	0.00	122.48	0.00	94.72	0.00
(2)XHS20 Train + (2)XHS20 Single	0.75	66.71	0.00	122.48	0.00	89.22	0.00

**Span 1 (69.3' from pier 37)**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	0.00	2155.66	0.00	N/A	0.00	1478.78
Single HS20 Train Vehicle	1	0.00	N/A	0.00	3913.21	0.00	438.28
(2)XHS20 Single	1	0.00	2155.66	0.00	N/A	0.00	2957.56
(2)XHS20 Train	1	0.00	N/A	0.00	3913.21	0.00	876.56
HS20 Single + HS20 Train	1	0.00	2155.66	0.00	3913.21	0.00	1917.06
HS20 Single + (2)XHS20 Train	0.9	0.00	2155.66	0.00	3913.21	0.00	2119.81
HS20 Train + (2)XHS20 Single	0.9	0.00	2155.66	0.00	3913.21	0.00	3056.26
(2)XHS20 Train + (2)XHS20 Single	0.75	0.00	2155.66	0.00	3913.21	0.00	2875.59

**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo. - Ctr Gdr HS20**



Made By RAH  
Check By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING HS20 TRUCKS (SINGLE OR TRAIN)**

**Pier 38**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	70.51	1879.96	N/A	N/A	48.37	1289.65
Single HS20 Train Vehicle	1	N/A	N/A	136.02	7562.42	15.23	846.99
(2)XHS20 Single	1	70.51	1879.96	N/A	N/A	96.74	2579.31
(2)XHS20 Train	1	N/A	N/A	136.02	7562.42	30.47	1693.98
HS20 Single + HS20 Train	1	70.51	1879.96	136.02	7562.42	63.61	2136.64
HS20 Single + (2)XHS20 Train	0.9	70.51	1879.96	136.02	7562.42	70.96	2685.27
HS20 Train + (2)XHS20 Single	0.9	70.51	1879.96	136.02	7562.42	100.78	3083.67
(2)XHS20 Train + (2)XHS20 Single	0.75	70.51	1879.96	136.02	7562.42	95.41	3204.97

**Span 2 (135' from pier 38)**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	0.00	3048.23	0.00	N/A	0.00	2091.09
Single HS20 Train Vehicle	1	0.00	N/A	0.00	6508.20	0.00	728.92
(2)XHS20 Single	1	0.00	3048.23	0.00	N/A	0.00	4182.18
(2)XHS20 Train	1	0.00	N/A	0.00	6508.20	0.00	1457.84
HS20 Single + HS20 Train	1	0.00	3048.23	0.00	6508.20	0.00	2820.01
HS20 Single + (2)XHS20 Train	0.9	0.00	3048.23	0.00	6508.20	0.00	3194.03
HS20 Train + (2)XHS20 Single	0.9	0.00	3048.23	0.00	6508.20	0.00	<b>4419.99</b>
(2)XHS20 Train + (2)XHS20 Single	0.75	0.00	3048.23	0.00	6508.20	0.00	4230.01

**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo. - Ctr Gdr HS20**



Made By RAH  
Check By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING HS20 TRUCKS (SINGLE OR TRAIN)**

**Pier 39**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	70.39	1662.60	N/A	N/A	48.29	1140.54
Single HS20 Train Vehicle	1	N/A	N/A	201.00	7715.00	22.51	864.08
(2)XHS20 Single	1	70.39	1662.60	N/A	N/A	96.58	2281.09
(2)XHS20 Train	1	N/A	N/A	201.00	7715.00	45.02	1728.16
HS20 Single + HS20 Train	1	70.39	1662.60	201.00	7715.00	70.80	2004.62
HS20 Single + (2)XHS20 Train	0.9	70.39	1662.60	201.00	7715.00	83.98	2581.83
HS20 Train + (2)XHS20 Single	0.9	70.39	1662.60	201.00	7715.00	<b>107.18</b>	2830.65
(2)XHS20 Train + (2)XHS20 Single	0.75	70.39	1662.60	201.00	7715.00	106.20	3006.94

**Span 3 (119' from pier 39)**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	0.00	1899.43	0.00	N/A	0.00	1303.01
Single HS20 Train Vehicle	1	0.00	N/A	0.00	4021.00	0.00	450.35
(2)XHS20 Single	1	0.00	1899.43	0.00	N/A	0.00	2606.02
(2)XHS20 Train	1	0.00	N/A	0.00	4021.00	0.00	900.70
HS20 Single + HS20 Train	1	0.00	1899.43	0.00	4021.00	0.00	1753.36
HS20 Single + (2)XHS20 Train	0.9	0.00	1899.43	0.00	4021.00	0.00	1983.34
HS20 Train + (2)XHS20 Single	0.9	0.00	1899.43	0.00	4021.00	0.00	2750.74
(2)XHS20 Train + (2)XHS20 Single	0.75	0.00	1899.43	0.00	4021.00	0.00	2630.05

**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo. - Ctr Gdr HS20**



Made By RAH  
Check By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING HS20 TRUCKS (SINGLE OR TRAIN)**

**Pier 40**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	70.21	1542.74	N/A	N/A	48.16	1058.32
Single HS20 Train Vehicle	1	N/A	N/A	187.65	6549.50	21.02	733.54
(2)XHS20 Single	1	70.21	1542.74	N/A	N/A	96.32	2116.64
(2)XHS20 Train	1	N/A	N/A	187.65	6549.50	42.03	1467.09
HS20 Single + HS20 Train	1	70.21	1542.74	187.65	6549.50	69.18	1791.86
HS20 Single + (2)XHS20 Train	0.9	70.21	1542.74	187.65	6549.50	81.17	2272.87
HS20 Train + (2)XHS20 Single	0.9	70.21	1542.74	187.65	6549.50	105.60	2565.16
(2)XHS20 Train + (2)XHS20 Single	0.75	70.21	1542.74	187.65	6549.50	103.77	2687.80

**Span 4 (124' from pier 40)**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	0.00	2916.38	0.00	N/A	0.00	2000.64
Single HS20 Train Vehicle	1	0.00	N/A	0.00	5926.50	0.00	663.77
(2)XHS20 Single	1	0.00	2916.38	0.00	N/A	0.00	4001.28
(2)XHS20 Train	1	0.00	N/A	0.00	5926.50	0.00	1327.54
HS20 Single + HS20 Train	1	0.00	2916.38	0.00	5926.50	0.00	2664.41
HS20 Single + (2)XHS20 Train	0.9	0.00	2916.38	0.00	5926.50	0.00	2995.36
HS20 Train + (2)XHS20 Single	0.9	0.00	2916.38	0.00	5926.50	0.00	4198.54
(2)XHS20 Train + (2)XHS20 Single	0.75	0.00	2916.38	0.00	5926.50	0.00	3996.61

**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo. - Ctr Gdr HS20**



Made By RAH  
Check By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING HS20 TRUCKS (SINGLE OR TRAIN)**

**East Abutment**

	Reduction	V HS20 Single Unfactored No IM No DF No Reduction	M HS20 Single Unfactored No IM No DF No Reduction	V HS20 Train Unfactored No IM No DF No Reduction	M HS20 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single HS20 Vehicle	1	67.97	0.00	N/A	0.00	46.63	0.00
Single HS20 Train Vehicle	1	N/A	0.00	132.07	0.00	14.79	0.00
(2)XHS20 Single	1	67.97	0.00	N/A	0.00	93.25	0.00
(2)XHS20 Train	1	N/A	0.00	132.07	0.00	29.58	0.00
HS20 Single + HS20 Train	1	67.97	0.00	132.07	0.00	61.42	0.00
HS20 Single + (2)XHS20 Train	0.9	67.97	0.00	132.07	0.00	68.59	0.00
HS20 Train + (2)XHS20 Single	0.9	67.97	0.00	132.07	0.00	97.24	0.00
(2)XHS20 Train + (2)XHS20 Single	0.75	67.97	0.00	132.07	0.00	92.13	0.00
						Max V Combo	107.18
						Max M Combo	4419.99

**Therefore the Most Critical Number of Lanes (combined) for the HS20 Truck will be 2 Single HS20 + 1 Train HS20**

**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo - Ctr Gdr OH5C1**



Made By RAH  
Check By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING OH5C1 TRUCKS (SINGLE OR TRAIN)**

Single HS20/Single OH5C1 Shear/Mom. DF= 0.686  
Train HS20/Train OH5C1 Shear/Mom. DF= 0.112

Shear in Kips, Moments in K-ft

**Pier 37**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	65.09	0.00	N/A	0.00	44.65	0.00
Single OH5C1 Train Vehicle	1	N/A	0.00	90.19	0.00	10.10	0.00
(2)XOH5C1 Single	1	65.09	0.00	N/A	N/A	89.31	0.00
(2)XOH5C1 Train	1	N/A	0.00	90.19	0.00	20.20	0.00
OH5C1 Single + OH5C1 Train	1	65.09	0.00	90.19	0.00	54.75	0.00
OH5C1 Single + (2)XOH5C1 Train	0.9	65.09	0.00	90.19	0.00	58.37	0.00
OH5C1 Train + (2)XOH5C1 Single	0.9	65.09	0.00	90.19	0.00	89.47	0.00
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	65.09	0.00	90.19	0.00	82.13	0.00

**Span 1 (69.3' from pier 37)**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	0.00	2070.33	0.00	N/A	0.00	1420.25
Single OH5C1 Train Vehicle	1	0.00	N/A	0.00	2887.72	0.00	323.42
(2)XOH5C1 Single	1	0.00	2070.33	0.00	N/A	0.00	2840.50
(2)XOH5C1 Train	1	0.00	N/A	0.00	2887.72	0.00	646.85
OH5C1 Single + OH5C1 Train	1	0.00	2070.33	0.00	2887.72	0.00	1743.67
OH5C1 Single + (2)XOH5C1 Train	0.9	0.00	2070.33	0.00	2887.72	0.00	1860.39
OH5C1 Train + (2)XOH5C1 Single	0.9	0.00	2070.33	0.00	2887.72	0.00	2847.53
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	0.00	2070.33	0.00	2887.72	0.00	2615.51

**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo - Ctr Gdr OH5C1**



Made By RAH  
Check By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING OH5C1 TRUCKS (SINGLE OR TRAIN)**

**Pier 38**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	75.22	2041.11	N/A	N/A	51.60	1400.20
Single OH5C1 Train Vehicle	1	N/A	N/A	125.21	5699.00	14.02	638.29
(2)XOH5C1 Single	1	75.22	2041.11	N/A	N/A	103.20	2800.40
(2)XOH5C1 Train	1	N/A	N/A	125.21	5699.00	28.05	1276.58
OH5C1 Single + OH5C1 Train	1	75.22	2041.11	125.21	5699.00	65.62	2038.49
OH5C1 Single + (2)XOH5C1 Train	0.9	75.22	2041.11	125.21	5699.00	71.68	2409.10
OH5C1 Train + (2)XOH5C1 Single	0.9	75.22	2041.11	125.21	5699.00	105.50	3094.82
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	75.22	2041.11	125.21	5699.00	98.44	3057.73

**Span 2 (135' from pier 38)**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	0.00	3038.70	0.00	N/A	0.00	2084.55
Single OH5C1 Train Vehicle	1	0.00	N/A	0.00	4844.20	0.00	542.55
(2)XOH5C1 Single	1	0.00	3038.70	0.00	N/A	0.00	4169.09
(2)XOH5C1 Train	1	0.00	N/A	0.00	4844.20	0.00	1085.10
OH5C1 Single + OH5C1 Train	1	0.00	3038.70	0.00	4844.20	0.00	2627.10
OH5C1 Single + (2)XOH5C1 Train	0.9	0.00	3038.70	0.00	4844.20	0.00	2852.68
OH5C1 Train + (2)XOH5C1 Single	0.9	0.00	3038.70	0.00	4844.20	0.00	<b>4240.48</b>
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	0.00	3038.70	0.00	4844.20	0.00	3940.64

**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo - Ctr Gdr OH5C1**



Made By RAH  
Check By DBH

Date 3/26/2012  
Date 4/2/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING OH5C1 TRUCKS (SINGLE OR TRAIN)**

**Pier 39**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	74.82	1810.42	N/A	N/A	51.33	1241.95
Single OH5C1 Train Vehicle	1	N/A	N/A	132.00	5750.10	14.78	644.01
(2)XOH5C1 Single	1	74.82	1810.42	N/A	N/A	102.66	2483.90
(2)XOH5C1 Train	1	N/A	N/A	132.00	5750.10	29.57	1288.02
OH5C1 Single + OH5C1 Train	1	74.82	1810.42	132.00	5750.10	66.11	1885.96
OH5C1 Single + (2)XOH5C1 Train	0.9	74.82	1810.42	132.00	5750.10	72.81	2276.97
OH5C1 Train + (2)XOH5C1 Single	0.9	74.82	1810.42	132.00	5750.10	<b>105.70</b>	2815.12
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	74.82	1810.42	132.00	5750.10	99.17	2828.94

**Span 3 (102' from pier 39)**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	0.00	1929.29	0.00	N/A	0.00	1323.49
Single OH5C1 Train Vehicle	1	0.00	N/A	0.00	3071.00	0.00	343.95
(2)XOH5C1 Single	1	0.00	1929.29	0.00	N/A	0.00	2646.99
(2)XOH5C1 Train	1	0.00	N/A	0.00	3071.00	0.00	687.90
OH5C1 Single + OH5C1 Train	1	0.00	1929.29	0.00	3071.00	0.00	1667.45
OH5C1 Single + (2)XOH5C1 Train	0.9	0.00	1929.29	0.00	3071.00	0.00	1810.26
OH5C1 Train + (2)XOH5C1 Single	0.9	0.00	1929.29	0.00	3071.00	0.00	2691.85
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	0.00	1929.29	0.00	3071.00	0.00	2501.17



**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo - Ctr Gdr OH5C1**



Made By RAH  
 Check By DBH

Date 3/26/2012  
 Date 4/2/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING OH5C1 TRUCKS (SINGLE OR TRAIN)**

**Pier 40**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	74.26	1643.61	N/A	N/A	50.94	1127.52
Single OH5C1 Train Vehicle	1	N/A	N/A	131.48	4850.20	14.73	543.22
(2)XOH5C1 Single	1	74.26	1643.61	N/A	N/A	101.88	2255.03
(2)XOH5C1 Train	1	N/A	N/A	131.48	4850.20	29.45	1086.44
OH5C1 Single + OH5C1 Train	1	74.26	1643.61	131.48	4850.20	65.67	1670.74
OH5C1 Single + (2)XOH5C1 Train	0.9	74.26	1643.61	131.48	4850.20	72.35	1992.57
OH5C1 Train + (2)XOH5C1 Single	0.9	74.26	1643.61	131.48	4850.20	104.94	2518.43
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	74.26	1643.61	131.48	4850.20	98.50	2506.11

**Span 4 (124' from pier 40)**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	0.00	2901.24	0.00	N/A	0.00	1990.25
Single OH5C1 Train Vehicle	1	0.00	N/A	0.00	4290.33	0.00	480.52
(2)XOH5C1 Single	1	0.00	2901.24	0.00	N/A	0.00	3980.50
(2)XOH5C1 Train	1	0.00	N/A	0.00	4290.33	0.00	961.03
OH5C1 Single + OH5C1 Train	1	0.00	2901.24	0.00	4290.33	0.00	2470.77
OH5C1 Single + (2)XOH5C1 Train	0.9	0.00	2901.24	0.00	4290.33	0.00	2656.15
OH5C1 Train + (2)XOH5C1 Single	0.9	0.00	2901.24	0.00	4290.33	0.00	4014.91
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	0.00	2901.24	0.00	4290.33	0.00	3706.15

**SECTION I**

**FOR SPANS > 200 FT.**

**Lane Combo - Ctr Gdr OH5C1**



Made By RAH  
 Check By DBH

Date 3/26/2012  
 Date 4/2/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**LANE COMBINATIONS ACTING ON CENTER GIRDER USING OH5C1 TRUCKS (SINGLE OR TRAIN)**

**East Abutment**

	Reduction	V OH5C1 Single Unfactored No IM No DF No Reduction	M OH5C1 Single Unfactored No IM No DF No Reduction	V OH5C1 Train Unfactored No IM No DF No Reduction	M OH5C1 Train Unfactored No IM No DF No Reduction	V Combo W/ Reduction and Distribution Factors	M Combo W/ Reduction and Distribution Factors
Single OH5C1 Vehicle	1	68.64	0.00	N/A	0.00	47.09	0.00
Single OH5C1 Train Vehicle	1	N/A	0.00	100.63	0.00	11.27	0.00
(2)XOH5C1 Single	1	68.64	0.00	N/A	0.00	94.17	0.00
(2)XOH5C1 Train	1	N/A	0.00	100.63	0.00	22.54	0.00
OH5C1 Single + OH5C1 Train	1	68.64	0.00	100.63	0.00	58.36	0.00
OH5C1 Single + (2)XOH5C1 Train	0.9	68.64	0.00	100.63	0.00	62.67	0.00
OH5C1 Train + (2)XOH5C1 Single	0.9	68.64	0.00	100.63	0.00	94.90	0.00
(2)XOH5C1 Train + (2)XOH5C1 Single	0.75	68.64	0.00	100.63	0.00	87.54	0.00
						Max V Combo	105.70
						Max M Combo	4240.48

**Therefore the Most Critical Number of Lanes (combined) for the OH5C1 Truck will be 2 Single OH5C1 + 1 Train OH5C1**

up

# North Girder

Id Dead Loads (Superstructure) Unfactored  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	102.178	0	-102.178
	13.793	1103.043	57.765	-0.01	
	27.586	1593.492	13.351	-0.04	
	41.379	1471.346	-31.062	-0.11	
	55.172	736.605	-75.476	-0.2	
	68.965	-610.731	-119.889	-0.31	
	82.758	-2570.66	-164.303	-0.41	
	93.379	-4497.26	-198.501	-0.45	
	96.551	-5143.19	-208.716	-0.45	
	109.93	-8223.84	-251.797	-0.4	
	110.344	-8328.31	-253.13	-0.4	
	120.965	-11198.3	-287.328	-0.29	
	124.137	-12126	-297.543	-0.24	
	2	137.93	-16536.3	-341.957	0
0		-16536.3	424.023		
8.396		-13089.8	396.988	0.2	
16.521		-9970.63	370.826	0.42	
25.458		-6785.01	342.048	0.71	
27.083		-6233.44	336.815	0.77	
54.166		1707.612	249.608	1.88	
72.041		5654.896	192.051	2.57	
81.249		7286.833	162.401	2.87	
84.499		7797.624	151.936	2.96	
102.374		9999.039	94.379	3.37	
108.332		10504.22	75.194	3.46	
135.415		11359.77	-12.014	3.62	
162.498		9853.489	-99.221	3.34	
167.373	9331.534	-114.918	3.24		
189.581	5985.375	-186.428	2.64		
197.977	4306.69	-213.462	2.35		
216.664	-244.574	-273.635	1.63		
235.622	-6010.83	-334.68	0.91		
243.747	-8836.35	-360.843	0.65		
246.997	-10026.1	-371.307	0.55		
256.476	-13690.4	-401.83	0.3		
3	270.83	-19790	-448.05	0	-836.224
	0	-19790	388.174		
	12.438	-15211.1	348.125	-0.17	
	23.467	-11567.3	312.61	-0.25	
	27.926	-10205.5	298.253	-0.26	
	42.945	-6089.23	249.892	-0.24	
46.934	-5117.93	237.046	-0.21		

@ pier 37

Span 1 Max LL mom location (HS 20TT)

Span 2 Max LL Mom Location (OHSCITT)

Moment & Shear @ Pier 38

Span 2 Max LL Mom Location

Mom & Shear @ Pier 39

W 24

	66.412	-1111.63	174.328	0
	70.401	-441.792	161.483	0.05
	93.868	2461.093	85.919	-0.34
	117.335	3590.724	10.355	0.49
	140.802	2947.101	-65.209	0.43
	164.269	530.227	-140.772	0.2
	177.88	-1684.07	-184.599	0.04
	187.736	-3659.91	-216.336	-0.06
	205.571	-8030.36	-273.764	-0.16
	211.203	-9623.29	-291.9	-0.16
	222.702	-13192.7	328.926	-0.12
4	234.67	-17359.9	367.464	0 -803.23
	0	-17359.9	435.766	
	9.075	-13541	405.911	0.14
	21.606	-8712.68	364.683	0.41
	22.038	-8555.4	363.261	0.42
	43.212	-1601.26	293.599	1.05
	64.818	3974.321	222.515	1.74
	65.466	4117.86	220.383	1.76
	77.566	6543.53	180.576	2.09
	86.424	8014.067	151.431	2.29
	93.554	9010.144	127.974	2.43
	108.03	10517.98	80.348	2.61
	129.636	11486.05	9.264	2.66
	151.242	10918.29	-61.82	2.43
	155.563	10620.44	-76.037	2.35
	171.984	8928.327	-130.06	1.93
	172.848	8814.695	-132.904	1.9
	185.163	6928.437	-173.421	1.47
	194.454	5175.267	-203.987	1.07
	216.06	0	-275.071	0 -275.071

Span 3 Max LL Max Location

Max + Show @ Piers 10

Max @ 126' Span 4 (From pier 40)

↑ @ End bay +

W24

CENTER Girder

Id Dead Loads (Superstructure) Unfactored  
Type Static  
Factors 1

Shear @ Pier 33

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)	
1	0	0	127.079	0	-127.079	
	16.623	1750.445	83.526	0.18		
	33.246	2776.921	39.974	0.31		
	49.869	3079.428	-3.578	0.36		
	66.492	2657.966	-47.13	0.31		
	83.115	1512.534	-90.683	0.18		
	99.738	-356.867	-134.235	0.01		
	116.361	-2950.24	-177.787	-0.15		
	127.166	-5024.16	-206.096	-0.21		
	132.984	-6267.58	-221.339	-0.22		
	138.303	-7482.03	-235.276	-0.22		
	149.607	-10308.9	-264.892	-0.17		
	152.267	-11022.7	-271.86	-0.15		
	2	166.23	15074.2	-308.444	0	-671.521
		0	-15074.2	363.077	0	
8.937		-11933.8	339.661	0.14		
17.604		-9088.54	316.955	0.31		
26.541		-6360.43	293.539	0.52		
27.083		-6201.81	292.12	0.54		
54.166		748.8	221.162	1.41		
72.582		4377.517	172.911	2		
81.249		5777.671	150.205	2.23		
83.686		6136.007	143.819	2.29		
97.77		7901.61	106.921	2.59		
108.332		8884.8	79.247	2.75		
116.728		9457.8	57.251	2.84		
135.415		10070.19	8.29	2.92		
162.498		9333.836	-62.667	2.76		
170.081	8783.281	-82.536	2.65			
189.581	6675.743	-133.625	2.27			
190.123	6602.98	-135.044	2.25			
204.206	4441.313	-171.942	1.88			
215.581	2316	-201.744	1.54			
216.664	2095.91	-204.582	1.5			
243.747	-4405.66	-275.54	0.63			
249.434	-6015.15	-290.441	0.47			
258.913	-8885.96	-315.276	0.24			
3	270.83	-12829	346.497	0	-620.741	
	0	-12829	274.244	0		
	16.514	-8657.31	230.976	-0.24		
	20.388	-7782.23	220.827	-0.28		
	32.417	-5315.47	189.311	-0.37		

+ Max @ 64.3 from Pier 33

Shear @ Pier 33

Neg Max @ Pier 38

Max (+) Moment @ 135' From Pier 38

Substructure

Max Neg Moment @ Pier 39

Shear @ Pier 39

✓ 1/14/8

40.776	-3824.54	167.411	-0.39
61.164	-955.898	113.994	-0.34
81.552	823.682	60.577	-0.25
94.193	1380.098	27.459	-0.2
101.94	1514.206	7.161	-0.19
122.328	1115.673	-46.256	-0.19
142.716	371.917	-99.672	-0.24
156.172	-1950.31	-134.927	-0.27
163.104	-2948.56	-153.089	-0.28
183.492	-6614.27	-206.505	-0.22
185.939	-7127.34	-212.915	-0.2
20.88	-11369	-259.922	0 -591.777
0	-11369	331.855	0
12.536	-7414.66	299.01	0.23
21.248	-4909.21	276.185	0.42
42.496	367.747	220.516	0.98
58.007	3472.997	179.877	1.39
63.744	4461.827	164.846	1.53
69.056	5300.524	150.928	1.65
83.505	7207.754	113.073	1.92
84.992	7373.036	109.176	1.94
106.24	9101.375	53.506	2.15
127.488	9646.842	-2.163	2.16
148.736	9009.438	-57.833	1.93
160.422	8154.667	-88.452	1.72
169.984	7189.164	-113.503	1.5
174.446	6656.622	-125.194	1.38
185.92	5047.697	-155.255	1.02
191.232	4186.018	-169.173	0.84
212.48	0	-224.842	0 -224.842

Max (+) Mom  
@ 102' From  
Pic. 39 For 01551

Max (+) Mom  
@ 119' From  
Pic. 39 For H520

Max (-)  
Mom @ Pic. 40

Max (+) Mom  
@ 124' From  
Pic. 40

Shear @ Pic. 40

Shear @  
END BENT

# South Girder

## SOUTH GIRDER

Shear @ Pier 37

Id Dead Loads (Superstructure) Unfactored  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	<del>200.908</del>	0	-200.908
	19.586	3317.368	137.841	0.57	
	39.172	5399.506	74.774	1	
	43.481	5691.809	60.899	1.06	
	58.758	6246.416	11.707	1.21	
	78.344	<del>5858.097</del>	-51.36	1.22	
	97.93	4234.549	-114.427	1.02	
	98.518	4166.757	-116.319	1.01	
	117.516	1375.771	-177.494	0.67	
	137.102	-2718.23	-240.561	0.27	
	151.596	-6543.04	-287.23	0.03	
	156.688	-8047.47	-303.628	-0.03	
	161.585	-9572.78	-319.394	-0.08	
	172.944	-13408.8	-355.973	-0.12	
	176.274	-14611.9	-366.694	-0.12	
	187.438	-18906.4	-402.643	-0.08	
2	195.86	<del>-22411.6</del>	<del>-429.764</del>	0	-899.511
	0	-22411.6	469.75	0	
	6.506	-19423.6	448.801	0.09	
	18.976	-14077.6	408.648	0.32	
	27.108	-10860.7	382.462	0.52	
	29.548	-9937.23	374.606	0.59	
	37.951	-6902.93	347.547	0.85	
	54.216	-1676.06	295.174	1.46	
	79.426	4742.149	213.997	2.45	
	81.324	5142.424	207.887	2.52	
	92.438	7254.053	172.099	2.88	
	108.432	9594.714	120.599	3.28	
	135.54	<del>11680.81</del>	33.311	3.64	
	162.648	11400.71	-53.977	3.55	
	181.081	9858.665	-113.332	3.23	
	189.756	8754.407	-141.264	3.02	
	198.159	7453.597	-168.324	2.77	
	211.442	4933.707	-211.095	2.3	
	216.864	3741.908	-228.552	2.09	
	243.972	-3636.78	-315.84	0.94	
	255.9	-7633.02	-354.247	0.48	
	263.761	-10517.4	-379.56	0.22	
3	271.08	<del>-13381.7</del>	<del>-403.128</del>	0	-691.299
	0	-13381.7	288.171	0	
	11.046	-10395	252.604	-0.28	
	17.259	-8887.7	232.597	-0.41	

(+) Mom @ 81.6'  
From Pier 37

Mom (-)  
@ Pier 38

Shear @ Pier 38

Mom (+) @ 136'  
From Pier 38

Mom (-)  
@ Pier 39

Shear @ Pier 39

(F)

28.477	-6480.97	196.474	-0.59		
34.518	-5352.88	177.023	-0.66		
51.777	-2777.22	121.449	-0.78		
64.549	-1488.73	80.324	-0.81		
69.036	-1160.7	65.875	-0.82		
86.295	-503.342	10.301	-0.81		
103.554	-805.13	-45.273	-0.79		
120.813	-2066.07	-100.847	-0.73		
132.894	-3519.42	-139.749	-0.65		
138.072	-4286.16	-156.421	-0.61		
155.331	-7465.4	-211.995	-0.38		
156.021	-7612.52	-214.218	-0.36		
4	172.59	-11603.8	-267.569	0	-667.64
	0	-11603.8	400.071	0	
	10.896	-7439.9	364.223	0.32	
	20.954	-3942.98	331.132	0.67	
	41.908	2273.288	262.193	1.48	
	55.319	5493.606	218.073	1.97	
	62.862	7045.019	193.255	2.21	
	66.843	7788.343	180.156	2.32	
	81.93	10131.92	130.521	2.68	
	83.816	10372.21	124.316	2.71	
	104.77	12254.86	55.377	2.95	
	125.724	12692.97	-13.561	2.92	
	146.678	11686.54	-82.5	2.59	
	156.945	10666.06	-116.28	2.33	
	167.632	9235.563	-151.439	1.99	
	171.404	8640.979	-163.847	1.85	
	182.3	6660.384	-199.696	1.4	
	188.586	5340.055	-220.377	1.11	
	209.54	0	-289.316	0	-289.316

Max (+) Mom For  
OH SCI @ 71.9' From Pier 3a

Max (+) Mom For H/S 20  
@ 86.3' From Pier 3a

Max Mom  
(-) @  
Pier 40

Shear @ Pier 40

Mom @ Section Loss 6

Shear @ Section Loss 6

Max (+)  
Mom @  
122' From  
Pier 40

Shear @ END BENT



North GIRDER

Id Dead Loads (Self Wt) Unfactored  
Type Static

Factors 1

Span Location Moment Shear Deflect Reaction  
(ft) (kft) (K) (in) (K)

1	0	0	13.257	0	-13.257
	13.793	125.869	4.995	-0.03	
	27.586	137.781	-3.267	-0.06	
	41.379	35.735	-11.529	-0.09	
	55.172	-180.27	-19.791	-0.12	
	68.965	-510.232	-28.053	-0.15	
	82.758	-954.152	-36.315	-0.17	
	93.379	-1373.63	-42.677	-0.17	
	96.551	-1512.54	-44.905	-0.17	
	109.93	-2177.26	-54.52	-0.14	
	110.344	-2199.89	-54.871	-0.14	
	120.965	-2830.8	-63.965	-0.09	
	124.137	-3038.69	-67.099	-0.08	

Ⓐ Pic 37

Span 2 Max LL Mom Location (HS20TT)

Span 3 Max LL Mom Location (OH50TT)

Mom & Shear @ Pic 30

2	137.93	-4060.25	-81.143	0	-185.547
	0	-4060.25	104.404		
	8.396	-3220.06	95.79	0.06	
	16.521	-2470.66	88.73	0.13	
	25.458	-1707.86	82.027	0.21	
	27.083	-1575.36	81.053	0.23	
	54.166	400.128	64.831	0.54	
	72.041	1463.267	54.124	0.74	
	81.249	1931.124	47.494	0.83	
	84.499	2081.673	45.154	0.86	
	102.374	2754.431	30.121	0.98	
	108.332	2917.179	24.508	1.01	
	135.415	3235.463	-1.004	1.07	
	162.498	2862.801	-26.516	1	
	167.373	2722.344	-31.108	0.98	
	189.581	1825.098	-49.294	0.81	
	197.977	1385.866	-55.339	0.74	
	216.664	246.484	-66.639	0.53	
	235.622	-1127.25	-78.321	0.32	
	243.747	-1788.32	-84.428	0.23	
	246.997	-2066.73	-86.909	0.2	
	256.476	-2930.79	-95.436	0.11	

Span 2 Max LL Mom Location

Mom & Shear @ Pic 30

3	270.83	-4410.07	-110.751	0	-198.93
	0	-4410.07	88.179		
	12.438	-3399.41	74.411	-0.08	
	23.467	-2638.27	63.66	-0.13	
	27.926	-2363.94	59.403	-0.15	
	42.945	-1560.47	47.628	-0.19	
	46.934	-1375.39	45.158	-0.2	

66.412	-611.76	33.313	-0.21
70.401	-483.629	30.923	-0.2
93.868	77.111	16.866	-0.18
117.335	307.982	2.81	-0.16
140.802	208.983	-11.247	-0.16
164.269	-219.884	-25.304	-0.16
177.88	-619.774	-33.457	-0.16
187.736	-978.956	-39.462	-0.16
205.571	-1783.29	-50.847	-0.12
211.203	-2083.62	-55.793	-0.11
222.702	-2782.49	-65.725	-0.06
4 234.67	-3640.38	-77.705	0 -179.662
0	-3640.38	101.957	
9.075	-2755.01	93.209	0.06
21.606	-1650.01	83.198	0.15
22.038	-1614.13	82.858	0.16
43.212	-6.373	69.118	0.35
64.818	1341.835	55.8	0.54
65.466	1377.878	55.411	0.55
77.566	1995.616	46.7	0.64
86.424	2376.307	39.25	0.69
93.554	2634.78	33.253	0.73
108.03	3017.457	19.617	0.77
129.636	3221.431	-0.736	0.77
151.242	2985.661	-21.089	0.7
155.563	2885.738	-25.159	0.67
171.984	2359.228	-38.969	0.55
172.848	2325.28	-39.591	0.54
185.163	1783.097	-48.458	0.41
194.454	1307.041	-54.023	0.3
216.06	0	-66.965	0 -66.965

Span 3 Max LL down location

Max. P Shear @ Pin 40

Max @ 126' Span 41 (From pin 40)

@ End brn'

CENTER  
CENTER GIRDER *101W*

Id Type Dead Loads (Self Wt) Unfactored Static  
Factors 1

*Shear @  
Pic. 37*

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)	
1	0	0	23.241	0	-23.241	
	16.623	303.572	13.284	0		
	33.246	441.626	3.326	-0.02		
	49.869	414.162	-6.631	-0.04		
	66.492	221.179	-16.588	-0.08		
	83.115	-137.322	-26.545	-0.13		
	99.738	-661.341	-36.502	-0.17		
	116.361	-1350.88	-46.46	-0.19		
	127.166	-1887.84	-52.932	-0.18		
	132.984	-2207.72	-57.042	-0.17		
	138.303	-2521.29	-60.867	-0.15		
	149.607	-3265.08	-70.808	-0.1		
	152.267	-3456.6	-73.211	-0.09		
	2	166.23	-4582.16	-88.089	0	-202.136
		0	-4582.16	114.047	0	
8.937		-3605.2	104.524	0.07		
17.604		-2732.77	96.772	0.15		
26.541		-1896.42	90.319	0.24		
27.083		-1847.59	89.995	0.25		
54.166		370.061	73.772	0.59		
72.582		1627.1	62.741	0.82		
81.249		2143.807	56.501	0.91		
83.686		2279.386	54.746	0.93		
97.77		2966.98	42.902	1.05		
108.332		3366.462	32.741	1.11		
116.728		3607.441	24.664	1.15		
135.415		3886.231	5.173	1.18		
162.498		3643.824	-23.074	1.12		
170.081	3438.858	-30.984	1.09			
189.581	2651.789	-49.742	0.94			
190.123	2624.705	-50.263	0.94			
204.206	1833.437	-62.107	0.79			
215.581	1080.395	-70.297	0.66			
216.664	1003.889	-70.946	0.65			
243.747	-1137.23	-87.169	0.29			
249.434	-1642.68	-90.576	0.22			
258.913	-2536.16	-98.059	0.12			
3	270.83	-3775.67	-110.041	0	-184.132	
	0	-3775.67	74.091	0		
	16.514	-2686.33	57.676	-0.14		
	20.388	-2468.59	54.737	-0.16		
	32.417	-1866.5	45.288	-0.24		

*Max + Mom @ 69.3' from Pic. 37*

*Max Mom @ Pic. 38*

*Max (+) Mom @ 135' from Pic. 38*

*Max (-) Mom @ Pic. 39*

*Shear @ Pic. 38*

*Shear @ Pic. 39*

3/23

40.776	-1508.86	40.281	-0.27	
61.164	-812.117	28.068	-0.32	
81.552	-364.358	15.856	-0.33	
94.193	-211.789	8.284	-0.32	
101.94	-165.586	3.643	-0.32	
122.328	-215.8	-8.569	-0.3	
142.716	-515.001	-20.782	-0.27	
156.172	-848.869	-28.842	-0.24	
163.104	-1063.33	-33.053	-0.22	
183.492	-1868.7	-46.122	-0.13	
185.939	-1983.54	-47.758	-0.12	
4 203.88	-2981.86	-63.592	0	-162.033
0	-2981.86	98.442	0	
12.536	-1816.79	87.384	0.11	
21.248	-1078.43	82.105	0.19	
42.496	525.201	68.718	0.41	
58.007	1512.249	58.488	0.56	
63.744	1835.943	54.357	0.61	
69.056	2114.53	50.533	0.65	
83.505	2756.872	38.381	0.74	
84.992	2812.895	36.95	0.75	
106.24	3380.857	16.51	0.82	
127.488	3514.498	-3.931	0.81	
148.736	3213.818	-24.371	0.72	
160.422	2863.314	-35.614	0.63	
169.984	2484.347	-43.655	0.55	
174.446	2281.183	-47.408	0.5	
185.92	1689.839	-55.669	0.37	
191.232	1385.676	-58.851	0.3	
212.48	0	-71.578	0	-71.578

Max (+) Mom @ 102 From Pic. 3a For OH SEI

Max (+) Mom @ 119 From Pic. 3a For H520

Max (-) Mom @ Pic. 40

Max (+) Mom @ 124 From Pic. 40

Shear @ Pic. 40

Shear @ END BENT

SOUTH GIRDER ✓  
SOUTH GIRDER

id Dead Loads (Self Wt) Unfactored  
Type Static

Factors 1

Shear @ Pic 37

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	35.772	0	-35.772
	19.586	585.734	24.04	0.07	
	39.172	941.685	12.308	0.12	
	43.481	989.158	9.727	0.13	
	58.758	1058.518	-0.646	0.14	
	78.344	915.62	-13.945	0.11	
	97.93	512.25	-27.244	0.06	
	98.518	496.125	-27.643	0.06	
	117.516	-137.283	-39.044	-0.01	
	137.102	-1017.44	-50.839	-0.08	
	151.596	-1817.72	-59.596	-0.11	
	156.688	-2130.64	-63.308	-0.11	
	161.585	-2449.42	-66.903	-0.11	
	172.944	-3265.11	-76.735	-0.09	
	176.274	-3526.34	-80.185	-0.08	
	187.438	-4487.32	-92.048	-0.04	
	2	195.86	-5305.48	-102.272	0
0		-5305.48	119.82	0	
6.506		-4551.68	111.932	0.04	
18.976		-3238.99	98.683	0.13	
27.108		-2465.57	91.546	0.19	
29.548		-2244.8	89.432	0.22	
37.951		-1519.32	83.251	0.3	
54.216		-245.403	73.404	0.48	
79.426		1413.766	58.242	0.77	
81.324		1522.988	56.876	0.79	
92.438		2110.649	48.873	0.89	
108.432		2784.752	35.423	1	
135.54		3391.528	9.345	1.1	
162.648		3291.385	-16.733	1.06	
181.081		2819.496	-34.466	0.97	
189.756		2488.875	-41.761	0.9	
198.159		2108.239	-48.829	0.83	
211.442	1396.133	-58.392	0.69		
216.864	1070.729	-61.651	0.63		
243.972	-824.533	-78.27	0.29		
255.9	-1802.64	-85.756	0.15		
263.761	-2500.39	-91.821	0.07		
271.08	-3196.12	-98.32	0	-160.103	
0	-3196.12	61.783	0		
11.046	-2570.29	51.61	-0.09		
17.259	-2264.59	46.813	-0.14		

Mom (+) @ 81.6' from Pic 32

Mom (-) @ Pic 38

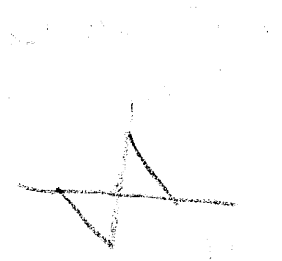
Shear @ Pic 38

Mom (+) @ 136' from Pic 38

Mom (-) @ Pic 39

Shear @ Pic 39

(F)



13.4

	28.477	-1786.77	38.432	-0.21		
	34.518	-1565.86	34.714	-0.24		
Max(+)	51.777	-1057.75	24.191	-0.3		
Mon For	64.549	-797.989	16.5	-0.32		
OHSC1 @	71.91	From Piv 39	69.036	-729.977	13.812	-0.33
	86.295	-580.801	3.474	-0.33		
Max(+)	103.554	-610.051	-6.864	-0.32		
Mon	120.813	-817.727	-17.202	-0.28		
for HS20	132.894	-1069.26	-24.439	-0.24		
@ 86.31 From	138.072	-1203.89	-27.572	-0.22		
Piv 39	155.331	-1772.84	-38.477	-0.13		
	156.021	-1799.55	-38.928	-0.12		

Max(+)  
Mon For  
OHSC1 @  
71.91 From Piv 39  
Max(+)  
Mon  
for HS20  
@ 86.31 From  
Piv 39

Shim @ Piv 40

4	172.59	-2556.54	-52.498	0	-146.59
	0	-2556.54	94.093	0	

Mon. @ Section Loss G

Max  
Mon (-)  
@ Piv 40

Shim @ Section Loss G

	10.896	-1579.82	85.245	-0.1
	20.954	-754.784	78.828	0.2
	41.908	759.52	65.781	-0.43
	55.319	-1587.015	57.659	0.57
	62.862	2001.475	52.227	0.63
	66.843	2203.699	49.361	0.66
	81.93	2852.689	36.673	0.76
	83.816	2920.138	34.859	0.77
	104.77	3439.372	14.701	0.83

Max(+)  
Mon  
@ Piv 40  
122' From  
Piv 40

	125.724	-3536.221	-5.457	0.82	
	146.678	3210.685	-25.615	0.72	
	156.945	2896.98	-35.492	0.65	
	167.632	2469.672	-44.479	0.55	
	171.404	2295.927	-47.651	0.51	
	182.3	1733.974	-55.497	0.39	
	188.586	1373.277	-59.262	0.3	
	209.54	0	-71.813	0	-71.813

Shim @ END Piv 40

Id HS20  
 Type Truck  
 Factors: Moment 1  
 Shear 1  
 Deflection 1

HS20  
 SINGLE TO  
 COMBINE  
 W/ TRAIN @ PIER 3\*

North Girder  
 ✓ D34

Maximums table:

Span	Location	Moment(r)	Corr. Shear	Corr. Shear	Shear (ma)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	65.837	-15.096	65.837	0	0	0
	13.793	786.558	57.026	0	57.026	786.558	0	0.1
	27.586	1333.149	48.327	0	48.327	1333.149	0	0.19
	41.379	1656.323	34.735	0	39.95	1653.11	0	0.26
	55.172	1799.03	26.638	-5.362	32.017	1766.42	0	0.3
	68.965	1767.97	0.132	-31.868	24.645	1699.653	0	0.31
	82.758	1600.352	0	-39.249	17.939	1484.585	0	0.28
	93.379	1374.403	0	-44.484	13.249	1237.18	0	0.24
	96.551	1293.233	0	-45.966	11.928	1151.69	0	0.22
	109.93	891.407	0	-51.816	6.684	734.752	0	0.15
	110.344	877.618	0	-51.986	6.53	720.507	0	0.15
	120.965	504.008	4.167	0	4.167	504.008	0	0.09
	124.137	517.226	4.167	0	4.167	517.226	0	0.08
2	0	574.695	4.167	-8.698	70.678	0	-417.955	0
	0	574.695	4.167	-8.698	70.678	0	-417.955	0
	8.396	501.666	0	-8.698	69.488	0	-172.702	0.06
	16.521	430.991	0	-8.698	68.165	61.259	0	0.12
	25.458	432.302	37.008	0	66.513	332.967	0	0.2
	27.083	475.265	36.744	0	66.189	383.888	0	0.21
	54.166	1299.031	52.941	0	59.693	1282.725	0	0.45
	72.041	1861.444	47.895	0	54.494	1853.677	0	0.6
	81.249	2122.061	45.091	0	51.636	2113.375	0	0.66
	84.499	2207.106	44.077	0	50.607	2197.319	0	0.68
	102.374	2595.343	38.347	0	44.822	2574.868	0	0.77
	108.332	2691.617	36.395	0	42.859	2666.547	0	0.79
	135.415	2901.018	27.406	-4.594	33.854	2852.521	0	0.85
	162.498	2770.641	0	-34.484	24.938	2659.082	0	0.82
	167.373	2708.174	0	-36.088	23.37	2586.185	0	0.8
	189.581	2282.646	0	-43.23	16.503	2131.636	0	0.7
	197.977	2069.609	0	-45.818	14.08	1918.835	0	0.64
	216.664	1524.095	0	-51.22	9.161	1398.25	0	0.49
235.622	917.531	0	-56.02	4.912	836.041	0	0.32	
243.747	651.084	0	-57.847	4.345	162.152	0	0.24	
246.997	543.744	0	-58.542	4.345	176.272	0	0.21	
256.476	490.228	2.575	0	4.345	217.455	0	0.12	
3	0	527.184	2.575	-8.637	69.849	0	-317.724	0
	0	527.184	2.575	-8.637	69.849	0	-317.724	0
	12.438	419.757	0	-8.637	66.991	131.134	0	0.11
	23.467	536.559	57.414	0	64.207	494.996	0	0.21
	27.926	675.165	56.266	0	63.02	634.888	0	0.26

Max (+)  
 Mom  
 LL for  
 HS20 Single

Max Shear  
 @ Pier 3\*

Shear @  
 Section Loss (A)

Max Mom +  
 @ 135' Span 2

Max Shear due to  
 HS20 Single @  
 Section Loss (B)

	42.945	1112.63	52.11	0	58.722	1077.089	0	0.41
	46.934	1220.701	50.926	0	57.5	1186.388	0	0.44
	66.412	1690.571	44.668	0	51.066	1659.765	0	0.63
	70.401	1772.661	43.297	0	49.664	1741.752	0	0.66
	93.868	2132.017	34.771	0	41.015	2095.462	0	0.81
	117.335	<del>2243.401</del>	5.41	-26.59	32.066	2194.557	0	0.86
	140.802	2109.929	0	-35.505	23.363	2031.422	0	0.81
	164.269	1732.164	0	-43.955	15.441	1648.095	0	0.65
	177.88	1425.742	0	-48.437	11.358	1350.387	0	0.53
	187.736	1173.683	0	-51.442	10.295	158.634	0	0.44
	205.571	665.897	0	-56.349	10.295	342.246	0	0.26
	211.203	497.174	0	-35.955	10.295	400.229	0	0.21
	222.702	518.61	10.295	0	10.295	518.61	0	0.1
4	0	641.823	10.295	-2.971	<u>70.209</u>	0	-300.551	0
	0	641.823	10.295	-2.971	70.209	0	-300.551	0
	9.075	614.867	0	-2.971	68.478	56.962	0	0.07
	21.606	577.641	0	-2.971	65.792	535.197	0	0.17
	22.038	576.357	0	-2.971	65.694	551.52	0	0.17
	43.212	1340.759	53.651	0	60.408	1331.629	0	0.34
	64.818	2042.806	47.531	0	54.096	2035.87	0	0.5
	65.466	2061.856	47.334	0	53.893	2054.783	0	0.51
	77.566	2389.114	43.515	0	49.983	2377.229	0	0.57
	86.424	2588.987	40.573	0	46.984	2570.983	0	0.61
	93.554	2721.175	38.13	0	44.502	2696.701	0	0.63
	108.03	2901.185	32.998	0	39.3	2860.554	0	0.65
	129.636	<u>2956.885</u>	4.49	-27.51	31.196	2854.419	0	0.64
	151.242	2723.101	0	-35.739	22.761	2519.585	0	0.56
	155.563	2638.022	0	-43.606	21.04	2410.917	0	0.54
	171.984	2206.652	0	-50.064	14.408	1866.452	0	0.43
	172.848	2178.262	0	-50.409	14.055	1831.926	0	0.42
	185.163	1710.458	0	-55.361	8.988	1274.848	0	0.32
	194.454	1277.982	0	-59.149	8.663	0	-187.165	0.23
	216.06	0	8.663	-68.01	8.663	0	0	0

Max. Mom. +  
@ 117' Span

Max. Shear @  
Pier 4

Max. Mom. +  
@ 126' From Pier 4  
@ Span 4

Minimums table:

Span	Location	Moment(r)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	65.837	-15.096	-15.096	0	0	0
	13.793	-208.226	0	-15.096	-15.096	0	-208.226	-0.07
	27.586	-416.452	0	-15.096	-15.096	0	-416.452	-0.13
	41.379	-624.678	0	-15.096	-20.636	1453.386	0	-0.18
	55.172	-832.904	0	-15.096	-29.14	1692.654	0	-0.22
	68.965	-1041.13	0	-15.096	-37.244	1724.922	0	-0.24
	82.758	-1249.36	0	-15.096	-44.828	1576.714	0	-0.24
	93.379	-1409.69	0	-15.096	-50.237	1360.235	0	-0.22
	96.551	-1457.58	0	-15.096	-51.773	1280.983	0	-0.21
	109.93	-1659.56	0	-15.096	-57.842	884.398	0	-0.16
	110.344	-1665.81	0	-15.096	-58.019	870.725	0	-0.16
	120.965	-1826.14	0	-15.096	-62.38	491.693	0	-0.11
	124.137	-1874.03	0	-15.096	-63.614	369.028	0	-0.09



2 Max - Moan @ Pier 38	0	2082.26	51.925	-15.096	-68.653	0	-220.269	0	✓ Single HS20 TRUCK NEG Moan @ Section Loss (A)
	0	-2082.26	51.925	-15.096	-68.653	0	-220.269	0	
	8.396	-1656.86	49.37	0	-8.698	501.666	0	-0.04	
	16.521	-1273.24	44.822	0	-8.698	430.991	0	-0.08	
	25.458	-892.694	39.763	0	-8.698	353.25	0	-0.12	
	27.083	-829.367	38.518	0	-8.698	339.115	0	-0.13	
	54.166	-661.502	4.345	0	-8.698	103.535	0	-0.21	
	72.041	-583.843	4.345	0	-12.098	1703.335	0	-0.23	
	81.249	-543.837	4.345	0	-14.692	1958.345	0	-0.24	
	84.499	-529.717	4.345	0	-15.646	2044.173	0	-0.24	
	102.374	-452.058	4.345	0	-21.145	2455.164	0	-0.29	
	108.332	-426.172	4.345	0	-23.048	2563.722	0	-0.31	
	135.415	-603.205	0	-8.698	-31.932	2841.153	0	-0.37	
	162.498	-838.786	0	-8.698	-40.943	2740.041	0	-0.41	
167.373	-881.19	0	-8.698	-42.555	2681.434	0	-0.42		
189.581	-1074.37	0	-8.698	-49.763	2269.094	0	-0.42		
197.977	-1147.4	0	-8.698	-52.394	2057.907	0	-0.41		
216.664	-1309.95	0	-8.698	-57.931	1508.494	0	-0.36		
235.622	-1474.85	0	-8.698	-62.909	888.014	0	-0.27		
243.747	-1545.53	0	-8.698	-64.811	614.964	0	-0.21		
246.997	-1573.8	0	-8.698	-65.533	505.141	0	-0.19		
256.476	-1656.25	0	-8.698	-67.529	182.09	0	-0.12		
3 Max - Moan @ Pier 39	0	-1781.11	46.246	-8.698	-70.242	0	-331.179	0	Max Shear @ Pier 39 Single HS20 TRUCK NEG Moan @ Section Loss (B)
	0	-1781.11	46.246	-8.698	-70.242	0	-331.179	0	
	12.438	-1646.08	10.295	0	-8.637	419.757	0	-0.1	
	23.467	-1532.53	10.295	0	-8.637	324.492	0	-0.18	
	27.926	-1486.62	10.295	0	-8.637	285.981	0	-0.21	
	42.945	-1332	10.295	0	-8.637	156.259	0	-0.3	
	46.934	-1290.93	10.295	0	-9.067	1146.944	0	-0.32	
	66.412	-1090.41	10.295	0	-14.755	1604.631	0	-0.39	
	70.401	-1049.34	10.295	0	-16.019	1685.904	0	-0.4	
	93.868	-807.744	10.295	0	-24.06	2055.825	0	-0.42	
	117.335	-566.149	10.295	0	-32.815	2197.006	0	-0.39	
	140.802	-688.965	0	-8.637	-41.758	2074.34	0	-0.36	
	164.269	-891.656	0	-8.637	-50.343	1700.86	0	-0.35	
	177.88	-1009.22	0	-8.637	-54.944	1392.51	0	-0.31	
187.736	-1094.35	0	-8.637	-58.045	1137.491	0	-0.28		
205.571	-1248.39	0	-8.637	-63.129	622.362	0	-0.19		
211.203	-1297.04	0	-8.637	-64.593	447.946	0	-0.16		
222.702	-1396.36	0	-8.637	-67.382	76.982	0	-0.08		
4 Max - Moan @ Pier 40	0	1871.65	8.663	-46.957	-69.982	0	-337.932	0	
	0	-1871.65	8.663	-46.957	-69.982	0	-337.932	0	
	9.075	-1793.04	8.663	0	-2.971	614.867	0	-0.07	
	21.606	-1684.49	8.663	0	-2.971	577.641	0	-0.16	
	22.038	-1680.74	8.663	0	-2.971	576.357	0	-0.16	
	43.212	-1497.32	8.663	0	-6.882	1189.525	0	-0.28	
	64.818	-1310.16	8.663	0	-12.399	1875.196	0	-0.34	
	65.466	-1304.54	8.663	0	-12.579	1894.253	0	-0.34	
	77.566	-1199.73	8.663	0	-16.09	2228.321	0	-0.36	

86.424	-1122.99	8.663	0	-18.832	2441.282	0	-0.36
93.554	-1061.23	8.663	0	-21.136	2589.323	0	-0.36
108.03	-935.826	8.663	0	-26.035	2812.544	0	-0.35
129.636	-748.661	8.663	0	-33.781	2919.484	0	-0.31
151.242	-561.496	8.663	0	-41.935	2718.12	0	-0.25
155.563	-524.063	8.663	0	-43.606	2638.022	0	-0.24
171.984	-381.817	8.663	0	-50.064	2206.652	0	-0.18
172.848	-374.33	8.663	0	-50.409	2178.262	0	-0.18
185.163	-267.646	8.663	0	-55.361	1710.458	0	-0.13
194.454	-187.165	8.663	0	-59.149	1277.982	0	-0.09
216.06	0	8.663	-68.01	<u>-68.01</u>	0	0	0

*Handwritten mark*

Support	Reac. Pos	Reac. Negative
1	15.096	-65.927
2	12.865	-76.402
3	11.212	-72.216
4	13.266	-71.957
5	8.663	-68.1

↑ Max Shear a END BENT

~~HS20~~

Id HS20  
Type Truck

CENTER GIRDER

Factors: Moment 1  
Shear 1  
Deflection 1

Max Shear @  
Pic 37

Maximums table:

Span	Location	Moment(r)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	66.713	-11.309	66.713	0	0	0
	16.623	957.884	57.624	0	57.624	957.884	0	0.17
	33.246	1617.503	48.653	0	48.653	1617.503	0	0.33
	49.869	2002.486	34.401	0	40.025	1996.023	0	0.44
	66.492	2155.658	26.104	-5.896	31.877	2119.543	0	0.51
	83.115	2098.926	0	-33.357	24.341	2023.097	0	0.52
	99.738	1867.585	0	-40.783	17.553	1750.653	0	0.47
	116.361	1478.675	0	-47.442	11.619	1351.96	0	0.38
	127.166	1165.914	0	-51.309	8.206	1043.489	0	0.3
	132.984	982.83	0	-53.241	6.488	862.769	0	0.26
	138.303	807.506	0	-54.922	4.978	688.435	0	0.21
	149.607	410.111	0	-58.264	2.408	360.198	0	0.13
152.267	366.602	2.408	0	2.408	366.602	0	0.11	
2	0	400.22	2.408	-6.592	70.512	0	-377.806	0
	0	400.22	2.408	-6.592	70.512	0	-377.806	0
	8.937	341.309	0	-6.592	69.101	0	-86.044	0.07
	17.604	284.182	0	-6.592	67.559	189.546	0	0.15
	26.541	538.487	36.478	0	65.79	482.357	0	0.23
	27.083	554.302	36.383	0	65.676	500.347	0	0.23
	54.166	1438.69	52.316	0	59.058	1428.329	0	0.48
	72.582	2025.69	47.101	0	53.703	2022.095	0	0.63
	81.249	2272.313	44.475	0	51.033	2267.128	0	0.68
	83.686	2336.927	43.722	0	50.27	2330.802	0	0.69
	97.77	2661.048	39.284	0	45.791	2646.415	0	0.76
	108.332	2843.364	35.887	0	42.376	2820.179	0	0.79
	116.728	2948.092	33.161	0	39.642	2917.357	0	0.81
	135.415	3048.234	27.059	-4.941	33.537	2999.728	0	0.82
	162.498	2908.695	0	-34.72	24.777	2791.268	0	0.77
170.081	2802.631	0	-37.168	22.374	2666.141	0	0.74	
189.581	2399.403	0	-43.348	16.377	2224.699	0	0.65	
190.123	2385.665	0	-43.516	16.216	2210.221	0	0.64	
204.206	1986.663	0	-47.809	12.155	1802.631	0	0.55	
215.581	1615.138	0	-51.111	9.135	1443.958	0	0.47	
216.664	1578.01	0	-51.415	8.862	1409.147	0	0.46	
243.747	623.943	0	-58.192	6.017	200.45	0	0.22	
249.434	429.067	0	-59.378	6.017	234.67	0	0.17	
258.913	417.523	2.107	0	6.017	291.704	0	0.09	
3	0	442.626	2.107	-9.242	69.386	0	-289.388	0
	0	442.626	2.107	-9.242	69.386	0	-289.388	0
	16.514	356.223	58.073	0	64.661	325.692	0	0.13

Max  
Mom (+)  
@ 69.3'  
From Pic 37

Shear @  
Pic 38

Shear @  
Section Loss (C)

Max (+)  
Mom  
@ 135' from  
Pic 38

777 of 1221 Section Loss (D) Shear

20.388	487.055	56.914	0	63.461	457.441	0	0.16
32.417	871.024	53.074	0	59.483	845.014	0	0.26
40.776	1115.896	50.183	0	56.495	1092.074	0	0.33
61.164	1618.148	42.406	0	48.517	1594.258	0	0.49
81.552	1933.527	33.916	0	39.927	1899.959	0	0.59
94.193	2015.531	28.494	-3.506	34.496	1973.752	0	0.62
101.94	2021.249	5.183	-26.817	31.186	1973.822	0	0.62
122.328	<del>1899.434</del>	0	-35.51	22.754	1817.967	0	0.58
142.716	1562.607	0	-43.752	15.074	1469.99	0	0.47
156.172	1247.001	0	-48.734	10.958	48.806	0	0.37
163.104	1061.636	0	-51.128	10.958	124.769	0	0.32
183.492	441.555	0	-57.475	10.958	348.189	0	0.15
185.939	375	10.958	0	10.958	375	0	0.13
4	0	571.61	10.958	-2.69	70.205	0	-305.982
	0	571.61	10.958	-2.69	70.205	0	-305.982
12.536	537.885	0	-2.69	67.72	183.67	0	0.09
21.248	539.649	58.835	0	65.768	519.72	0	0.15
42.496	1321.974	53.587	0	60.306	1315.729	0	0.31
58.007	1845.15	49.155	0	55.73	1841.2	0	0.42
63.744	2021.763	47.395	0	53.922	2016.777	0	0.45
69.056	2175.24	45.71	0	52.196	2168.398	0	0.48
83.505	2531.067	40.902	0	47.291	2514.861	0	0.54
84.992	2561.927	40.39	0	46.771	2544.414	0	0.55
106.24	2865.371	32.812	0	39.088	2824.581	0	0.59
127.488	<del>2916.384</del>	4.369	-27.631	30.994	2813.188	0	0.58
148.736	2682.856	0	-35.845	22.577	2478.394	0	0.5
160.422	2427.34	0	-46.628	17.837	2147.589	0	0.44
169.984	2144.525	0	-50.464	13.907	1796.73	0	0.38
174.446	1988.088	0	-52.271	12.058	1607.826	0	0.35
185.92	1513.036	0	-56.967	7.333	1057.072	0	0.25
191.232	1257.08	0	-59.162	7.261	0	-154.274	0.21
212.48	0	7.261	-67.97	7.261	0	0	0

*v250*

*Max (+)  
Mom.  
@ 119'  
From Pier 39*

*Show @ Pier 40*

*Show @ Section  
Loss (E)*

*Mom (+)  
@ Section  
Loss (E)*

*Max (+)  
Mom @ 124'  
From Pier 40*

Minimums table:

Span	Location	Moment(r)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	66.713	-11.309	-11.309	0	0	0
	16.623	-187.996	0	-11.309	-11.309	0	-187.996	-0.09
	33.246	-375.992	0	-11.309	-13.26	1280.877	0	-0.17
	49.869	-563.989	0	-11.309	-22.264	1808.271	0	-0.24
	66.492	-751.985	0	-11.309	-30.941	2058.09	0	-0.3
	83.115	-939.981	0	-11.309	-39.156	2057.844	0	-0.33
	99.738	-1127.98	0	-11.309	-46.774	1843.977	0	-0.33
	116.361	-1315.97	0	-11.309	-53.662	1461.868	0	-0.3
	127.166	-1438.17	0	-11.309	-57.683	1148.635	0	-0.25
	132.984	-1503.97	0	-11.309	-59.694	964.521	0	-0.23
	138.303	-1564.13	0	-11.309	-61.443	788.06	0	-0.19
	149.607	-1691.97	0	-11.309	-64.91	388.722	0	-0.12
	152.267	-1722.05	0	-11.309	-65.683	289.909	0	-0.1
2	0	<del>-1879.96</del>	51.319	-11.309	-69.49	0	-266.77	0

*Max (-) Mom  
@ Pier 30*

	0	-1879.96	51.319	-11.309	-69.49	0	-266.77	0
	8.937	-1429.79	48.679	0	-6.592	341.309	0	-0.06
	17.604	-1160.21	6.017	0	-6.592	284.182	0	-0.12
	26.541	-1106.43	6.017	0	-6.592	225.271	0	-0.18
	27.083	-1103.18	6.017	0	-6.592	221.701	0	-0.18
	54.166	-940.222	6.017	0	-8.19	1304.768	0	-0.29
	72.582	-829.414	6.017	0	-12.879	1852.27	0	-0.33
	81.249	-777.269	6.017	0	-15.329	2095.891	0	-0.33
	83.686	-762.603	6.017	0	-16.041	2161.373	0	-0.33
	97.77	-677.867	6.017	0	-20.304	2502.835	0	-0.33
	108.332	-614.316	6.017	0	-23.621	2707.394	0	-0.32
	116.728	-563.8	6.017	0	-26.305	2833.236	0	-0.31
	135.415	-492.378	0	-6.592	-32.367	2985.484	0	-0.29
	162.498	-670.898	0	-6.592	-41.207	2878.826	0	-0.31
	170.081	-720.884	0	-6.592	-43.665	2779.505	0	-0.32
	189.581	-849.418	0	-6.592	-49.891	2391.124	0	-0.32
	190.123	-852.988	0	-6.592	-50.061	2377.722	0	-0.32
	204.206	-945.818	0	-6.592	-54.411	1984.87	0	-0.31
	215.581	-1020.8	0	-6.592	-57.785	1613.048	0	-0.29
	216.664	-1027.94	0	-6.592	-58.098	1575.576	0	-0.29
	243.747	-1206.46	0	-6.592	-65.156	594.789	0	-0.18
	249.434	-1243.95	0	-6.592	-66.407	391.965	0	-0.15
	258.913	-1306.43	0	-6.592	-68.312	62.013	0	-0.09
3	0	-1662.6	10.958	-50.179	-70.391	0	-352.901	0
	0	1662.6	10.958	-50.179	-70.391	0	-352.901	0
	16.514	-1481.63	10.958	0	-9.242	290.005	0	-0.12
	20.388	-1439.18	10.958	0	-9.242	254.205	0	-0.14
	32.417	-1307.36	10.958	0	-9.242	143.036	0	-0.21
	40.776	-1215.76	10.958	0	-9.242	65.783	0	-0.25
	61.164	-992.334	10.958	0	-16.151	1511.445	0	-0.31
	81.552	-768.913	10.958	0	-24.199	1848.951	0	-0.32
	94.193	-630.393	10.958	0	-29.505	1954.267	0	-0.31
	101.94	-545.493	10.958	0	-32.819	1974.864	0	-0.3
	122.328	-687.903	0	-9.242	-41.551	1865.571	0	-0.28
	142.716	-876.325	0	-9.242	-49.937	1534.937	0	-0.26
	156.172	-1000.68	0	-9.242	-55.057	1218.856	0	-0.23
	163.104	-1064.75	0	-9.242	-57.529	1032.24	0	-0.21
	183.492	-1253.17	0	-9.242	-64.113	405.371	0	-0.12
	185.939	-1275.78	0	-9.242	-64.832	323.734	0	-0.11
4	0	-1542.74	7.261	-46.163	-69.625	0	-315.529	0
	0	1542.74	7.261	-46.163	-69.625	0	-315.529	0
	12.536	-1451.72	7.261	0	-2.69	537.885	0	-0.08
	21.248	-1388.46	7.261	0	-2.69	514.449	0	-0.13
	42.496	-1234.19	7.261	0	-6.845	1163.536	0	-0.22
	58.007	-1121.57	7.261	0	-10.822	1671.726	0	-0.26
	63.744	-1079.92	7.261	0	-12.421	1847.496	0	-0.27
	69.056	-1041.35	7.261	0	-13.964	2002.762	0	-0.27
	83.505	-936.442	7.261	0	-18.435	2377.633	0	-0.28
	84.992	-925.643	7.261	0	-18.917	2411.64	0	-0.28

Max(-) Moment @ Section Loss (C)

Shear @ Pin 39

Max(-) Moment @ Section Loss (D)

Max(-) Moment @ Pin 39

Section Loss (D)

Max(-) Moment @ Pin 40

Section Loss (D)

106.24	-771.369	7.261	0	-26.139	2777.037	0	-0.27
127.488	-617.095	7.261	0	-33.877	2879.234	0	-0.24
148.736	-462.821	7.261	0	-42.014	2678.16	0	-0.19
160.422	-377.971	7.261	0	-46.628	2427.34	0	-0.16
169.984	-308.548	7.261	0	-50.464	2144.525	0	-0.14
174.446	-276.15	7.261	0	-52.271	1988.088	0	-0.12
185.92	-192.842	7.261	0	-56.967	1513.036	0	-0.09
191.232	-154.274	7.261	0	-59.162	1257.08	0	-0.07
212.48	0	7.261	-67.97	-67.97	0	0	0

✓ 0.14

Support	Reac. Pos	Reac. Negative
1	11.309	-66.805
2	8.999	-73.591
3	11.348	-73.314
4	13.649	-72.196
5	7.261	-68.059

← Show @ End of Span

*Handwritten mark*

Id HS20  
 Type Truck  
 Factors: Moment 1  
 Shear 1  
 Deflection 1

SOUTH GIRDER

Max Shear @ Riv 37

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	67.405	-9.707	67.405	0	0	0
	19.586	1138.56	58.131	0	58.131	1138.56	0	0.24
	39.172	1919.177	48.994	0	48.994	1919.177	0	0.45
	43.481	2044.763	47.027	0	47.027	2044.763	0	0.49
	58.758	2371.069	34.259	0	40.204	2362.335	0	0.61
	78.344	2536.776	25.81	-6.19	31.878	2497.417	0	0.7
	97.93	2451.452	0	-34.393	24.168	2366.762	0	0.72
	98.518	2445.618	0	-34.628	23.948	2359.315	0	0.72
	117.516	2150.327	0	-41.89	17.282	2030.909	0	0.66
	137.102	1676.31	0	-48.506	11.376	1559.739	0	0.53
	151.596	1255.982	0	-52.76	7.62	1155.169	0	0.4
	156.688	1098.56	0	-54.13	6.402	1003.127	0	0.35
	161.585	943.767	0	-55.387	5.276	852.579	0	0.31
	172.944	568.583	0	-58.122	2.8	484.206	0	0.2
	176.274	454.702	0	-58.879	2.106	371.258	0	0.17
	187.438	305.239	1.628	0	1.628	305.239	0	0.07
	2	0	318.954	1.628	-5.114	70.346	0	-348.927
0		318.954	1.628	-5.114	70.346	0	-348.927	0
6.506		285.68	0	-5.114	69.247	0	-119.357	0.06
18.976		354.673	37.521	0	66.895	291.563	0	0.17
27.108		604.097	36.029	0	65.226	555.213	0	0.25
29.548		677.641	35.564	0	64.7	634.225	0	0.27
37.951		940.481	55.873	0	62.791	906.65	0	0.35
54.216		1449.945	51.89	0	58.646	1431.368	0	0.51
79.426		2180.707	44.683	0	51.253	2170.373	0	0.71
81.324		2229.497	44.102	0	50.662	2218.889	0	0.72
92.438		2488.583	40.628	0	47.144	2474.038	0	0.78
108.432		2769.028	35.482	0	41.963	2743.778	0	0.84
135.54		2955.222	26.6	-5.4	33.072	2906.748	0	0.86
162.648		2804.906	0	-35.202	24.3	2693.655	0	0.8
181.081		2497.062	0	-41.103	18.563	2349.218	0	0.71
189.756		2298.348	0	-43.808	15.975	2140.053	0	0.66
198.159		2076.843	0	-46.366	13.564	1915.042	0	0.61
211.442	1679.739	0	-50.234	9.998	1527.011	0	0.5	
216.864	1504.935	0	-51.736	8.643	1361.464	0	0.46	
243.972	586.8	0	-58.355	7.963	295.438	0	0.21	
255.9	390.417	7.963	0	7.963	390.417	0	0.11	
263.761	453.017	7.963	0	7.963	453.017	0	0.05	
3	0	511.3	7.963	-3.817	68.803	0	-255.18	0
	0	511.3	7.963	-3.817	68.803	0	-255.18	0

(+) Mom @  
 81.6 From  
 Riv 37

Max Shear @ Riv 38

(+) Mom @ 136' From Riv 38

*W/12/13*

11.046	469.14	0	-3.817	64.984	194.624	0	0.07
17.259	445.424	0	-3.817	62.666	425.67	0	0.11
28.477	822.687	52.098	0	58.193	807.855	0	0.18
34.518	1007.776	49.618	0	55.638	992.244	0	0.21
51.777	1443.132	41.994	0	47.829	1421.939	0	0.31
64.549	1658.184	35.961	0	41.712	1628.632	0	0.37
69.036	1709.475	33.79	0	39.524	1676.442	0	0.38
86.295	1785.884	5.928	-26.072	31.067	1735.979	0	0.41
103.554	1689.739	0	-34.516	22.837	1600.873	0	0.39
120.813	1405.894	0	-42.66	15.205	1294.503	0	0.32
132.894	1112.079	0	-47.986	13.513	0	-14.375	0.25
138.072	966.109	0	-50.147	13.513	55.591	0	0.21
155.331	406.306	0	-56.769	13.513	288.811	0	0.1
156.021	381.871	0	-57.014	13.513	298.139	0	0.1
0	522.03	13.513	-2.491	70.304	0	-331.641	0
0	522.03	13.513	-2.491	70.304	0	-331.641	0
10.896	494.885	0	-2.491	68.246	73.682	0	0.07
20.954	476.784	59.096	0	66.038	452.271	0	0.14
41.908	1246.222	53.893	0	60.586	1241.272	0	0.3
55.319	1711.918	49.995	0	56.551	1710.633	0	0.39
62.862	1952.819	47.632	0	54.121	1950.46	0	0.43
66.843	2071.958	46.34	0	52.797	2068.16	0	0.45
81.93	2459.241	41.218	0	47.573	2445.172	0	0.52
83.816	2499.604	40.555	0	46.899	2483.793	0	0.52
104.77	2807.941	32.923	0	39.164	2768.232	0	0.56
125.724	2863.094	4.504	-27.496	31.03	2761.94	0	0.55
146.678	2637.747	0	-35.743	22.583	2434.477	0	0.48
156.945	2419.324	0	-46	18.35	2149.712	0	0.43
167.632	2110.328	0	-50.356	13.886	1763.441	0	0.36
171.404	1979.613	0	-51.909	12.298	1604.832	0	0.34
182.3	1537.37	0	-56.438	7.71	1085.344	0	0.25
188.586	1237.906	0	-59.077	5.439	0	-113.969	0.2
209.54	0	5.439	-67.905	5.439	0	0	0

*Max (+) Mom  
For H<sub>2</sub>O  
@ 86.3' From  
Pier 39*

*(+) Mom @  
Section Loss 6"  
4*

*H<sub>2</sub>O  
Max Slown  
@ Pier 40*

*Shear @  
Section Loss 6"*

*Max (+)  
Mom @  
122' From  
Pier 40*

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	67.405	-9.707	-9.707	0	0	0
	19.586	-190.113	0	-9.707	-9.707	0	-190.113	-0.11
	39.172	-380.226	0	-9.707	-14.307	1587.969	0	-0.22
	43.481	-422.05	0	-9.707	-16.338	1748.226	0	-0.24
	58.758	-570.338	0	-9.707	-23.429	2181.939	0	-0.3
	78.344	-760.451	0	-9.707	-32.2	2446.08	0	-0.37
	97.93	-950.564	0	-9.707	-40.503	2412.478	0	-0.42
	98.518	-956.267	0	-9.707	-40.744	2407.292	0	-0.42
	117.516	-1140.68	0	-9.707	-48.18	2127.268	0	-0.42
	137.102	-1330.79	0	-9.707	-55.02	1655.923	0	-0.38
	151.596	-1471.47	0	-9.707	-59.446	1231.066	0	-0.32
	156.688	-1520.9	0	-9.707	-60.874	1071.373	0	-0.29
	161.585	-1568.43	0	-9.707	-62.183	914.287	0	-0.26



17201

	172.944	-1678.7	0	-9.707	-65.022	534.735	0	-0.18
	176.274	-1711.02	0	-9.707	-65.805	419.936	0	-0.16
	187.438	-1819.38	0	-9.707	-68.307	20.272	0	-0.07
2	0	-1901.13	50.662	-9.707	-70.042	0	-302.53	0
	0	-1901.13	50.662	-9.707	-70.042	0	-302.53	0
	6.506	-1595.51	7.963	0	-5.114	285.68	0	-0.05
	18.976	-1496.22	7.963	0	-5.114	221.905	0	-0.15
	27.108	-1431.46	7.963	0	-5.114	180.313	0	-0.21
	29.548	-1412.03	7.963	0	-5.114	167.835	0	-0.23
	37.951	-1345.11	7.963	0	-5.159	875.562	0	-0.28
	54.216	-1215.6	7.963	0	-8.646	1338.586	0	-0.36
	79.426	-1014.85	7.963	0	-15.181	2025.458	0	-0.42
	81.324	-999.735	7.963	0	-15.724	2073.552	0	-0.42
	92.438	-911.232	7.963	0	-19.016	2336.59	0	-0.42
	108.432	-783.873	7.963	0	-24.006	2641.861	0	-0.41
	135.54	-568.011	7.963	0	-32.803	2894.873	0	-0.37
	162.648	-512.897	0	-5.114	-41.688	2773.892	0	-0.3
	181.081	-607.173	0	-5.114	-47.629	2479.732	0	-0.25
	189.756	-651.538	0	-5.114	-50.363	2285.861	0	-0.25
	198.159	-694.517	0	-5.114	-52.959	2067.36	0	-0.24
	211.442	-762.452	0	-5.114	-56.908	1670.604	0	-0.23
	216.864	-790.18	0	-5.114	-58.451	1494.226	0	-0.22
	243.972	-928.822	0	-5.114	-65.337	552.352	0	-0.14
	255.9	-1113.56	0	-41.978	-67.834	139.188	0	-0.08
	263.761	-1460.2	0	-46.213	-69.287	0	-123.604	-0.04
3	0	-1810.17	13.513	-49.103	-70.471	0	-371.688	0
	0	-1810.17	13.513	-49.103	-70.471	0	-371.688	0
	11.046	-1660.91	13.513	0	-10.877	292.529	0	-0.07
	17.259	-1576.95	13.513	0	-10.877	224.947	0	-0.11
	28.477	-1425.35	13.513	0	-10.877	102.925	0	-0.17
	34.518	-1343.73	13.513	0	-10.877	37.221	0	-0.19
	51.777	-1110.51	13.513	0	-15.764	1328.608	0	-0.24
	64.549	-937.925	13.513	0	-21.44	1565.195	0	-0.25
	69.036	-877.287	13.513	0	-23.52	1626.081	0	-0.25
	86.295	-644.068	13.513	0	-31.798	1741.385	0	-0.24
	103.554	-713.685	0	-10.877	-40.257	1659.113	0	-0.21
	120.813	-901.411	0	-10.877	-48.52	1384.875	0	-0.2
	132.894	-1032.82	0	-10.877	-53.979	1094.017	0	-0.18
	138.072	-1089.14	0	-10.877	-56.205	948.352	0	-0.16
	155.331	-1276.86	0	-10.877	-63.068	385.84	0	-0.09
	156.021	-1284.37	0	-10.877	-63.324	361.22	0	-0.09
4	0	-1464.59	50.975	-10.877	-68.969	0	-275.141	0
	0	-1464.59	50.975	-10.877	-68.969	0	-275.141	0
	10.896	-1080.43	5.439	0	-2.491	494.885	0	-0.06
	20.954	-1025.72	5.439	0	-2.491	469.827	0	-0.1
	41.908	-911.751	5.439	0	-6.504	1090.287	0	-0.17
	55.319	-838.811	5.439	0	-9.945	1533.763	0	-0.2
	62.862	-797.782	5.439	0	-12.076	1771.328	0	-0.2
	66.843	-776.128	5.439	0	-13.255	1891.435	0	-0.21

Max(-)  
Mom @  
Pier 38

H\$20  
Neg. Mom.  
@ Section Loss

Shear @  
Section Loss

Max Shear  
@ Pier 30

Max(-)  
Mom @  
Pier 39

Max(-)  
Mom @  
Pier 40

*Plot*

81.93	-694.07	5.439	0	-18.017	2299.173	0	-0.21
83.816	-683.813	5.439	0	-18.642	2343.777	0	-0.21
104.77	-569.844	5.439	0	-25.925	2716.157	0	-0.2
125.724	-455.875	5.439	0	-33.707	2825.22	0	-0.18
146.678	-341.906	5.439	0	-41.88	2632.635	0	-0.14
156.945	-286.062	5.439	0	-46	2419.324	0	-0.12
167.632	-227.938	5.439	0	-50.356	2110.328	0	-0.1
171.404	-207.423	5.439	0	-51.909	1979.613	0	-0.09
182.3	-148.16	5.439	0	-56.438	1537.37	0	-0.07
188.586	-113.969	5.439	0	-59.077	1237.906	0	-0.05
209.54	0	5.439	-67.905	-67.905	0	0	0

*Max Shear @ END BENT*

Support	Reac. Pos	Reac. Negative
1	9.707	-67.5
2	6.743	-72.158
3	12.854	-74.566
4	16.004	-73.221
5	5.439	-67.995

Id Ohio 5C1  
 Type Truck  
 Factors: Moment 1  
 Shear 1  
 Deflection 1

OH 5C1  
 SINGLE TO  
 COMBINE  
 W/  
 TRAN

*Handwritten mark*

Pier 37

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (ma)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	62.661	-16.405	62.661	0	0	0
	13.793	734.101	53.223	0	53.223	734.101	0	0.1
	27.586	1243.755	38.306	0	44.056	1215.336	0	0.2
	41.379	1564.285	29.284	0	35.392	1464.501	0	0.26
	55.172	1682.088	6.201	-10.799	27.351	1509.008	0	0.3
	68.965	1635.138	5.979	-11.021	19.993	1378.827	0	0.31
	82.758	1492.343	0	-19.41	13.301	1100.752	0	0.28
	93.379	1269.449	0	-40.205	8.563	799.561	0	0.24
	96.551	1187.579	0	-41.966	7.212	696.333	0	0.23
	109.93	762.744	0	-48.999	4.478	492.257	0	0.16
	110.344	747.744	0	-49.207	4.478	494.11	0	0.16
	120.965	541.668	4.478	0	4.478	541.668	0	0.1
	124.137	555.874	4.478	0	4.478	555.874	0	0.08
	2	0	617.637	4.478	-9.348	75.594	0	-1038.83
0		617.637	4.478	-9.348	75.594	0	-1038.83	0
8.396		539.151	0	-9.348	73.903	0	-709.522	0.06
16.521		463.196	0	-9.348	72.05	0	-392.685	0.13
25.458		379.645	0	-9.348	69.819	0	-37.242	0.21
27.083		364.454	0	-9.348	69.391	28.05	0	0.23
54.166		1199.398	52.319	0	61.298	1102.989	0	0.49
72.041		1814.641	46.51	0	55.236	1721.031	0	0.65
81.249		2091.025	43.33	0	51.973	1989.642	0	0.72
84.499		2180.09	42.186	0	50.806	2074.724	0	0.74
102.374		2583.216	20.214	0	44.301	2442.765	0	0.84
108.332		2682.146	18.047	0	42.113	2526.133	0	0.86
135.415		2879.107	8.107	-8.893	32.19	2648.426	0	0.92
162.498		2761.581	1.075	-15.925	22.622	2373.914	0	0.88
167.373	2698.81	0	-17.704	20.98	2288.265	0	0.87	
189.581	2256.84	0	-41.246	13.982	1792.478	0	0.76	
197.977	2032.802	0	-44.173	11.579	1570.189	0	0.7	
216.664	1439.714	0	-50.369	6.723	1025.672	0	0.53	
235.622	754.985	0	-40.148	4.45	129.921	0	0.34	
243.747	493.168	2.776	0	4.45	166.074	0	0.26	
246.997	502.189	2.776	0	4.45	180.535	0	0.23	
256.476	528.499	2.776	0	4.45	222.714	0	0.13	
3	0	568.341	2.776	-9.312	73.431	0	-817.121	0
	0	568.341	2.776	-9.312	73.431	0	-817.121	0
	12.438	452.528	0	-9.312	69.879	0	-300.275	0.12
	23.467	349.825	0	-9.312	66.402	125.695	0	0.23
	27.926	454.76	40.244	0	64.927	289.384	0	0.28

Max + Min  
 @ Span 7  
 Location 68.51  
 from Pier 37

Max  
 Loss A

Max (+)  
 Min  
 @ 135  
 from Pier 38

Max Shear @  
 Pier 38

Shear @  
 Section Loss A

Single OH5C1

Max. Shear  
 @ Section Loss B

*J.P. 50*

	42.945	952.559	35.402	0	59.664	801.303	0	0.44
	46.934	1074.227	34.038	0	58.187	925.636	0	0.48
	66.412	1595.407	26.916	0	50.61	1449.865	0	0.67
	70.401	1684.868	25.372	0	48.992	1537.104	0	0.71
	93.868	2066.857	15.888	-1.112	39.267	1894.342	0	0.87
	117.335	<u>2174.396</u>	10.077	-6.923	29.593	1963.768	0	0.92
	140.802	2044.371	0.303	-16.697	20.562	1762.137	0	0.86
	164.269	1641.421	0	-26.112	12.575	1335.888	0	0.7
	177.88	1304.131	0	-31.19	11.172	62.036	0	0.57
	187.736	1020.401	0	-34.645	11.172	172.153	0	0.47
	205.571	442.002	0	-40.358	11.172	371.412	0	0.28
	211.203	434.336	11.172	0	11.172	434.336	0	0.22
	222.702	562.805	11.172	0	11.172	562.805	0	0.11
4	0	696.518	11.172	-3.224	<u>74.376</u>	0	-740.095	0
	0	696.518	11.172	-3.224	74.376	0	-740.095	0
	9.075	667.265	0	-3.224	72.155	0	-314.106	0.07
	21.606	626.867	0	-3.224	68.747	250.162	0	0.18
	22.038	625.474	0	-3.224	68.624	269.219	0	0.18
	43.212	1246.195	53.119	0	62.075	1160.244	0	0.37
	64.818	2012.933	45.923	0	54.504	1918.055	0	0.54
	65.466	2033.087	45.694	0	54.265	1937.497	0	0.54
	77.566	2373.153	41.29	0	49.688	2260.064	0	0.62
	86.424	2578.209	22.457	0	46.211	2442.326	0	0.65
	93.554	2711.75	19.706	0	43.345	2552.409	0	0.68
	108.03	2882.479	13.932	-3.068	37.374	2666.884	0	0.7
	129.636	<u>2945.823</u>	8.906	-8.094	28.134	2544.502	0	0.68
	151.242	2733.815	0	-32.398	18.563	2044.203	0	0.6
	155.563	2652.876	0	-34.232	16.616	1896.533	0	0.58
	171.984	2206.557	0	-41.329	9.621	1247.146	0	0.46
	172.848	2176.841	0	-41.708	9.316	0	-402.543	0.45
	185.163	1698.295	0	-54.967	9.316	0	-287.818	0.34
	194.454	1276.672	0	-59.089	9.316	0	-201.272	0.25
	216.06	0	9.316	-68.758	9.316	0	0	0

*Max (+)  
Mom @  
117' from  
Pier 39*

*Max Shear @ Pier 40*

*Max (+)  
Mom @  
Span 4  
126' From  
Pier 40*

Minimums table:

Span	Location	Moment(r)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	62.661	-16.405	-16.405	0	0	0
	13.793	-226.268	0	-16.405	-16.405	0	-226.268	-0.07
	27.586	-452.535	0	-16.405	-16.405	0	-452.535	-0.14
	41.379	-678.803	0	-16.405	-16.405	0	-678.803	-0.2
	55.172	-905.071	0	-16.405	-21.911	1266.909	0	-0.24
	68.965	-1131.34	0	-16.405	-31.283	1421.783	0	-0.26
	82.758	-1357.61	0	-16.405	-40.221	1354.029	0	-0.26
	93.379	-1531.83	0	-16.405	-46.724	1169.309	0	-0.24
	96.551	-1583.87	0	-16.405	-48.593	1094.411	0	-0.23
	109.93	-1803.35	0	-16.405	-56.094	690.022	0	-0.18
	110.344	-1810.14	0	-16.405	-56.315	675.459	0	-0.18
	120.965	-1984.37	0	-16.405	-61.799	263.663	0	-0.12
	124.137	-2036.41	0	-16.405	-63.362	127.448	0	-0.1

*Dist*

2	0	-2262.68	56.724	-16.405	-69.706	0	-529.181	0	
	0	-2262.68	56.724	-16.405	-69.706	0	-529.181	0	
	8.396	-1799.66	54.186	0	-9.348	539.151	0	-0.04	
	16.521	-1381.96	49.214	0	-9.348	463.196	0	-0.09	
	25.458	-965.687	43.37	0	-9.348	379.645	0	-0.13	
	27.083	-895.492	42.113	0	-9.348	364.454	0	-0.13	
	54.166	-677.5	4.45	0	-9.348	111.271	0	-0.22	
	72.041	-597.963	4.45	0	-9.685	1355.252	0	-0.24	
	81.249	-556.99	4.45	0	-12.164	1606.695	0	-0.24	
	84.499	-542.529	4.45	0	-13.09	1693.121	0	-0.25	
	102.374	-462.991	4.45	0	-18.603	2127.092	0	-0.31	
	108.332	-436.479	4.45	0	-20.575	2250.719	0	-0.33	
	135.415	-648.278	0	-9.348	-30.077	2615.806	0	-0.4	
	162.498	-901.461	0	-9.348	-39.983	2587.639	0	-0.44	
	167.373	-947.034	0	-9.348	-41.775	2537.827	0	-0.45	
	189.581	-1154.64	0	-9.348	-49.869	2143.9	0	-0.45	
	197.977	-1233.13	0	-9.348	-52.864	1928.403	0	-0.44	
	216.664	-1407.83	0	-9.348	-59.285	1339.795	0	-0.39	
	235.622	-1585.06	0	-9.348	-65.291	628.689	0	-0.29	
	243.747	-1661.01	0	-9.348	-67.661	302.941	0	-0.23	
	246.997	-1691.39	0	-9.348	-68.574	169.998	0	-0.2	
	256.476	-1780.01	0	-9.348	-71.122	0	-224.655	-0.13	
	3	0	-1925.31	11.172	-53.246	-74.604	0	-841.962	0
	0	-1925.31	11.172	-53.246	-74.604	0	-841.962	0	
	12.438	-1786.35	11.172	0	-9.312	452.528	0	-0.11	
	23.467	-1663.13	11.172	0	-9.312	349.825	0	-0.19	
	27.926	-1613.31	11.172	0	-9.312	308.307	0	-0.23	
	42.945	-1445.52	11.172	0	-9.312	168.458	0	-0.33	
	46.934	-1400.94	11.172	0	-9.312	131.31	0	-0.35	
	66.412	-1183.33	11.172	0	-11.838	1283.219	0	-0.42	
	70.401	-1138.76	11.172	0	-13.11	1373.494	0	-0.44	
	93.868	-876.578	11.172	0	-21.24	1787.899	0	-0.46	
	117.335	-614.395	11.172	0	-30.378	1970.207	0	-0.43	
	140.802	-742.752	0	-9.312	-40.085	1875.352	0	-0.39	
	164.269	-961.267	0	-9.312	-49.78	1494.043	0	-0.37	
	177.88	-1088.01	0	-9.312	-55.159	1156.733	0	-0.34	
	187.736	-1179.78	0	-9.312	-58.871	868.205	0	-0.3	
	205.571	-1345.85	0	-9.312	-65.12	267.419	0	-0.2	
	211.203	-1398.3	0	-9.312	-66.943	62.814	0	-0.17	
	222.702	-1505.37	0	-9.312	-70.447	0	-373.762	-0.09	
	4	0	-2012.72	9.316	-50.407	-73.734	0	-860.274	0
	0	-2012.72	9.316	-50.407	-73.734	0	-860.274	0	
	9.075	-1928.18	9.316	0	-3.224	667.265	0	-0.08	
	21.606	-1811.44	9.316	0	-3.224	626.867	0	-0.17	
	22.038	-1807.42	9.316	0	-3.224	625.474	0	-0.18	
	43.212	-1610.17	9.316	0	-4.347	751.323	0	-0.3	
	64.818	-1408.9	9.316	0	-9.784	1479.813	0	-0.37	
	65.466	-1402.86	9.316	0	-9.962	1500.24	0	-0.37	
	77.566	-1290.15	9.316	0	-13.453	1863.186	0	-0.39	

Max. Moment (L) @ Pier 38

Single OHSOI TRUCK NEG MOM @ SECTION LOSS (A)

Max (L) MOM @ Pier 39

Max Shear @ Pier 39

Single OHSOI TRUCK NEG MOM @ SECTION LOSS (B)

Max (L) MOM @ Pier 40

86.424	-1207.63	9.316	0	-16.214	2101.968	0	-0.39
93.554	-1141.21	9.316	0	-18.55	2272.527	0	-0.39
108.03	-1006.36	9.316	0	-23.577	2547.029	0	-0.38
129.636	-805.086	9.316	0	-31.717	2741.124	0	-0.33
151.242	-603.815	9.316	0	-40.44	2621.241	0	-0.27
155.563	-563.56	9.316	0	-42.239	2555.321	0	-0.26
171.984	-410.594	9.316	0	-49.218	2169.349	0	-0.2
172.848	-402.543	9.316	0	-49.591	2142.938	0	-0.19
185.163	-287.818	9.316	0	-54.967	1698.295	0	-0.14
194.454	-201.272	9.316	0	-59.089	1276.672	0	-0.1
216.06	0	9.316	-68.758	-68.758	0	0	0

*Max*

*Max Shear @ End BENT*

Support	Reac. Pos	Reac. Negative
1	16.405	-62.758
2	13.826	-83.592
3	12.087	-79.762
4	14.396	-79.425
5	9.316	-68.857

*✓ 2/22*  
CENTER GIRDER

Id Ohio 5C1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(n)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	65.092	-12.279	65.092	0	0	0
	16.623	918.841	55.275	0	55.275	918.841	0	0.18
	33.246	1555.221	39.111	0	45.725	1520.157	0	0.34
	49.869	1938.742	29.764	0	36.69	1829.693	0	0.46
	66.492	2070.333	6.047	-10.953	28.321	1883.117	0	0.53
	83.115	2004.327	3.614	-13.386	20.761	1725.588	0	0.54
	99.738	1787.175	0	-21.832	14.07	1403.302	0	0.49
	116.361	1382.876	0	-44.72	8.139	947.073	0	0.4
	127.166	1044.304	0	-49.361	4.662	592.869	0	0.32
	132.984	840.853	0	-51.706	2.903	386.058	0	0.27
	138.303	642.69	0	-53.765	2.564	354.602	0	0.23
	149.607	383.584	2.564	0	2.564	383.584	0	0.13
	152.267	390.403	2.564	0	2.564	390.403	0	0.11
	2	0	426.204	2.564	-7.02	75.22	0	-943.257
0		426.204	2.564	-7.02	75.22	0	-943.257	0
8.937		363.468	0	-7.02	73.306	0	-568.411	0.08
17.604		302.633	0	-7.02	71.229	0	-210.198	0.16
26.541		316.857	43.33	0	68.911	160.673	0	0.25
27.083		337.246	43.202	0	68.764	183.166	0	0.25
54.166		1364.275	51.641	0	60.623	1278.387	0	0.53
72.582		2002.888	45.666	0	54.418	1915.853	0	0.68
81.249		2263.023	42.698	0	51.382	2167.174	0	0.74
83.686		2330.346	41.851	0	50.52	2231.208	0	0.75
97.77		2663.13	21.301	0	45.487	2538.868	0	0.82
108.332		2850.043	17.529	0	41.68	2696.576	0	0.86
116.728		2954.03	14.508	-2.492	38.648	2775.817	0	0.87
135.415		3038.696	7.763	-9.237	31.929	2803.86	0	0.89
162.498	2911.739	0.767	-16.233	22.446	2495.212	0	0.83	
170.081	2804.833	0	-18.952	19.895	2342.074	0	0.8	
189.581	2389.473	0	-41.438	13.722	1848.521	0	0.7	
190.123	2375.298	0	-41.627	13.561	1833.242	0	0.7	
204.206	1957.069	0	-46.473	9.595	1416.957	0	0.6	
215.581	1558.66	0	-50.233	6.725	1061.845	0	0.51	
216.664	1518.448	0	-50.582	6.466	1027.348	0	0.5	
243.747	449.082	0	-42.587	6.336	211.076	0	0.24	
249.434	428.984	2.273	0	6.336	247.111	0	0.19	
258.913	450.531	2.273	0	6.336	307.167	0	0.1	
3	0	477.619	2.273	-9.972	71.971	0	-723.896	0
	0	477.619	2.273	-9.972	71.971	0	-723.896	0
	16.514	341.015	0	-2.522	66.03	0	-7.243	0.14

*Shear @ Pier 37*

*Max (+) Mom @ 69.3 From Pier 37*

*Shear @ Pier 38*

*Max (+) Mom @ 135 From Pier 38*

*Shear @ Section Loss C*

20.388	331.245	0	-2.522	64.527	147.356	0	0.17
32.417	707.496	36.087	0	59.65	591.317	0	0.28
40.776	979.598	32.772	0	56.074	866.092	0	0.35
61.164	1523.089	24.02	0	46.849	1397.24	0	0.51
81.552	1851.494	14.634	-2.366	37.318	1689.423	0	0.62
94.193	1929.667	8.715	-8.285	31.48	1741.608	0	0.65
101.94	1929.292	10.158	-6.842	27.993	1726.167	0	0.66
122.328	1815.616	0.633	-16.367	19.346	1528.667	0	0.61
142.716	1461.553	0	-25.542	11.933	0	-107.423	0.5
156.172	1116.944	0	-31.188	11.933	53.145	0	0.39
163.104	909.583	0	-33.942	11.933	135.862	0	0.33
183.492	379.148	11.933	0	11.933	379.148	0	0.16
185.939	408.343	11.933	0	11.933	408.343	0	0.14
0	622.434	11.933	-2.929	74.255	0	-734.363	0
0	622.434	11.933	-2.929	74.255	0	-734.363	0
12.536	585.71	0	-2.929	71.053	0	-149.129	0.09
21.248	560.19	0	-2.929	68.579	245.986	0	0.16
42.496	1233.238	52.944	0	61.815	1153.17	0	0.33
58.007	1804.622	47.734	0	56.328	1718.75	0	0.45
63.744	1991.988	45.692	0	54.195	1900.149	0	0.49
69.056	2152.247	43.749	0	52.172	2053.205	0	0.52
83.505	2516.061	22.793	0	46.473	2386.195	0	0.58
84.992	2547.622	22.216	0	45.871	2412.984	0	0.59
106.24	2842.448	13.684	-3.316	37.038	2626.298	0	0.63
127.488	2901.238	8.805	-8.195	27.814	2497.359	0	0.62
148.736	2689.757	0	-32.455	18.276	1996.528	0	0.54
160.422	2433.781	0	-37.518	12.923	1553.886	0	0.47
169.984	2139.529	0	-41.735	9.101	1176.971	0	0.41
174.446	1975.429	0	-43.725	7.735	0	-294.206	0.37
185.92	1504.099	0	-56.63	7.735	0	-205.451	0.27
191.232	1254.106	0	-59.022	7.735	0	-164.361	0.22
212.48	0	7.735	-68.64	7.735	0	0	0

Max (+)  
Mom @ 102'  
From Pier 39

Shrav @  
Pier 40

(+) Mom @  
Section 105 (E)

Shrav @  
Section 105 (E)

Max (+)  
Mom @ 124'  
From Pier 40

Minimums table:

Span	Location	Moment (r)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect (min)
1	0	0	65.092	-12.279	-12.279	0	0	0
	16.623	-204.111	0	-12.279	-12.279	0	-204.111	-0.1
	33.246	-408.222	0	-12.279	-12.279	0	-408.222	-0.19
	49.869	-612.333	0	-12.279	-15.759	1279.19	0	-0.26
	66.492	-816.445	0	-12.279	-25.546	1682.743	0	-0.32
	83.115	-1020.56	0	-12.279	-35.059	1797.298	0	-0.36
	99.738	-1224.67	0	-12.279	-44.042	1648.356	0	-0.36
	116.361	-1428.78	0	-12.279	-52.348	1279.668	0	-0.32
	127.166	-1561.45	0	-12.279	-57.312	947.198	0	-0.28
	132.984	-1632.89	0	-12.279	-59.831	744.151	0	-0.24
	138.303	-1698.21	0	-12.279	-62.046	545.052	0	-0.21
	149.607	-1837	0	-12.279	-66.484	84.123	0	-0.13
	152.267	-1869.66	0	-12.279	-67.476	0	-30.956	-0.11
2	0	-2041.11	56.078	-12.279	-72.333	0	-668.673	0

Max (-)  
Mom @ Pier 39



*v. 2/28*

	0	-2041.11	56.078	-12.279	-72.333	0	-668.673	0
	8.937	-1551.49	53.538	0	-7.02	363.468	0	-0.07
	17.604	-1221.71	6.336	0	-7.02	302.633	0	-0.13
	26.541	-1165.09	6.336	0	-7.02	239.896	0	-0.19
	27.083	-1161.66	6.336	0	-7.02	236.094	0	-0.19
	54.166	-990.064	6.336	0	-7.02	45.984	0	-0.31
	72.582	-873.382	6.336	0	-10.435	1491.68	0	-0.34
	81.249	-818.472	6.336	0	-12.816	1736.936	0	-0.35
	83.686	-803.029	6.336	0	-13.516	1803.906	0	-0.35
	97.77	-713.802	6.336	0	-17.801	2164.313	0	-0.34
	108.332	-646.881	6.336	0	-21.243	2395.219	0	-0.34
	116.728	-593.688	6.336	0	-24.087	2547.721	0	-0.33
	135.415	-524.345	0	-7.02	-30.64	2765.293	0	-0.3
	162.498	-714.455	0	-7.02	-40.38	2736.5	0	-0.33
	170.081	-767.686	0	-7.02	-43.117	2651.88	0	-0.34
	189.581	-904.565	0	-7.02	-50.101	2282.931	0	-0.34
	190.123	-908.367	0	-7.02	-50.294	2269.656	0	-0.34
	204.206	-1007.22	0	-7.02	-55.233	1870.903	0	-0.33
	215.581	-1087.07	0	-7.02	-59.111	1479.784	0	-0.31
	216.664	-1094.68	0	-7.02	-59.474	1439.738	0	-0.31
	243.747	-1284.79	0	-7.02	-67.929	333.637	0	-0.2
	249.434	-1324.71	0	-7.02	-69.52	86.707	0	-0.16
	258.913	-1391.25	0	-7.02	-72.015	0	-327.985	-0.09
3	0	-1810.42	11.933	-54.832	-74.823	0	-860.123	0
	0	-1810.42	11.933	-54.832	-74.823	0	-860.123	0
	16.514	-1613.36	11.933	0	-9.972	312.932	0	-0.13
	20.388	-1567.14	11.933	0	-9.972	274.301	0	-0.15
	32.417	-1423.6	11.933	0	-9.972	154.344	0	-0.23
	40.776	-1323.85	11.933	0	-9.972	70.984	0	-0.27
	61.164	-1080.57	11.933	0	-12.539	1169.767	0	-0.34
	81.552	-837.28	11.933	0	-20.618	1552.621	0	-0.35
	94.193	-686.443	11.933	0	-26.098	1687.607	0	-0.34
	101.94	-593.995	11.933	0	-29.596	1726.365	0	-0.33
	122.328	-742.287	0	-9.972	-39.072	1653.966	0	-0.3
	142.716	-945.604	0	-9.972	-48.535	1328.061	0	-0.28
	156.172	-1079.79	0	-9.972	-54.525	989.003	0	-0.25
	163.104	-1148.92	0	-9.972	-57.482	781.597	0	-0.23
	183.492	-1352.24	0	-9.972	-65.592	59.269	0	-0.13
	185.939	-1376.64	0	-9.972	-66.493	0	-35.805	-0.12
4	0	-1643.61	7.735	-50.218	-72.538	0	-779.056	0
	0	-1643.61	7.735	-50.218	-72.538	0	-779.056	0
	12.536	-1546.63	7.735	0	-2.929	585.71	0	-0.09
	21.248	-1479.25	7.735	0	-2.929	560.19	0	-0.14
	42.496	-1314.89	7.735	0	-4.274	726.493	0	-0.23
	58.007	-1194.9	7.735	0	-8.137	1256.88	0	-0.27
	63.744	-1150.53	7.735	0	-9.705	1443.532	0	-0.28
	69.056	-1109.43	7.735	0	-11.23	1610.618	0	-0.29
	83.505	-997.669	7.735	0	-15.704	2025.49	0	-0.3
	84.992	-986.164	7.735	0	-16.19	2064.042	0	-0.3

*Max(-) mom @ Pier 39*

*Shear @ Pier 39*

*(-) Mom @ Section 40*

106.24	-821.803	7.735	0	-23.582	2505.311	0	-0.28
127.488	-657.443	7.735	0	-31.734	2697.146	0	-0.25
148.736	-493.082	7.735	0	-40.44	2577.825	0	-0.21
160.422	-402.684	7.735	0	-45.412	2364.061	0	-0.17
169.984	-328.721	7.735	0	-49.564	2106.258	0	-0.15
174.446	-294.206	7.735	0	-51.525	1959.684	0	-0.13
185.92	-205.451	7.735	0	-56.63	1504.099	0	-0.09
191.232	-164.361	7.735	0	-59.022	1254.106	0	-0.08
212.48	0	7.735	-68.64	-68.64	0	0	0

*AW*

Support	Reac. Pos	Reac. Negative
1	12.279	-65.193
2	9.583	-80.896
3	12.246	-80.544
4	14.862	-79.439
5	7.735	-68.739

*← -68.64 @ END BENT*

*SOUTH GIRDER*

Id Ohio 5C1  
 Type Truck  
 Factors: Moment 1  
 Shear 1  
 Deflection 1

*Shear @ Pier 32*

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	67.06	-10.52	<u>67.06</u>	0	0	0
	19.586	1115.994	56.979	0	56.979	1115.994	0	0.26
	39.172	1886.928	39.846	0	47.155	1847.162	0	0.48
	43.481	2016.878	37.697	0	45.056	1959.073	0	0.53
	58.758	<u>2339.301</u>	30.263	0	37.827	2222.633	0	0.65
	78.344	<u>2485.204</u>	6.04	-10.96	29.164	2284.831	0	0.74
	97.93	2395.474	1.918	-15.082	21.36	2091.815	0	0.76
	98.518	2390.346	1.652	-15.348	21.141	2082.762	0	0.76
	117.516	2100.793	0	-23.576	14.55	1709.878	0	0.7
	137.102	1595.819	0	-31.177	8.694	1191.95	0	0.56
	151.596	1128.917	0	-36.152	4.894	741.913	0	0.43
	156.688	950.377	0	-37.774	3.648	571.526	0	0.38
	161.585	772.903	0	-39.273	2.49	402.371	0	0.33
	172.944	341.412	0	-42.538	1.707	295.276	0	0.22
	176.274	300.961	1.707	0	1.707	300.961	0	0.18
	187.438	320.022	1.707	0	1.707	320.022	0	0.08
	2	0	334.401	1.707	-5.362	<u>74.906</u>	0	-898.153
0		334.401	1.707	-5.362	74.906	0	-898.153	0
6.506		299.516	0	-5.362	73.5	0	-622.623	0.06
18.976		232.652	0	-5.362	70.453	0	-112.496	0.18
27.108		380.091	42.775	0	68.301	216.113	0	0.27
29.548		470.982	42.172	0	67.63	313.652	0	0.29
37.951		779.838	40.008	0	65.229	644.865	0	0.38
54.216		1359.317	51.188	0	60.186	1258.125	0	0.55
79.426		2157.771	42.923	0	51.616	2055.092	0	0.77
81.324		2209.056	42.267	0	50.945	2104.613	0	0.78
92.438		2478.488	22.779	0	46.977	2359.066	0	0.85
108.432		<u>2767.507</u>	17.067	0	41.196	2610.356	0	0.91
135.54		<u>2938.839</u>	7.254	-9.746	31.415	2706.984	0	0.93
162.648		2798.447	0.245	-16.755	21.976	2403.305	0	0.87
181.081		2480.354	0	-23.32	16.011	2007.285	0	0.77
189.756		2271.999	0	-41.954	13.396	1781.527	0	0.72
198.159		2039.787	0	-44.844	11.004	1545.352	0	0.66
211.442	1614.023	0	-49.254	8.499	38.853	0	0.55	
216.864	1422.991	0	-50.984	8.499	84.932	0	0.5	
243.972	389.471	0	-42.836	8.499	315.323	0	0.23	
255.9	416.695	8.499	0	8.499	416.695	0	0.12	
263.761	483.508	8.499	0	8.499	483.508	0	0.06	
3	0	545.714	8.499	-4.074	70.088	0	-607.036	0
	0	545.714	8.499	-4.074	70.088	0	-607.036	0

*(+) Max @  
81.6' From  
Pier 32*

*Max Shear  
@ Pier 38*

*Max (+)  
Mom @  
136' From  
Pier 38*

*Handwritten initials*

*Max (+) Mom  
@ 71.9'  
From Pier 31*

*(+) Mom @  
Section Loss  
(G)*

*Max (+)  
Mom  
@ 122 From  
Pier 40*

*OHSCI  
Max Shear  
@ Pier 40*

*Max Shear  
@ Section Loss (G)*

11.046	500.716	0	-4.074	65.332	0	-97.267	0.07
17.259	475.405	0	-4.074	62.471	163.336	0	0.11
28.477	671.506	49.66	0	57.075	582.657	0	0.18
34.518	872.343	46.77	0	54.052	779.692	0	0.22
51.777	1334.002	23.128	0	45.067	1219.508	0	0.33
64.549	1556.792	16.451	-0.549	38.266	1411.721	0	0.38
69.036	1607.789	14.069	-2.931	35.882	1451.078	0	0.4
86.295	1674.22	11.322	-5.678	26.895	1468.07	0	0.42
103.554	1590.367	2.138	-14.862	18.469	1283.56	0	0.4
120.813	1298.327	0	-23.86	14.719	0	-193.485	0.33
132.894	985.284	0	-44.901	14.719	0	-15.658	0.26
138.072	826.755	0	-47.411	14.719	60.554	0	0.22
155.331	314.592	14.719	0	14.719	314.592	0	0.11
156.021	324.754	14.719	0	14.719	324.754	0	0.1
4	0	568.631	14.719	-2.714	74.391	0	-779.369
0	568.631	14.719	-2.714	74.391	0	-779.369	0
10.896	539.062	0	-2.714	71.646	0	-278.575	0.08
20.954	511.768	0	-2.714	68.78	177.982	0	-0.15
41.908	1157.837	53.183	0	61.981	1082.523	0	0.32
55.319	1665.522	48.602	0	57.144	1586.959	0	0.42
62.862	1920.852	45.864	0	54.28	1834.506	0	0.46
66.843	2045.132	44.376	0	52.732	1953.117	0	0.49
81.93	2439.12	23.094	0	46.665	2315.89	0	0.55
83.816	2480.405	22.347	0	45.887	2350.846	0	0.56
104.77	2779.942	13.757	-3.243	37.001	2567.014	0	0.6
125.724	2840.8	9.005	-7.995	27.736	2442.519	0	0.59
146.678	2638.528	0	-32.264	18.165	1949.097	0	0.51
156.945	2421.842	0	-36.785	13.384	1565.643	0	0.46
167.632	2101.223	0	-41.575	9.014	1145.991	0	0.39
171.404	1964.347	0	-43.285	7.591	992.452	0	0.36
182.3	1523.851	0	-55.941	5.693	0	-155.08	0.27
188.586	1232.451	0	-58.817	5.693	0	-119.292	0.21
209.54	0	5.693	-68.457	5.693	0	0	0

Minimums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	67.06	-10.52	-10.52	0	0	0
	19.586	-206.054	0	-10.52	-10.52	0	-206.054	-0.12
	39.172	-412.108	0	-10.52	-10.52	0	-412.108	-0.23
	43.481	-457.44	0	-10.52	-10.829	1159.847	0	-0.26
	58.758	-618.163	0	-10.52	-18.231	1691.401	0	-0.33
	78.344	-824.217	0	-10.52	-28.24	2117.102	0	-0.4
	97.93	-1030.27	0	-10.52	-37.819	2192.816	0	-0.45
	98.518	-1036.45	0	-10.52	-38.098	2190.071	0	-0.45
	117.516	-1236.33	0	-10.52	-46.818	1961.427	0	-0.46
	137.102	-1442.38	0	-10.52	-55.052	1482.395	0	-0.41
	151.596	-1594.86	0	-10.52	-60.545	1011.279	0	-0.34
	156.688	-1648.43	0	-10.52	-62.347	827.997	0	-0.31
	161.585	-1699.95	0	-10.52	-64.017	644.646	0	-0.28

1258

	172.944	-1819.46	0	-10.52	-67.654	197.254	0	-0.2
	176.274	-1854.49	0	-10.52	-68.658	61.277	0	-0.17
	187.438	-1971.94	0	-10.52	-71.838	0	-408.076	-0.08
2	0	-2060.54	54.923	-10.52	-74.02	0	-780.53	0
	0	-2060.54	54.923	-10.52	-74.02	0	-780.53	0
	6.506	-1711.02	51.779	0	-5.362	299.516	0	-0.06
Max(-)	18.976	-1596.92	8.499	0	-5.362	232.652	0	-0.16
Mom @	27.108	-1527.81	8.499	0	-5.362	189.045	0	-0.23
Pier 38	29.548	-1507.07	8.499	0	-5.362	175.963	0	-0.24
	37.951	-1435.65	8.499	0	-5.362	130.902	0	-0.3
	54.216	-1297.42	8.499	0	-6.349	982.665	0	-0.38
	79.426	-1083.15	8.499	0	-12.758	1689.232	0	-0.45
	81.324	-1067.02	8.499	0	-13.293	1738.424	0	-0.45
	92.438	-972.564	8.499	0	-16.573	2011.622	0	-0.45
	108.432	-836.633	8.499	0	-21.69	2344.787	0	-0.44
	135.54	-606.242	8.499	0	-31.099	2674.822	0	-0.39
	162.648	-537.736	0	-5.362	-40.89	2622.76	0	-0.32
	181.081	-636.578	0	-5.362	-47.54	2351.186	0	-0.27
	189.756	-683.092	0	-5.362	-50.63	2159.308	0	-0.26
	198.159	-728.152	0	-5.362	-53.583	1937.121	0	-0.25
	211.442	-799.377	0	-5.362	-58.129	1520.001	0	-0.24
	216.864	-828.448	0	-5.362	-59.929	1329.421	0	-0.23
	243.972	-973.804	0	-5.362	-68.252	252.944	0	-0.14
	255.9	-1208.3	0	-45.755	-71.445	0	-251.331	-0.09
	263.761	-1588.21	0	-50.91	-73.361	0	-581.757	-0.04
3	0	-1971.76	14.719	-53.954	-74.963	0	-896.613	0
	0	-1971.76	14.719	-53.954	-74.963	0	-896.613	0
Max(-)	11.046	-1809.17	14.719	0	-11.737	315.666	0	-0.08
Mom @	17.259	-1717.72	14.719	0	-11.737	242.739	0	-0.12
Pier 39	28.477	-1552.59	14.719	0	-11.737	111.066	0	-0.18
	34.518	-1463.68	14.719	0	-11.737	40.165	0	-0.21
	51.777	-1209.64	14.719	0	-11.737	0	-162.41	-0.26
	64.549	-1021.65	14.719	0	-16.974	1231.526	0	-0.27
	69.036	-955.601	14.719	0	-19.076	1307.11	0	-0.28
	86.295	-701.562	14.719	0	-27.624	1478.594	0	-0.26
	103.554	-770.133	0	-11.737	-36.675	1441.393	0	-0.23
	120.813	-972.708	0	-11.737	-45.852	1186.953	0	-0.22
	132.894	-1114.51	0	-11.737	-52.135	888.321	0	-0.19
	138.072	-1175.28	0	-11.737	-54.754	732.97	0	-0.17
	155.331	-1377.86	0	-11.737	-63.067	107.247	0	-0.1
	156.021	-1385.96	0	-11.737	-63.383	79.283	0	-0.1
4	0	-1580.43	55.264	-11.737	-70.457	0	-648.809	0
	0	-1580.43	55.264	-11.737	-70.457	0	-648.809	0
Max(-)	10.896	-1130.89	5.693	0	-2.714	539.062	0	-0.06
Mom @	20.954	-1073.63	5.693	0	-2.714	511.768	0	-0.11
Pier 40	41.908	-954.338	5.693	0	-4.037	676.67	0	-0.18
	55.319	-877.991	5.693	0	-7.278	1122.398	0	-0.2
	62.862	-835.045	5.693	0	-9.318	1366.813	0	-0.21
	66.843	-812.38	5.693	0	-10.459	1492.474	0	-0.22

Max(-)  
Mom @  
Pier 38

OH5C1  
NEG. Mom @  
Section Loss (F)

Shear @  
Section Loss (F)

Max Shear  
@ Pier 39

Max(-)  
Mom @  
Pier 39

Max(-)  
Mom @  
Pier 40

81.93	-726.489	5.693	0	-15.153	1933.609	0	-0.22
83.816	-715.753	5.693	0	-15.777	1983.599	0	-0.22
104.77	-596.461	5.693	0	-23.22	2432.803	0	-0.21
125.724	-477.169	5.693	0	-31.429	2634.235	0	-0.19
146.678	-357.877	5.693	0	-40.177	2525.592	0	-0.15
156.945	-299.423	5.693	0	-44.618	2346.638	0	-0.13
167.632	-238.584	5.693	0	-49.332	2067.422	0	-0.11
171.404	-217.112	5.693	0	-51.017	1945.614	0	-0.1
182.3	-155.08	5.693	0	-55.941	1523.851	0	-0.07
188.586	-119.292	5.693	0	-58.817	1232.451	0	-0.06
209.54	0	5.693	-68.457	-68.457	0	0	0

Support	Reac. Pos	Reac. Negative
1	10.52	-67.15
2	7.069	-79.772
3	13.871	-81.738
4	17.433	-80.235
5	5.693	-68.556

May Show  
@ END BENT

```

STAAD SPACE
START JOB INFORMATION
JOB NAME CUY-2-1441
JOB CLIENT ODOT
JOB NO P402110046
ENGINEER NAME RAH
ENGINEER DATE 3/26/12
JOB PART SECTION I
JOB COMMENT DETERMINING MAXIMUM LIVE LOAD MOMENTS AND SHEARS AT MIDSPAN AND AT SUPPORTS
CHECKER NAME DBH
CHECKER DATE 3/27/12
END JOB INFORMATION
INPUT WIDTH 79
UNIT FEET KIP
JOINT COORDINATES
1 0 0 0; 2 136.92 0 0; 3 407.75 0 0; 4 642.42 0 0; 5 858.48 0 0;
MEMBER INCIDENCES
1 1 2; 2 2 3; 3 3 4; 4 4 5;
DEFINE MATERIAL START
ISOTROPIC STEEL
E 4.176e+006
POISSON 0.17
DENSITY 0.145
ALPHA 6e-005
DAMP 0.05
ISOTROPIC STAINLESSSTEEL
E 4.032e+006
POISSON 0.3
DENSITY 0.489024
ALPHA 1e-005
DAMP 0.03
ISOTROPIC WEIGHTLESSTEEL
E 4.032e+006
POISSON 0.3
ALPHA 1e-005
DAMP 0.03
END DEFINE MATERIAL
UNIT INCHES KIP
MEMBER PROPERTY AMERICAN
*USE COMPOSITE SECTION PROPERTIES FOR LIVE LOAD
1 TO 4 PRIS AX 177.34 IX 27182.2 IY 7883.99 IZ 75783.7 YD 54.75 ZD 12
SUPPORTS
1 TO 5 PINNED
CONSTANTS
MATERIAL WEIGHTLESSTEEL ALL
*HL-93 TRUCK
UNIT FEET KIP
DEFINE MOVING LOAD
TYPE 1 LOAD 32 32 8 32 32 8
DIST 14 14 30 14 14
TYPE 2 LOAD 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14
TYPE 3 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14
TYPE 4 LOAD 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14
TYPE 5 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14
TYPE 6 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 -
32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 -
14
TYPE 7 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14
*UNIFORM LANE LOAD

```

LOAD 1 UNIFORM LANE  
MEMBER LOAD  
1 2 UNI GY -0.64  
\*COMBINE TRUCK AND LANE  
LOAD GENERATION 223  
TYPE 1 -86 0 0 XINC 1  
LOAD GENERATION 437  
TYPE 2 205.75 0 0 XINC 1  
LOAD GENERATION 784  
TYPE 3 -376 0 0 XINC 1  
LOAD GENERATION 419  
TYPE 4 440.42 0 0 XINC 1  
LOAD GENERATION 531  
TYPE 5 -123.08 0 0 XINC 1  
LOAD GENERATION 998  
TYPE 6 -355.08 0 0 XINC 1  
LOAD GENERATION 885  
TYPE 7 -26.25 0 0 XINC 1  
PERFORM ANALYSIS  
\*OUTPUT  
PRINT MAXFORCE ENVELOPE  
PRINT SUPPORT REACTION LIST 1 TO 4  
FINISH



```

STAAD SPACE
START JOB INFORMATION
JOB NAME CUY-2-1441
JOB CLIENT ODOT
JOB NO P402110046
ENGINEER NAME RAH
ENGINEER DATE 3/26/12
JOB PART SECTION I
JOB COMMENT DETERMINING MAXIMUM LIVE LOAD MOMENTS AND SHEARS AT MIDSPAN AND AT SUPPORTS
CHECKER NAME DBH
CHECKER DATE 3/27/12
END JOB INFORMATION
INPUT WIDTH 79
UNIT FEET KIP
JOINT COORDINATES
1 0 0 0; 2 166.23 0 0; 3 437.05 0 0; 4 640.93 0 0; 5 853.38 0 0;
MEMBER INCIDENCES
1 1 2; 2 2 3; 3 3 4; 4 4 5;
DEFINE MATERIAL START
ISOTROPIC STEEL
E 4.176e+006
POISSON 0.17
DENSITY 0.145
ALPHA 6e-005
DAMP 0.05
ISOTROPIC STAINLESSSTEEL
E 4.032e+006
POISSON 0.3
DENSITY 0.489024
ALPHA 1e-005
DAMP 0.03
ISOTROPIC WEIGHTLESSTEEL
E 4.032e+006
POISSON 0.3
ALPHA 1e-005
DAMP 0.03
END DEFINE MATERIAL
UNIT INCHES KIP
MEMBER PROPERTY AMERICAN
*USE COMPOSITE SECTION PROPERTIES FOR LIVE LOAD
1 TO 4 PRIS AX 177.34 IX 27182.2 IY 7883.99 IZ 75783.7 YD 54.75 ZD 12
SUPPORTS
1 TO 5 PINNED
CONSTANTS
BETA 0 MEMB 1 2
MATERIAL WEIGHTLESSTEEL ALL
*HL-93 TRUCK
UNIT FEET KIP
DEFINE MOVING LOAD
TYPE 1 LOAD 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14
TYPE 2 LOAD 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14
TYPE 3 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14
TYPE 4 LOAD 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14
TYPE 5 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14
TYPE 6 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14
TYPE 7 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14
*UNIFORM LANE LOAD
LOAD 1 UNIFORM LANE

```

MEMBER LOAD

1 2 UNI GY -0.64

\*COMBINE TRUCK AND LANE

LOAD GENERATION 311

TYPE 1 -144 0 0 XINC 1

LOAD GENERATION 406

TYPE 2 235.05 0 0 XINC 1

LOAD GENERATION 872

TYPE 3 -434 0 0 XINC 1

LOAD GENERATION 415

TYPE 4 438.93 0 0 XINC 1

LOAD GENERATION 531

TYPE 5 -93.77 0 0 XINC 1

LOAD GENERATION 909

TYPE 6 -267.77 0 0 XINC 1

LOAD GENERATION 793

TYPE 7 61.05 0 0 XINC 1

PERFORM ANALYSIS

\*OUTPUT

PRINT MAXFORCE ENVELOPE

PRINT SUPPORT REACTION LIST 1 TO 4

FINISH

```

STAAD SPACE
START JOB INFORMATION
JOB NAME CUY-2-1441
JOB CLIENT ODOT
JOB NO P402110046
ENGINEER NAME RAH
ENGINEER DATE 3/26/12
JOB PART SECTION I
JOB COMMENT DETERMINING MAXIMUM LIVE LOAD MOMENTS AND SHEARS AT MIDSPAN AND AT SUPPORTS
CHECKER NAME DBH
CHECKER DATE 3/27/12
END JOB INFORMATION
INPUT WIDTH 79
UNIT FEET KIP
JOINT COORDINATES
1 0 0 0; 2 195.86 0 0; 3 466.94 0 0; 4 639.53 0 0; 5 849.07 0 0;
MEMBER INCIDENCES
1 1 2; 2 2 3; 3 3 4; 4 4 5;
DEFINE MATERIAL START
ISOTROPIC STEEL
E 4.176e+006
POISSON 0.17
DENSITY 0.145
ALPHA 6e-005
DAMP 0.05
ISOTROPIC STAINLESSSTEEL
E 4.032e+006
POISSON 0.3
DENSITY 0.489024
ALPHA 1e-005
DAMP 0.03
ISOTROPIC WEIGHTLESSTEEL
E 4.032e+006
POISSON 0.3
ALPHA 1e-005
DAMP 0.03
END DEFINE MATERIAL
UNIT INCHES KIP
MEMBER PROPERTY AMERICAN
*USE COMPOSITE SECTION PROPERTIES FOR LIVE LOAD
1 TO 4 PRIS AX 177.34 IX 27182.2 IY 7883.99 IZ 75783.7 YD 54.75 ZD 12
SUPPORTS
1 TO 5 PINNED
CONSTANTS
BETA 0 MEMB 1 2
MATERIAL WEIGHTLESSTEEL ALL
*HL-93 TRUCK
UNIT FEET KIP
DEFINE MOVING LOAD
TYPE 1 LOAD 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14
TYPE 2 LOAD 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14
TYPE 3 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14
TYPE 4 LOAD 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14
TYPE 5 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14
TYPE 6 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14
TYPE 7 LOAD 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8 32 32 8
DIST 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14 30 14 14
*UNIFORM LANE LOAD
LOAD 1 UNIFORM LANE

```

MEMBER LOAD

1 2 UNI GY -0.64

\*COMBINE TRUCK AND LANE

LOAD GENERATION 340

TYPE 1 -144 0 0 XINC 1

LOAD GENERATION 317

TYPE 2 322.94 0 0 XINC 1

LOAD GENERATION 901

TYPE 3 -434 0 0 XINC 1

LOAD GENERATION 412

TYPE 4 437.53 0 0 XINC 1

LOAD GENERATION 532

TYPE 5 -64.14 0 0 XINC 1

LOAD GENERATION 878

TYPE 6 -238.14 0 0 XINC 1

LOAD GENERATION 759

TYPE 7 90.94 0 0 XINC 1

PERFORM ANALYSIS

\*OUTPUT

PRINT MAXFORCE ENVELOPE

PRINT SUPPORT REACTION LIST 1 TO 4

FINISH

```

STAAD SPACE
START JOB INFORMATION
JOB NAME CUY-2-1441
JOB CLIENT ODOT
JOB NO P402110046
ENGINEER NAME RAH
ENGINEER DATE 3/26/12
JOB PART SECTION I
JOB REF OH5C1 TRUCK TRAIN
JOB COMMENT DETERMINING MAXIMUM LIVE LOAD MOMENTS AND SHEARS AT MID SPANS AND AT SUPPORTS
CHECKER NAME DBH
CHECKER DATE 3/27/12
END JOB INFORMATION
INPUT WIDTH 79
UNIT FEET KIP
JOINT COORDINATES
1 0 0 0; 2 136.92 0 0; 3 407.75 0 0; 4 642.42 0 0; 5 858.48 0 0;
MEMBER INCIDENCES
1 1 2; 2 2 3; 3 3 4; 4 4 5;
DEFINE MATERIAL START
ISOTROPIC STEEL
E 4.176e+006
POISSON 0.17
DENSITY 0.145
ALPHA 6e-005
DAMP 0.05
ISOTROPIC STAINLESSSTEEL
E 4.032e+006
POISSON 0.3
DENSITY 0.489024
ALPHA 1e-005
DAMP 0.03
ISOTROPIC WEIGHTLESSTEEL
E 4.032e+006
POISSON 0.3
ALPHA 1e-005
DAMP 0.03
END DEFINE MATERIAL
UNIT INCHES KIP
MEMBER PROPERTY AMERICAN
*USE COMPOSITE SECTION PROPERTIES FOR LIVE LOAD
1 TO 4 PRIS AX 177.34 IX 27182.2 IY 7883.99 IZ 75783.7 YD 54.75 ZD 12
SUPPORTS
1 TO 5 PINNED
CONSTANTS
MATERIAL WEIGHTLESSTEEL ALL
*HL-93 TRUCK
UNIT FEET KIP
DEFINE MOVING LOAD
TYPE 1 LOAD 17 17 17 17 12
DIST 4 31 4 12
TYPE 2 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 3 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 12 17 17 -
17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 4 LOAD 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12
TYPE 5 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 6 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 12 17 17 -
17 17 12 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 7 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 12 17 17 -
17 17 12

```

DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12

\*UNIFORM LANE LOAD  
LOAD 1 UNIFORM LANE  
MEMBER LOAD  
1 2 UNI GY -0.64  
\*COMBINE TRUCK AND LANE  
LOAD GENERATION 188  
TYPE 1 -51 0 0 XINC 1  
LOAD GENERATION 460  
TYPE 2 182.75 0 0 XINC 1  
LOAD GENERATION 807  
TYPE 3 -399 0 0 XINC 1  
LOAD GENERATION 355  
TYPE 4 504.42 0 0 XINC 1  
LOAD GENERATION 496  
TYPE 5 -88.08 0 0 XINC 1  
LOAD GENERATION 992  
TYPE 6 -349.08 0 0 XINC 1  
LOAD GENERATION 850  
TYPE 7 8.75 0 0 XINC 1  
PERFORM ANALYSIS  
\*OUTPUT  
PRINT MAXFORCE ENVELOPE  
PRINT SUPPORT REACTION LIST 1 TO 4  
FINISH

```

STAAD SPACE
START JOB INFORMATION
JOB NAME CUY-2-1441
JOB CLIENT ODOT
JOB NO P402110046
ENGINEER NAME RAH
ENGINEER DATE 3/26/12
JOB PART SECTION I
JOB REF OH5C1 TRUCK TRAIN
JOB COMMENT DETERMINING MAXIMUM LIVE LOAD MOMENTS AND SHEARS AT MID SPAN AND AT SUPPORTS
CHECKER NAME DBH
CHECKER DATE 3/27/12
END JOB INFORMATION
INPUT WIDTH 79
UNIT FEET KIP
JOINT COORDINATES
1 0 0 0; 2 166.23 0 0; 3 437.05 0 0; 4 640.93 0 0; 5 853.38 0 0;
MEMBER INCIDENCES
1 1 2; 2 2 3; 3 3 4; 4 4 5;
DEFINE MATERIAL START
ISOTROPIC STEEL
E 4.176e+006
POISSON 0.17
DENSITY 0.145
ALPHA 6e-005
DAMP 0.05
ISOTROPIC STAINLESSSTEEL
E 4.032e+006
POISSON 0.3
DENSITY 0.489024
ALPHA 1e-005
DAMP 0.03
ISOTROPIC WEIGHTLESSTEEL
E 4.032e+006
POISSON 0.3
ALPHA 1e-005
DAMP 0.03
END DEFINE MATERIAL
UNIT INCHES KIP
MEMBER PROPERTY AMERICAN
*USE COMPOSITE SECTION PROPERTIES FOR LIVE LOAD
1 TO 4 PRIS AX 177.34 IX 27182.2 IY 7883.99 IZ 75783.7 YD 54.75 ZD 12
SUPPORTS
1 TO 5 PINNED
CONSTANTS
MATERIAL WEIGHTLESSTEEL ALL
*HL-93 TRUCK
UNIT FEET KIP
DEFINE MOVING LOAD
TYPE 1 LOAD 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12
TYPE 2 LOAD 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12
TYPE 3 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 12 17 17 -
17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 4 LOAD 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12
TYPE 5 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 6 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 12 17 17 -
17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 7 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 12 17 17 -
17 17 12

```

---

DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12

\*UNIFORM LANE LOAD

LOAD 1 UNIFORM LANE

MEMBER LOAD

1 2 UNI GY -0.64

\*COMBINE TRUCK AND LANE

LOAD GENERATION 305

TYPE 1 -138 0 0 XINC 1

LOAD GENERATION 342

TYPE 2 299.05 0 0 XINC 1

LOAD GENERATION 837

TYPE 3 -399 0 0 XINC 1

LOAD GENERATION 351

TYPE 4 502.93 0 0 XINC 1

LOAD GENERATION 496

TYPE 5 -58.77 0 0 XINC 1

LOAD GENERATION 874

TYPE 6 -232.77 0 0 XINC 1

LOAD GENERATION 816

TYPE 7 38.05 0 0 XINC 1

PERFORM ANALYSIS

\*OUTPUT

PRINT MAXFORCE ENVELOPE

PRINT SUPPORT REACTION LIST 1 TO 4

FINISH



```

STAAD SPACE
START JOB INFORMATION
JOB NAME CUY-2-1441
JOB CLIENT ODOT
JOB NO P402110046
ENGINEER NAME RAH
ENGINEER DATE 3/26/12
JOB PART SECTION I
JOB REF OH5C1 TRUCK TRAIN
JOB COMMENT DETERMINING MAXIMUM LIVE LOAD MOMENTS AND SHEARS AT MID SPANS AND AT SUPPORTS
CHECKER NAME DBH
CHECKER DATE 3/27/12
END JOB INFORMATION
INPUT WIDTH 79
UNIT FEET KIP
JOINT COORDINATES
1 0 0 0; 2 195.86 0 0; 3 466.94 0 0; 4 639.53 0 0; 5 849.07 0 0;
MEMBER INCIDENCES
1 1 2; 2 2 3; 3 3 4; 4 4 5;
DEFINE MATERIAL START
ISOTROPIC STEEL
E 4.176e+006
POISSON 0.17
DENSITY 0.145
ALPHA 6e-005
DAMP 0.05
ISOTROPIC STAINLESSSTEEL
E 4.032e+006
POISSON 0.3
DENSITY 0.489024
ALPHA 1e-005
DAMP 0.03
ISOTROPIC WEIGHTLESSTEEL
E 4.032e+006
POISSON 0.3
ALPHA 1e-005
DAMP 0.03
END DEFINE MATERIAL
UNIT INCHES KIP
MEMBER PROPERTY AMERICAN
*USE COMPOSITE SECTION PROPERTIES FOR LIVE LOAD
1 TO 4 PRIS AX 177.34 IX 27182.2 IY 7883.99 IZ 75783.7 YD 54.75 ZD 12
SUPPORTS
1 TO 5 PINNED
CONSTANTS
MATERIAL WEIGHTLESSTEEL ALL
*HL-93 TRUCK
UNIT FEET KIP
DEFINE MOVING LOAD
TYPE 1 LOAD 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12
TYPE 2 LOAD 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12
TYPE 3 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 12 17 17 -
17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 4 LOAD 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12
TYPE 5 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 6 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 12 17 17 -
17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12
TYPE 7 LOAD 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12 17 17 17 17 12
DIST 4 31 4 12 36 4 31 4 12 36 4 31 4 12 36 4 31 4 12

```

```
*UNIFORM LANE LOAD
LOAD 1 UNIFORM LANE
MEMBER LOAD
1 2 UNI GY -0.64
*COMBINE TRUCK AND LANE
LOAD GENERATION 334
TYPE 1 -138 0 0 XINC 1
LOAD GENERATION 311
TYPE 2 328.94 0 0 XINC 1
LOAD GENERATION 866
TYPE 3 -399 0 0 XINC 1
LOAD GENERATION 348
TYPE 4 501.53 0 0 XINC 1
LOAD GENERATION 497
TYPE 5 -29.14 0 0 XINC 1
LOAD GENERATION 843
TYPE 6 -203.14 0 0 XINC 1
LOAD GENERATION 695
TYPE 7 154.94 0 0 XINC 1
PERFORM ANALYSIS
*OUTPUT
PRINT MAXFORCE ENVELOPE
PRINT SUPPORT REACTION LIST 1 TO 4
FINISH
```

# GIRDERS SUMMARY SHEET

## East Approach - Section I

**CUY-2-1441 Load Rating Analysis**  
**Main Ave Bridge**

Calculated: RAH 3/14/2012  
Checked: DBH 3/18/2012

As-Built Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
N. Girder	Span 3	0.83	1.38	5.70	3.79	3.25	2.53	n/a
N. Girder	Span 2 / Section 7	2.08	3.46	19.92	13.05	11.18	8.05	n/a
N. Girder	Span 3 / Section 19	2.12	3.54	19.10	12.47	10.63	7.37	n/a
C. Girder	Span 2	1.11	1.85	7.00	4.66	4.01	3.15	n/a
C. Girder	Span 2 / Section 7	2.43	4.05	21.02	13.73	11.72	8.41	n/a
C. Girder	Span 3 / Section 19	2.92	4.87	26.97	17.60	15.00	10.36	n/a
C. Girder	Span 4 / Section 26	2.14	3.57	16.01	10.45	8.91	6.32	n/a
S. Girder	Span 3	0.99	1.66	5.39	3.57	3.09	2.41	n/a
S. Girder	Span 2 / Section 19	1.11	1.85	11.35	7.40	6.31	4.37	n/a
S. Girder	Span 4 / Section 28	1.49	2.48	7.98	5.33	4.60	3.69	n/a

As-Inspected Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
N. Girder	Span 2 / Section 7	1.93	3.21	15.04	9.86	8.45	6.08	9017.62
N. Girder	Span 3 / Section 19	1.74	2.91	11.00	7.23	6.21	4.57	5421.86
C. Girder	Span 2 / Section 7	2.25	3.75	16.45	10.79	9.25	6.67	3713.04
C. Girder	Span 3 / Section 19	2.75	4.59	25.42	16.59	14.14	9.77	4265.72
C. Girder	Span 4 / Section 26	1.95	3.26	14.60	9.53	8.13	5.76	41393.44
S. Girder	Span 2 / Section 19	1.00	1.66	10.17	6.64	5.66	3.91	1808.59
S. Girder	Span 4 / Section 28	1.35	2.25	7.22	4.82	4.16	3.33	2213.89

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 Inventory	0.83	29.88	HS16.6
HS20 Operating	1.38	49.68	HS27.6
2F1	5.39	80.85	240%
3F1	3.57	82.11	
4F1	3.09	83.43	
5C1	2.41	96.40	
Fatigue	1808.59 years remaining		

**Section I**

**North Girder Loading**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Each girder is comprised of a built up section utilizing top and bottom base plates (22 wide), 8"x8"x3/4" connective angles and a variable height and thickness web plate.

Section properties are found in another section of this report. Member components are used to develop the section properties required for analysis. Variable section modulus of inertias were utilized in the analysis of the three girders.

**Dead Loads:**

**NORTH GIRDER FRAME:**

Girder Spacing: 19.50 ft  
Girder Overhang to Edge (avg): 11.25 ft  
Tributary Width: Girder Spacing / 2 + Girder Overhang to Facia (avg) = 21.00 ft

Wearing Surface = 1.25 in  
Wearing Surface Concrete = 0.150 #/cf  
Trib Width = 1/2 girder spa + distance to gutter line = 29.00 ft  
Wearing Surface = (1.25/12\*29.00)\*(0.150) = **0.453 k/ft**

Barrier = 0.462 k/ft No of Barriers = 2 = 0.924 k/ft  
Median = 0.499 k/ft No of medians = 1 = 0.499 k/ft  
Assume 1/3 total value **0.474 k/ft**

Slab Thickness: 6.75 in Lightweight Deck Concrete = 0.117 k/cf  
Overhang Thickness: 11.25 in Width = 3.60 ft  
Slab / ft = ((6.75/12)\*(21.0) + (11.25-6.75)\*3.6)\*0.117: **1.540 k/ft** (longitudinally)

haunch: 17 in x 22 in Haunch Area = 2.60 k/ft (longitudinally)  
haunch / ft = (17\*22/144)\*(0.117)\*(1) = **0.304 k/ft** (longitudinally)

Fascia Stringers: Self weights for tapered web fascia stringers vary from 75 to 84 pounds per linear ft.  
Use upper limits for stringer self weigh along exterior girder.  
(Plus 15% for misc. build up sections) Wt = **0.098 k/ft** (longitudinally)

Interior Stringers:  
4 Stringers are located symmetrically between the three girders. North girder frame supports 1 stringer

Interior stringers along the frame are composed of W sections with double angles located at various but not all supports. Where the angles are located the bottom of the W section is cut away at the support. Due to the random pattern of the double angles, a 10 percent increase in W section weight is added through out the bridge

North girder stringers per span:	Wt =	Use 40 # / lf + 10 percent =	<b>0.044 k/ft</b> (longitudinally)
<u>Span 1: L = 137.93</u>	<u>Span 2: L = 270.83</u>	<u>Span 3: L = 234.67</u>	<u>Span 4: L = 216.06</u>
Unit 1: W8X40	Unit 4: W10X39	Unit 9: W12x40	Unit 14: W12x40
Unit 2: W10X39	Unit 5: W12x40	Unit 10: W10X39	Unit 15: W10X39
Unit 3: W10X39	Unit 6: W12x40	Unit 11: W8X40	Unit 11: W8X40
	Unit 7: W12x40	Unit 12: W12x40	Unit 12: W12x40
	Unit 8: W12x40	Unit 13: W12x40	Unit 13: W12x40
			Unit 14: W12x40
			Unit 15: W10X39



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Floor Beams / Joists:

Cantilver floor beams and floor beams between the girders are comprised of built up sections spaced at approx. 6.0 ft o/c. Cantilever lengths are constant through out Span 1, 2 & 3 however the lengths vary in Span 4.

CANTILEVERS:

Build up sections in **Spans 1, 2, 3** have an approx. weight per ft =  $30 \text{ si} / 144 \text{ si/sf} \times 0.490 \text{ k/cf} \times 1$   
 = 0.102 k/ft (transverse) **SPANS 1, 2, 3**  
 (Plus 10% for misc.)

Cantilever Length: 7.67 ft  
 Cantilever Spacing: 6.00 ft (Approx. - varies) Wt = **0.143 k/ft** (longitudinally)

Approx. weights of build up sections in **Spans 4**, vary greatly thus a weighted average will be used for the weight calculation.

North cant.:

No: 107, 108, 115, 138-144	Members: 7	Area: 33.79 si
No: 109	Members: 1	Area: 33.45 si
No: 113	Members: 1	Area: 31.60 si
No: 116-121, 133-137	Members: 10	Area: 48.24 si
No: 122-132	Members: 10	Area: 48.45 si
No: 110, 114	Members: 2	Area: 28.45 si
No: 111	Members: 1	Area: 30.61 si
No: 112	Members: 1	Area: 35.61 si
	SUM: 33	290.20 si

Weighted Avg. Area 42.17 si Wt = 0.143 k/ft (transverse) **SPAN 4**  
 (Plus 10% for misc.)

Cantilever Length: 9.00 ft (Approx. - varies)  
 Cantilever Spacing: 6.00 ft (Approx. - varies) Wt = **0.215 k/ft** (longitudinally)

BETWEEN North and Center:

Floor beams vary in weight. Representative floor beam is FB 130 Area: 22.73 si  
 Wt = 0.077 k/ft (transverse)

1/2 FB Length: 9.75 ft (Approx. - varies)  
 FB Spacing: 6.19 ft (Approx. - varies) Wt = **0.122 k/ft** (longitudinally)

Lateral Bracing: Wt = **0.040 k/ft** (longitudinally)

UNIFORM DEAD LOAD NORTH GIRDER:

(Not including lateral bracing) Sum of BOLD text: **3.22 k/ft SPANS 1, 2, 3**  
**3.29 k/ft SPAN 4**

# Section I

# Center Girder Loading



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Each girder is comprised of a built up section utilizing top and bottom base plates (22 wide), 8"x8"x3/4" connective angles and a variable height and thickness web plate.

Section properties are found in another section of this report. Member components are used to develop the section properties required for analysis. Variable section modulus of inertias were utilized in the analysis of the three girders.

### Dead Loads:

#### CENTER GIRDER FRAME:

Girder Spacing: 19.50 ft

Tributary Width: Girder Spacing = 19.50 ft

Median Barrier Width: 2.25 ft

Wearing Surface = 1.25 in

$$\begin{aligned} \text{Wearing Surface Concrete} &= 0.150 \text{ \#/cf} \\ \text{Trib Width} &= \text{girder spa} - \text{barrier width} = 17.25 \text{ ft} \\ \text{Wearing Surface} &= (1.25/12 * 17.25) * (0.150) = \mathbf{0.270 \text{ k/ft}} \end{aligned}$$

Barrier = 0.462 k/ft	No of Barriers = 2	= 0.924 k/ft
Median = 0.499 k/ft	No of medians = 1	= 0.499 k/ft
	Assume 1/3 total value	<b>0.474 k/ft</b>

Slab Thickness: 6.75 in      Lightweight Deck Concrete = 0.117 k/cf

Slab / ft =  $= ((6.75/12) * (19.5) * 0.117) = \mathbf{1.283 \text{ k/ft}}$  (longitudinally)

haunch: 17 in x 22 in      Haunch Area = 2.60 k/ft (longitudinally)  
haunch / ft =  $= (17 * 22 / 144) * (0.117) * (1) = \mathbf{0.304 \text{ k/ft}}$  (longitudinally)

Fascia Stringers: No fascia girder contribution

Wt = **0.000 k/ft** (longitudinally)

Interior Stringers:

4 Stringers are located symmetrically between the three girders.      Center girder frame supports 2 stringer

Interior stringers along the frame are composed of W sections with double angles located at various but not all supports. Where the angles are located the bottom of the W section is cut away at the support. Due to the random pattern of the double angles, a 10 percent increase in W section weight is added through out the bridge

Center girder stringers per span:	2Wt =	Use 40 # / lf + 10 percent =	<b>0.088 k/ft</b> (longitudinally)
<u>Span 1: L = 195.86</u>	<u>Span 2: L = 271.08</u>	<u>Span 3: L = 172.59</u>	<u>Span 4: L = 209.54</u>
Unit 1: W8X40	Unit 5: W12x40	Unit 10: W10X39	Unit 14: W12x40
Unit 2: W10X39	Unit 6: W12x40	Unit 11: W8X40	Unit 15: W10X39
Unit 3: W10X39	Unit 7: W12x40	Unit 12: W12x40	Unit 11: W8X40
Unit 4: W10X39	Unit 8: W12x40	Unit 13: W12x40	Unit 12: W12x40
	Unit 9: W12x40		Unit 13: W12x40
			Unit 14: W12x40
			Unit 15: W10X39



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Floor Beams / Joists:

Cantilver floor beams and floor beams between the girders are comprised of built up sections spaced at approx. 6.0 ft o/c. Cantilever lengths are constant through out Span 1, 2 & 3 however the lengths vary in Span 4.

BETWEEN North and South:

Floor beams vary in weight. Representative floor beam is FB 130	Area:	22.73 si
	Wt =	0.077 k/ft (transverse)
1/2 FB Length: 9.75 ft (Approx. - varies)		
FB Spacing: 6.19 ft (Approx. - varies)	Wt =	<b>0.122 k/ft</b> (longitudinally)
Lateral Bracing:	Wt =	<b>0.080 k/ft</b> (longitudinally)

UNIFORM DEAD LOAD NORTH GIRDER:

Sum of BOLD text:	<b>2.62 k/ft</b>	<b>SPANS 1, 2, 3</b>
	<b>2.62 k/ft</b>	<b>SPAN 4</b>

**Section I**

**South Girder Loading**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/7/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Each girder is comprised of a built up section utilizing top and bottom base plates (22 wide), 8"x8"x3/4" connective angles and a variable height and thickness web plate.

Section properties are found in another section of this report. Member components are used to develop the section properties required for analysis. Variable section modulus of inertias were utilized in the analysis of the three girders.

**Dead Loads:**

**SOUTH GIRDER FRAME:**

Girder Spacing: 19.50 ft  
Girder Overhang to Edge (avg): 11.25 ft  
Tributary Width: Girder Spacing / 2 + Girder Overhang to Facia (avg) = 21.00 ft

Wearing Surface = 1.25 in  
Wearing Surface Concrete = 0.150 #/cf  
Trib Width = 1/2 girder spa + distance to gutter line = 29.00 ft  
Wearing Surface = (1.25/12\*29.00)\*(0.150) = **0.453 k/ft**

Barrier = 0.462 k/ft No of Barriers = 2 = 0.924 k/ft  
Median = 0.499 k/ft No of medians = 1 = 0.499 k/ft  
Assume 1/3 total value **0.474 k/ft**

Slab Thickness: 6.75 in Lightweight Deck Concrete = 0.117 k/cf  
Overhang Thickness: 11.25 in Width = 3.60 ft  
Slab / ft = ((6.75/12)\*(21.0) + (11.25-6.75)\*3.6)\*0.117: **1.540 k/ft** (longitudinally)

haunch: 17 in x 22 in Haunch Area = 2.60 k/ft (longitudinally)  
haunch / ft = (17\*22/144)\*(0.117)\*(1) = **0.304 k/ft** (longitudinally)

Fascia Stringers: Self weights for tapered web fascia stringers vary from 75 to 84 pounds per linear ft.  
Use upper limits for stringer self weigh along exterior girder.  
(Plus 15% for misc. build up sections) Wt = **0.098 k/ft** (longitudinally)

Interior Stringers:  
4 Stringers are located symmetrically between the three girders. South girder frame supports 1 stringer

Interior stringers along the frame are composed of W sections with double angles located at various but not all supports. Where the angles are located the bottom of the W section is cut away at the support. Due to the random pattern of the double angles, a 10 percent increase in W section weight is added through out the bridge

South girder stringers per span:	Wt =	Use 40 # / lf + 10 percent =	<b>0.044 k/ft</b> (longitudinally)
<u>Span 1: L = 195.86</u>	<u>Span 2: L = 271.08</u>	<u>Span 3: L = 172.59</u>	<u>Span 4: L = 209.54</u>
Unit 1: W8X40	Unit 5: W12x40	Unit 10: W10X39	Unit 14: W12x40
Unit 2: W10X39	Unit 6: W12x40	Unit 11: W8X40	Unit 15: W10X39
Unit 3: W10X39	Unit 7: W12x40	Unit 12: W12x40	Unit 11: W8X40
Unit 4: W10X39	Unit 8: W12x40	Unit 13: W12x40	Unit 12: W12x40
	Unit 9: W12x40		Unit 13: W12x40
			Unit 14: W12x40
			Unit 15: W10X39





Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Floor Beams / Joists:

Cantilver floor beams and floor beams between the girders are comprised of built up sections spaced at approx. 6.0 ft o/c. Cantilever lengths are constant through out Span 1, 2 & 3 however the lengths vary in Span 4.

CANTILEVERS:

Build up sections in **Spans 1, 2, 3** have an approx. weight per ft =  $30 \text{ si} / 144 \text{ si/sf} \times 0.490 \text{ k/cf} \times 1$   
 = 0.102 k/ft (transverse) **SPANS 1, 2, 3**  
 (Plus 10% for misc.)

Cantilever Length: 7.67 ft  
 Cantilever Spacing: 6.00 ft (Approx. - varies) Wt = **0.143 k/ft** (longitudinally)

Approx. weights of build up sections in **Spans 4**, vary greatly thus a weighted average will be used for the weight calculation.

North cant.:

No: 107, 108, 115, 138-144	Members: 7	Area: 33.79 si
No: 109	Members: 1	Area: 33.45 si
No: 113	Members: 1	Area: 31.60 si
No: 116-121, 133-137	Members: 10	Area: 48.24 si
No: 122-132	Members: 10	Area: 48.45 si
No: 110, 114	Members: 2	Area: 28.45 si
No: 111	Members: 1	Area: 30.61 si
No: 112	Members: 1	Area: 35.61 si
	SUM: 33	290.20 si

Weighted Avg. Area 42.17 si Wt = 0.143 k/ft (transverse) **SPAN 4**  
 (Plus 10% for misc.)

Cantilever Length: 6.75 ft (Approx. - varies)  
 Cantilever Spacing: 6.00 ft (Approx. - varies) Wt = **0.161 k/ft** (longitudinally)

BETWEEN North and Center:

Floor beams vary in weight. Representative floor beam is FB 130 Area: 22.73 si  
 Wt = 0.077 k/ft (transverse)

1/2 FB Length: 9.75 ft (Approx. - varies)  
 FB Spacing: 6.19 ft (Approx. - varies) Wt = **0.122 k/ft** (longitudinally)

Lateral Bracing: Wt = **0.040 k/ft** (longitudinally)

UNIFORM DEAD LOAD NORTH GIRDER:  
 (Not including lateral bracing)

Sum of BOLD text: **3.22 k/ft** **SPANS 1, 2, 3**  
**3.24 k/ft** **SPAN 4**

**Section I**

**Lateral Bracing Loading**



Made By RAH  
 Checked By DBH

Date 2/27/2012  
 Date 3/7/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

---

Lateral Bracing: Use interior bays as they will impact self weight more than exterior bays

All Struts are: W14x43  
 All diagonals are: 2 L 6x4x3/8 Diagonal Length: 27.07 ft  
 L 6x4x3/8

Typical Bay Length: 18.75 ft with one diagonal per panel  
 Bay Width: 19.5 ft

		<u>Total Wt</u>	<u>Distributed Wt / Panel Length</u>
North Girder:	$0.043*(19.5/2) + 2*(0.0123)*(27.07/2) =$	0.75 k	0.040 k/ft
Center Girder:	$0.043*(19.5) + 2*(0.0123)*(27.07) =$	1.50 k	0.080 k/ft
South Girder:	$0.043*(19.5/2) + 2*(0.0123)*(27.07/2) =$	0.75 k	0.040 k/ft

Bentley Tel:(800) 778-4277 Fax:(813) 980-3642 Net: www.bentley.com

---

**Project Data**

File: Section I North Girder Individual Trucks

Project: Main Avenue Bridge Rating

Analysis Method: AASHTO Standard Specification

User Job Number: P402110046

State: OH

State Job Number:

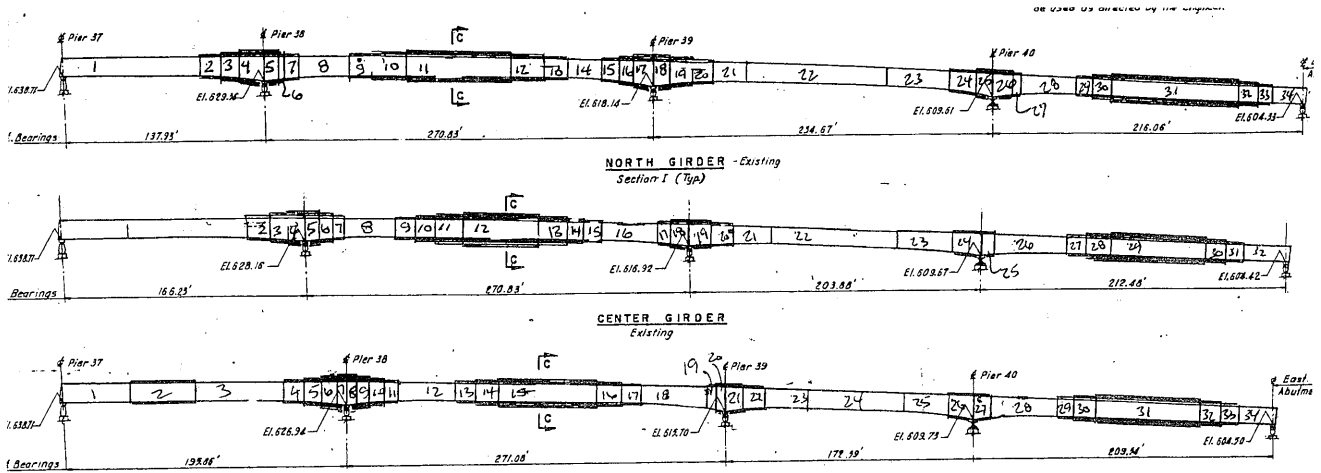
Date: 3/10/12

By: RAH

Comments:

East Approach, Lake Front Ramp Stadium Section Rating - Section I North Girder us:

GIRDER SECTION (MEMBERS)



SEE GIRDER SECTION PROPERTIES FOR DIST. FROM PIERS 37 OR PIER WEST OF SPAN.

CENTER GIRDER NOT RATED AS INDICATED PREVIOUSLY



Made By RAH Date 2/27/2012  
 Checked By DBH Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Section No.	End $I_{x, gross}$ (in <sup>4</sup> )	End A (in <sup>2</sup> )	End Wt (k/ft) (+ 5%)	Start $I_{x, gross}$ (in <sup>4</sup> )	Start A (in <sup>2</sup> )	Start Wt (k/ft) (+ 5%)	Avg Wt (k/ft) (+ 5%)
1	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
2	689860.30	195.76	0.699	857946.32	204.91	0.732	0.716
3	1035474.89	237.48	0.848	1130111.01	241.85	0.864	0.856
4	1328522.17	274.90	0.982	1768205.12	292.00	1.043	1.013
5	1509255.67	282.28	1.009	1768205.12	292.00	1.043	1.026
6	1045945.68	237.98	0.85	1284223.91	248.54	0.888	0.869
7	705180.18	204.71	0.731	886043.61	215.19	0.769	0.750
8	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
9	722147.65	201.45	0.72	722147.65	201.45	0.72	0.720
10	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
11	1096443.70	263.63	0.942	1096443.70	263.63	0.942	0.942
12	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
13	722147.65	201.45	0.72	722147.65	201.45	0.72	0.720
14	534289.94	167.55	0.599	630438.05	174.15	0.622	0.611
15	845917.14	208.05	0.743	981286.83	214.65	0.767	0.755
16	1240576.69	248.63	0.888	1416005.85	255.08	0.911	0.900
17	1696362.79	294.43	1.052	1962239.30	302.85	1.082	1.067
18	1715388.86	305.18	1.09	1997940.71	314.72	1.124	1.107
19	1203336.47	265.62	0.949	1464375.88	276.78	0.989	0.969
20	858916.75	217.35	0.777	936381.97	221.48	0.791	0.784
21	534289.94	167.55	0.599	625859.81	173.85	0.621	0.610
22	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
23	534289.94	167.55	0.599	790349.63	183.90	0.657	0.628
24	1100980.28	239.01	0.854	1266198.47	247.02	0.883	0.869
25	1521023.07	275.38	0.984	1774063.93	285.01	1.018	1.001
26	1563349.83	266.75	0.953	1735800.18	272.86	0.975	0.964
27	1100929.23	220.05	0.786	1265785.20	226.95	0.811	0.799
28	534289.94	167.55	0.599	830386.90	186.15	0.665	0.632
29	722147.65	201.45	0.72	722147.65	201.45	0.72	0.720
30	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
31	1096443.70	263.63	0.942	1096443.70	263.63	0.942	0.942
32	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
33	722147.65	201.45	0.72	722147.65	201.45	0.72	0.720
34	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599

Use average self weight per member section in CONSYS for Moment, Shear & Reactions



Made By RAH Date 2/27/2012  
 Checked By DBH Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Section No.	End $I_{x, gross}$ (in <sup>4</sup> )	End A (in <sup>2</sup> )	End Wt (k/ft) (+ 5%)	Start $I_{x, gross}$ (in <sup>4</sup> )	Start A (in <sup>2</sup> )	Start Wt (k/ft) (+ 5%)	Avg Wt (k/ft) (+ 5%)
1	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
2	690094.87	195.80	0.700	817735.41	202.85	0.725	0.713
3	1025850.72	240.84	0.860	1324135.83	253.87	0.907	0.884
4	1596983.20	293.19	1.048	1874343.26	303.09	1.083	1.066
5	1596983.20	293.19	1.048	1874343.26	303.09	1.083	1.066
6	1156268.62	246.78	0.882	1324135.83	253.87	0.907	0.895
7	690094.87	195.80	0.700	924207.05	208.25	0.744	0.722
8	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
9	722147.65	201.45	0.720	722147.65	201.45	0.72	0.720
10	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
11	1132479.74	269.33	0.962	1132479.74	269.33	0.962	0.962
12	1278757.81	291.93	1.043	1278757.81	291.93	1.043	1.043
13	1132479.74	269.33	0.962	1132479.74	269.33	0.962	0.962
14	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
15	722147.65	201.45	0.720	722147.65	201.45	0.72	0.720
16	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
17	737544.65	210.42	0.752	1140490.40	231.46	0.827	0.790
18	1457703.69	276.51	0.988	1709326.60	286.23	1.023	1.006
19	1304986.71	270.12	0.965	1709326.60	286.23	1.023	0.994
20	737544.65	210.42	0.752	1017833.75	225.60	0.806	0.779
21	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
22	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
23	534289.94	167.55	0.599	867451.37	188.18	0.672	0.636
24	1205195.98	244.14	0.872	1327031.18	249.81	0.893	0.883
25	1199569.61	243.87	0.871	1327031.18	249.81	0.893	0.882
26	534289.94	167.55	0.599	863284.52	187.95	0.672	0.636
27	722147.65	201.45	0.720	722147.65	201.45	0.72	0.720
28	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
29	1132479.74	269.33	0.962	1132479.74	269.33	0.962	0.962
30	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
31	722147.65	201.45	0.720	722147.65	201.45	0.72	0.720
32	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599

Use average self weight per member section in CONSYS for Moment, Shear & Reactions



Made By RAH Date 2/27/2012  
 Checked By DBH Date 3/6/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Section No.	End $I_{x, gross}$ (in <sup>4</sup> )	End A (in <sup>2</sup> )	End Wt (k/ft) (+ 5%)	Start $I_{x, gross}$ (in <sup>4</sup> )	Start A (in <sup>2</sup> )	Start Wt (k/ft) (+ 5%)	Avg Wt (k/ft) (+ 5%)
1	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599
2	658340.88	190.15	0.679	658340.88	190.15	0.679	0.679
3	534289.94	167.55	0.599	560638.71	169.43	0.605	0.602
4	756151.20	203.33	0.726	811026.87	206.25	0.737	0.732
5	1030143.28	240.15	0.858	1129760.51	244.28	0.873	0.866
6	1400952.44	288.22	1.030	1838842.00	302.99	1.083	1.057
7	2089758.00	337.09	1.204	2278528.11	342.67	1.224	1.214
8	2060188.99	336.19	1.201	2278528.11	342.67	1.224	1.213
9	1518792.29	292.43	1.045	1812567.16	302.16	1.080	1.063
10	1071159.93	241.88	0.864	1226884.88	248.10	0.886	0.875
11	764447.88	203.78	0.728	844446.20	207.98	0.743	0.736
12	534289.94	167.55	0.599	567075.55	169.88	0.607	0.603
13	722147.65	201.45	0.720	722147.65	201.45	0.720	0.720
14	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
15	1132479.74	269.33	0.962	1132479.74	269.33	0.962	0.962
16	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
17	722147.65	201.45	0.720	722147.65	201.45	0.720	0.720
18	534289.94	167.55	0.599	671357.22	176.78	0.632	0.616
19	841842.31	209.24	0.748	1096696.82	222.52	0.795	0.772
20	1290768.25	245.18	0.876	1455470.37	251.86	0.900	0.888
21	1223371.17	251.90	0.900	1489967.70	263.60	0.942	0.921
22	763853.54	204.70	0.731	1014850.22	218.48	0.781	0.756
23	534289.94	167.55	0.599	607746.79	172.65	0.617	0.608
24	534289.94	167.55	0.599	534601.64	167.57	0.599	0.599
25	534289.94	167.55	0.599	777269.42	183.15	0.654	0.627
26	996065.47	226.75	0.810	1087143.03	231.61	0.828	0.819
27	925378.68	222.79	0.796	1087143.03	231.61	0.828	0.812
28	534289.94	167.55	0.599	721275.77	179.85	0.643	0.621
29	722147.65	201.45	0.720	722147.65	201.45	0.720	0.720
30	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
31	1132479.74	269.33	0.962	1132479.74	269.33	0.962	0.962
32	922457.92	235.43	0.841	922457.92	235.43	0.841	0.841
33	722147.65	201.45	0.720	722147.65	201.45	0.720	0.720
34	534289.94	167.55	0.599	534289.94	167.55	0.599	0.599

Use average self weight per member section in CONSYS for Moment, Shear & Reactions

Section I

North Girder

Section Properties



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/11/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Section No.	Capacities							
	$I_{x, gross}$ (in <sup>4</sup> )	A (in <sup>2</sup> )	Wt (k/ft) (+ 5%)	Dist	As-Built		As-Inspected	
				From Rear	Moment k-ft	Shear k	Moment k-ft	Shear k
				0				
				93.42	20467	1700	20467	1700
				93.42	20467	1700	20467	1700
				93.42	20467	1700	20467	1700
				93.42	20467	1700	20467	1700
				93.42	20467	1700	20467	1700
				93.42	20467	1700	20467	1700
1	534289.94	167.55	0.599	93.42	20467	1700	20467	1700
				109.92	29369	1889	29369	1889
2	857946.32	204.91	0.732	109.92	29369	1889	29369	1889
				120.92	36781	2174	36781	2174
3	1130111.01	241.85	0.864	120.92	36781	2174	36781	2174
				136.92	50194	2713	50194	2713
4	1768205.12	292.00	1.043	136.92	50194	2713	50194	2713
					50194	2713	50194	2713
5	1768205.12	292.00	1.043	8.5	50194	2713	50194	2713
6	1284223.91	248.54	0.888	16.5	39523	2302	39523	2302
7	886043.61	215.19	0.769	25.5	30218	2086	<b>28843</b>	<b>1710</b>
				71.91	20467	1700	20467	1700
				71.91	20467	1700	20467	1700
8	534289.94	167.55	0.599	71.91	20467	1700	20467	1700
				84.41	27108	1717	27108	1717
9	722147.65	201.45	0.720	84.41	27108	1717	27108	1717
10	922457.92	235.43	0.841	102.41	33918	1736	33918	1736
				167.41	39667	1750	39667	1750
				167.41	39667	1750	39667	1750
				167.41	39667	1750	39667	1750
11	1096443.70	263.63	0.942	167.41	39667	1750	39667	1750
12	922457.92	235.43	0.841	185.41	33918	1736	33918	1736
				197.91	27108	1717	27108	1717
13	722147.65	201.45	0.720	197.91	27108	1717	27108	1717
				235.53	22495	1826	22495	1826
14	630438.05	174.15	0.622	235.53	22495	1826	22495	1826
				247.03	32194	1970	32194	1970
15	981286.83	214.65	0.767	247.03	32194	1970	32194	1970
16	1416005.85	255.08	0.911	256.53	43023	2112	43023	2112
17	1962239.30	302.85	1.082	270.53	55144	2500	55144	2500



**Section I**

**North Girder**

**Section Properties**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/11/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

					56148	2727		
18	1997940.71	314.72	1.124	12.5	56148	2727	56148	2727
				28	44611	2527	39549	1274
19	1464375.88	276.78	0.989	28	44611	2527	39549	1274
20	936381.97	221.48	0.791	43	31673	2100	31673	2100
				66.5	22402	1820	22402	1820
21	625859.81	173.85	0.621	66.5	22402	1820	22402	1820
				177.78	20467	1700	20467	1700
				177.78	20467	1700	20467	1700
				177.78	20467	1700	20467	1700
				177.78	20467	1700	20467	1700
				177.78	20467	1700	20467	1700
22	534289.94	167.55	0.599	177.78	20467	1700	20467	1700
				205.67	25609	2013	25609	2013
23	790349.63	183.90	0.657	205.67	25609	2013	25609	2013
				222.67	37980	2589	37980	2589
24	1266198.47	247.02	0.883	222.67	37980	2589	37980	2589
25	1774063.93	285.01	1.018	234.67	49119	2791	49119	2791
					48059	2558	48059	2558
26	1735800.18	272.86	0.975	9	48059	2558	48059	2558
				22	37165	2205	37165	2205
27	1265785.20	226.95	0.811	22	37165	2205	37165	2205
				65.56	26348	2056	26348	2056
				65.56	26348	2056	26348	2056
28	830386.90	186.15	0.665	65.56	26348	2056	26348	2056
29	722147.65	201.45	0.720	77.56	27108	1717	27108	1717
				93.56	33918	1736	33918	1736
30	922457.92	235.43	0.841	93.56	33918	1736	33918	1736
				155.56	39667	1750	39667	1750
				155.56	39667	1750	39667	1750
				155.56	39667	1750	39667	1750
31	1096443.70	263.63	0.942	155.56	39667	1750	39667	1750
32	922457.92	235.43	0.841	172.06	33918	1736	33918	1736
				185.06	27108	1717	27108	1717
33	722147.65	201.45	0.720	185.06	27108	1717	27108	1717
				216.06	20467	1700	20467	1700
34	534289.94	167.55	0.599	216.06	20467	1700	20467	1700

Properties developed at  
start member nodes

**Section I**

**North Girder**

**1**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

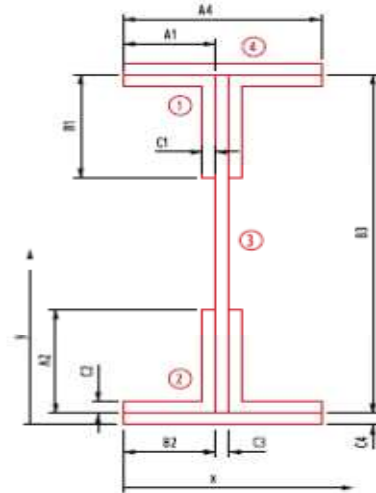
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 1**

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg	12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg	10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg	12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg	10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate	88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top	16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom	16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>		<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bott.</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bott.</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate	88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>		<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

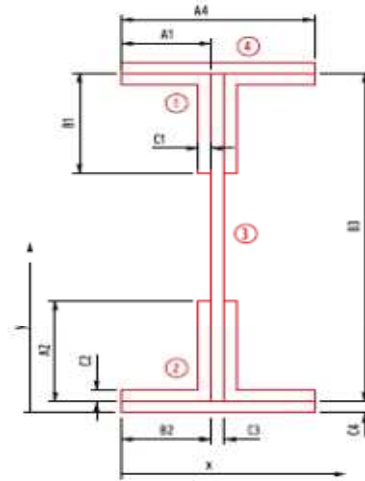
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 157.92$  in

Cover Plate:

$C_4 = 1.3740$  in  
 $A_4 = 22.0000$  in



**Section 2**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	158.9190	1907.0280	0.5625	78.5850	74107.2267	74107.7892
	Vertical Leg		10.8750	154.9190	1684.7441	47.6348	74.5850	60496.7792	60544.4140
2	Horizontal Leg		12.0000	1.7490	20.9880	0.5625	78.5850	74107.2267	74107.7892
	Vertical Leg		10.8750	5.7490	62.5204	47.6348	74.5850	60496.7792	60544.4140
3	Web Plate		98.7000	80.3340	7928.9658	205121.0246	0.0000	0.0000	205121.0246
4	Cover Plate Top		30.2280	159.9810	4835.9057	4.7556	79.6470	191755.6892	191760.4448
	Cover Plate Bottom		30.2280	0.6870	20.7666	4.7556	79.6470	191755.6892	191760.4448
<b>Total</b>			<b>204.91</b>		<b>16460.92</b>	<b>205226.93</b>		<b>652719.39</b>	<b>857946.32</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 80.3340 in	S <sub>top</sub> = 10679.74 in <sup>3</sup>			y-bar = 80.3340 in	S <sub>top</sub> = 10679.74 in <sup>3</sup>		
I <sub>x</sub> = 857946.32 in <sup>4</sup>	S <sub>bottom</sub> = 10679.74 in <sup>3</sup>			I <sub>x</sub> = 857946.32 in <sup>4</sup>	S <sub>bottom</sub> = 10679.74 in <sup>3</sup>		
C <sub>top</sub> = 80.3340 in	A = 204.9060 in <sup>2</sup>			C <sub>top</sub> = 80.3340 in	A = 204.9060 in <sup>2</sup>		
C <sub>bottom</sub> = 80.3340 in	r <sub>x</sub> = 64.7072 in			C <sub>bottom</sub> = 80.3340 in	r <sub>x</sub> = 64.7072 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		98.7000	11.0000	1085.7000	3.2129	0.0000	0.0000	3.2129
4	Cover Plate		60.4560	11.0000	665.0160	2438.3920	0.0000	0.0000	2438.3920
<b>Total</b>			<b>204.91</b>		<b>2253.97</b>	<b>2570.62</b>		<b>456.62</b>	<b>3027.25</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 275.20 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 275.20 in <sup>3</sup>		
I <sub>y</sub> = 3027.25 in <sup>4</sup>	S <sub>left</sub> = 275.20 in <sup>3</sup>			I <sub>y</sub> = 3027.25 in <sup>4</sup>	S <sub>left</sub> = 275.20 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 204.9060 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 204.9060 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8437 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8437 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	29369.3 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	29369.3 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1889.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1889.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

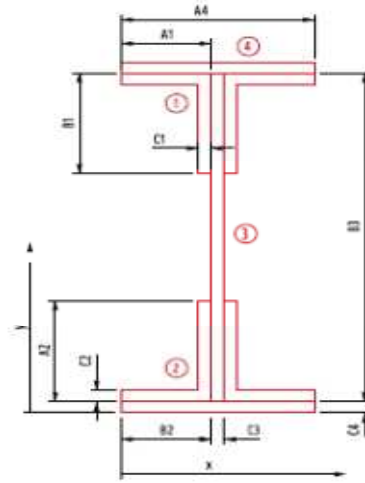
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 165.24$  in

Cover Plate:

$C_4 = 1.8750$  in  
 $A_4 = 22.0000$  in



**Section 3**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	166.7400	2000.8800	0.5625	82.2450	81170.8803	81171.4428
	Vertical Leg		10.8750	162.7400	1769.7975	47.6348	78.2450	66579.7953	66627.4300
2	Horizontal Leg		12.0000	2.2500	27.0000	0.5625	82.2450	81170.8803	81171.4428
	Vertical Leg		10.8750	6.2500	67.9688	47.6348	78.2450	66579.7953	66627.4300
3	Web Plate		113.6025	84.4950	9598.8432	258485.9937	0.0000	0.0000	258485.9937
4	Cover Plate Top		41.2500	168.0525	6932.1656	12.0850	83.5575	288001.5520	288013.6370
	Cover Plate Bottom		41.2500	0.9375	38.6719	12.0850	83.5575	288001.5520	288013.6370
<b>Total</b>			<b>241.85</b>		<b>20435.33</b>	<b>258606.56</b>		<b>871504.46</b>	<b>1130111.01</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 84.4950 in	S <sub>top</sub> = 13374.89 in <sup>3</sup>			y-bar = 84.4950 in	S <sub>top</sub> = 13374.89 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 13374.89 in <sup>3</sup>			I <sub>x</sub> = 1130111.01 in <sup>4</sup>	S <sub>bottom</sub> = 13374.89 in <sup>3</sup>		
C <sub>top</sub> = 84.4950 in	A = 241.8525 in <sup>2</sup>			C <sub>top</sub> = 84.4950 in	A = 241.8525 in <sup>2</sup>		
C <sub>bottom</sub> = 84.4950 in	r <sub>x</sub> = 68.3574 in			C <sub>bottom</sub> = 84.4950 in	r <sub>x</sub> = 68.3574 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		113.6025	11.0000	1249.6275	4.4746	0.0000	0.0000	4.4746
4	Cover Plate		82.5000	11.0000	907.5000	3327.5000	0.0000	0.0000	3327.5000
<b>Total</b>			<b>241.85</b>		<b>2660.38</b>	<b>3460.99</b>		<b>464.07</b>	<b>3925.07</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 356.82 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 356.82 in <sup>3</sup>		
I <sub>y</sub> = 3925.07 in <sup>4</sup>	S <sub>left</sub> = 356.82 in <sup>3</sup>			I <sub>y</sub> = 3925.07 in <sup>4</sup>	S <sub>left</sub> = 356.82 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 241.8525 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 241.8525 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0285 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0285 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	36780.9 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	36780.9 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2174.4 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2174.4 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

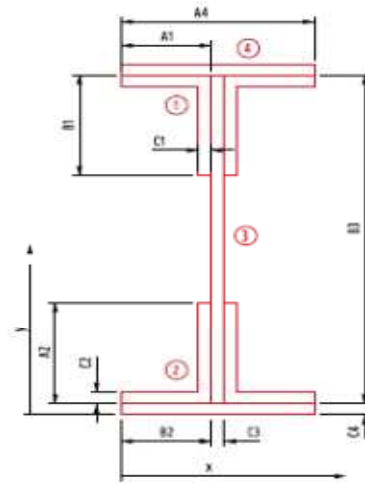
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 189.00$  in

Cover Plate:

$C_4 = 2.3750$  in  
 $A_4 = 22.0000$  in



**Section 4**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	191.0000	2292.0000	0.5625	94.1250	106314.1875	106314.7500
	Vertical Leg		10.8750	187.0000	2033.6250	47.6348	90.1250	88332.3574	88379.9922
2	Horizontal Leg		12.0000	2.7500	33.0000	0.5625	94.1250	106314.1875	106314.7500
	Vertical Leg		10.8750	6.7500	73.4063	47.6348	90.1250	88332.3574	88379.9922
3	Web Plate		141.7500	96.8750	13732.0313	421954.3125	0.0000	0.0000	421954.3125
4	Cover Plate Top		52.2500	192.5625	10061.3906	24.5602	95.6875	478406.1025	478430.6628
	Cover Plate Bottom		52.2500	1.1875	62.0469	24.5602	95.6875	478406.1025	478430.6628
<b>Total</b>			<b>292.00</b>		<b>28287.50</b>	<b>422099.83</b>		<b>1346105.29</b>	<b>1768205.12</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 96.8750 in	S <sub>top</sub> = 18252.44 in <sup>3</sup>			y-bar = 96.8750 in	S <sub>top</sub> = 18252.44 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 18252.44 in <sup>3</sup>			I <sub>x</sub> = 1768205.12 in <sup>4</sup>	S <sub>bottom</sub> = 18252.44 in <sup>3</sup>		
C <sub>top</sub> = 96.8750 in	A = 292.0000 in <sup>2</sup>			C <sub>top</sub> = 96.8750 in	A = 292.0000 in <sup>2</sup>		
C <sub>bottom</sub> = 96.8750 in	r <sub>x</sub> = 77.8171 in			C <sub>bottom</sub> = 96.8750 in	r <sub>x</sub> = 77.8171 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		141.7500	11.0000	1559.2500	6.6445	0.0000	0.0000	6.6445
4	Cover Plate		104.5000	11.0000	1149.5000	4214.8333	0.0000	0.0000	4214.8333
<b>Total</b>			<b>292.00</b>		<b>3212.00</b>	<b>4350.50</b>		<b>471.61</b>	<b>4822.11</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 438.37 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 438.37 in <sup>3</sup>		
I <sub>y</sub> = 4822.11 in <sup>4</sup>	S <sub>left</sub> = 438.37 in <sup>3</sup>			I <sub>y</sub> = 4822.11 in <sup>4</sup>	S <sub>left</sub> = 438.37 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 292.0000 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 292.0000 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0638 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0638 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	50194.2 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	50194.2 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2713.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2713.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

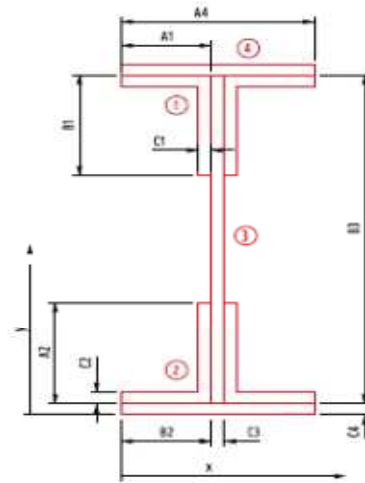
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 189.00$  in

Cover Plate:

$C_4 = 2.3750$  in  
 $A_4 = 22.0000$  in



**Section 5**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	191.0000	2292.0000	0.5625	94.1250	106314.1875	106314.7500
	Vertical Leg		10.8750	187.0000	2033.6250	47.6348	90.1250	88332.3574	88379.9922
2	Horizontal Leg		12.0000	2.7500	33.0000	0.5625	94.1250	106314.1875	106314.7500
	Vertical Leg		10.8750	6.7500	73.4063	47.6348	90.1250	88332.3574	88379.9922
3	Web Plate		141.7500	96.8750	13732.0313	421954.3125	0.0000	0.0000	421954.3125
4	Cover Plate Top		52.2500	192.5625	10061.3906	24.5602	95.6875	478406.1025	478430.6628
	Cover Plate Bottom		52.2500	1.1875	62.0469	24.5602	95.6875	478406.1025	478430.6628
<b>Total</b>			<b>292.00</b>		<b>28287.50</b>	<b>422099.83</b>		<b>1346105.29</b>	<b>1768205.12</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 96.8750 in	S <sub>top</sub> = 18252.44 in <sup>3</sup>			y-bar = 96.8750 in	S <sub>top</sub> = 18252.44 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 18252.44 in <sup>3</sup>			I <sub>x</sub> = 1768205.12 in <sup>4</sup>	S <sub>bottom</sub> = 18252.44 in <sup>3</sup>		
C <sub>top</sub> = 96.8750 in	A = 292.0000 in <sup>2</sup>			C <sub>top</sub> = 96.8750 in	A = 292.0000 in <sup>2</sup>		
C <sub>bottom</sub> = 96.8750 in	r <sub>x</sub> = 77.8171 in			C <sub>bottom</sub> = 96.8750 in	r <sub>x</sub> = 77.8171 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		141.7500	11.0000	1559.2500	6.6445	0.0000	0.0000	6.6445
4	Cover Plate		104.5000	11.0000	1149.5000	4214.8333	0.0000	0.0000	4214.8333
<b>Total</b>			<b>292.00</b>		<b>3212.00</b>	<b>4350.50</b>		<b>471.61</b>	<b>4822.11</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 438.37 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 438.37 in <sup>3</sup>		
I <sub>y</sub> = 4822.11 in <sup>4</sup>	S <sub>left</sub> = 438.37 in <sup>3</sup>			I <sub>y</sub> = 4822.11 in <sup>4</sup>	S <sub>left</sub> = 438.37 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 292.0000 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 292.0000 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0638 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0638 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	50194.2 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	50194.2 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2713.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2713.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

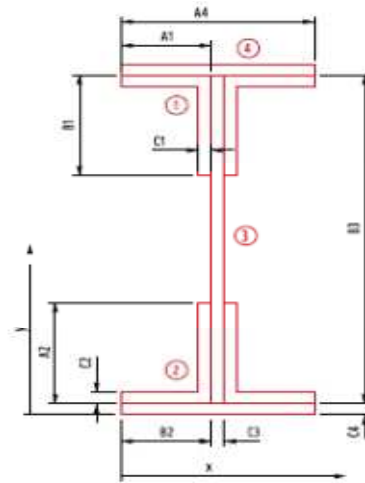
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 174.96$  in

Cover Plate:

$C_4 = 1.8750$  in  
 $A_4 = 22.0000$  in



**Section 6**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	176.4600	2117.5200	0.5625	87.1050	91047.3723	91047.9348
	Vertical Leg		10.8750	172.4600	1875.5025	47.6348	83.1050	75107.5461	75155.1809
2	Horizontal Leg		12.0000	2.2500	27.0000	0.5625	87.1050	91047.3723	91047.9348
	Vertical Leg		10.8750	6.2500	67.9688	47.6348	83.1050	75107.5461	75155.1809
3	Web Plate		120.2850	89.3550	10748.0662	306837.0273	0.0000	0.0000	306837.0273
4	Cover Plate Top		41.2500	177.7725	7333.1156	12.0850	88.4175	322478.2401	322490.3251
	Cover Plate Bottom		41.2500	0.9375	38.6719	12.0850	88.4175	322478.2401	322490.3251
<b>Total</b>			<b>248.54</b>		<b>22207.84</b>	<b>306957.59</b>		<b>977266.32</b>	<b>1284223.91</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 89.3550 in	S <sub>top</sub> = 14372.15 in <sup>3</sup>			y-bar = 89.3550 in	S <sub>top</sub> = 14372.15 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 14372.15 in <sup>3</sup>			I <sub>x</sub> = 1284223.91 in <sup>4</sup>	S <sub>bottom</sub> = 14372.15 in <sup>3</sup>		
C <sub>top</sub> = 89.3550 in	A = 248.5350 in <sup>2</sup>			C <sub>top</sub> = 89.3550 in	A = 248.5350 in <sup>2</sup>		
C <sub>bottom</sub> = 89.3550 in	r <sub>x</sub> = 71.8831 in			C <sub>bottom</sub> = 89.3550 in	r <sub>x</sub> = 71.8831 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		120.2850	11.0000	1323.1350	4.7378	0.0000	0.0000	4.7378
4	Cover Plate		82.5000	11.0000	907.5000	3327.5000	0.0000	0.0000	3327.5000
<b>Total</b>			<b>248.54</b>		<b>2733.89</b>	<b>3461.26</b>		<b>464.07</b>	<b>3925.33</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 356.85 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 356.85 in <sup>3</sup>		
I <sub>y</sub> = 3925.33 in <sup>4</sup>	S <sub>left</sub> = 356.85 in <sup>3</sup>			I <sub>y</sub> = 3925.33 in <sup>4</sup>	S <sub>left</sub> = 356.85 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 248.5350 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 248.5350 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.9742 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.9742 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39523.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39523.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2302.3 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2302.3 k



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

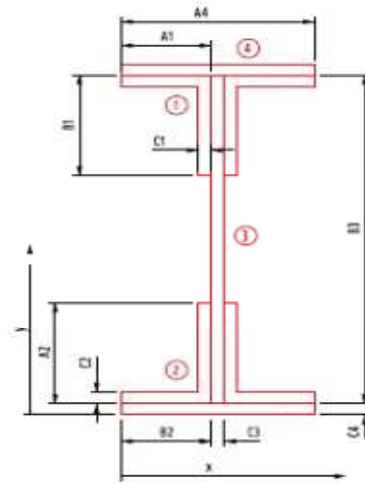
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 158.52$  in

Cover Plate:

$C_4 = 1.3740$  in  
 $A_4 = 22.0000$  in



**Section 7**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	159.5190	1914.2280	0.5625	78.8850	74674.1187	74674.6812
	Vertical Leg		10.8750	155.5190	1691.2691	47.6348	74.8850	60984.4251	61032.0598
2	Horizontal Leg		12.0000	1.7490	20.9880	0.5625	78.8850	74674.1187	74674.6812
	Vertical Leg		10.8750	5.7490	62.5204	47.6348	74.8850	60984.4251	61032.0598
3	Web Plate		108.9825	80.6340	8787.6949	228214.7169	0.0000	0.0000	228214.7169
4	Cover Plate Top		30.2280	160.5810	4854.0425	4.7556	79.9470	193202.9515	193207.7070
	Cover Plate Bottom		30.2280	0.6870	20.7666	4.7556	79.9470	193202.9515	193207.7070
<b>Total</b>			<b>215.19</b>		<b>17351.51</b>	<b>228320.62</b>		<b>657722.99</b>	<b>886043.61</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.1250	157.0200	-19.6275	80.6340	-1582.6438	-40326.7930	0.0000	0.0000	-40326.7930
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-19.63</b>		<b>-1582.64</b>	<b>-40326.79</b>		<b>0.00</b>	<b>-40326.79</b>



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 80.6340 in	S <sub>top</sub> = 10988.46 in <sup>3</sup>			y-bar = 80.6340 in	S <sub>top</sub> = 10488.34 in <sup>3</sup>		
I <sub>x</sub> = 886043.61 in <sup>4</sup>	S <sub>bottom</sub> = 10988.46 in <sup>3</sup>			I <sub>x</sub> = 845716.82 in <sup>4</sup>	S <sub>bottom</sub> = 10488.34 in <sup>3</sup>		
C <sub>top</sub> = 80.6340 in	A = 215.1885 in <sup>2</sup>			C <sub>top</sub> = 80.6340 in	A = 195.5610 in <sup>2</sup>		
C <sub>bottom</sub> = 80.6340 in	r <sub>x</sub> = 64.1679 in			C <sub>bottom</sub> = 80.6340 in	r <sub>x</sub> = 65.7614 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		108.9825	11.0000	1198.8075	4.2926	0.0000	0.0000	4.2926
4	Cover Plate		60.4560	11.0000	665.0160	2438.3920	0.0000	0.0000	2438.3920
<b>Total</b>			<b>215.19</b>		<b>2367.07</b>	<b>2571.70</b>		<b>464.07</b>	<b>3035.78</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	157.0200	0.1250	-19.6275	0.0000	0.0000	-0.0256	0.0000	0.0000	-0.0256
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-19.63</b>		<b>0.00</b>	<b>-0.03</b>		<b>0.00</b>	<b>-0.03</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 275.98 in <sup>3</sup>			x-bar = 12.1040 in	S <sub>right</sub> = 306.77 in <sup>3</sup>		
I <sub>y</sub> = 3035.78 in <sup>4</sup>	S <sub>left</sub> = 275.98 in <sup>3</sup>			I <sub>y</sub> = 3035.75 in <sup>4</sup>	S <sub>left</sub> = 250.81 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 215.1885 in <sup>2</sup>			C <sub>right</sub> = 9.8960 in	A = 195.5610 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.7560 in			C <sub>left</sub> = 12.1040 in	r <sub>y</sub> = 3.9400 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	30218.3 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	28842.9 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2085.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1710.3 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

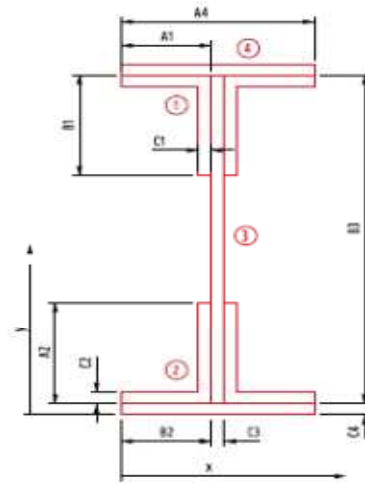
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 8**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

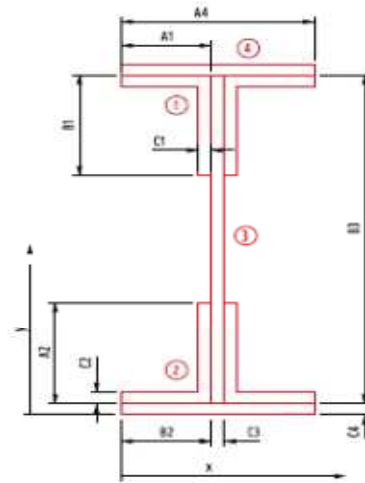
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 9**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>		
I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>			I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

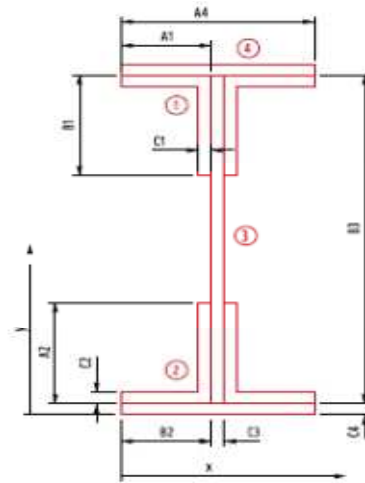
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 10**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>		
I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>			I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

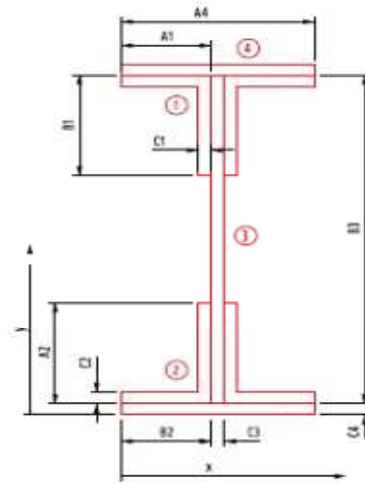
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 146.28$  in

Cover Plate:

$C_4 = 2.8740$  in  
 $A_4 = 22.0000$  in



**Section 11**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	148.7790	1785.3480	0.5625	72.7650	63536.9427	63537.5052
	Vertical Leg		10.8750	144.7790	1574.4716	47.6348	68.7650	51423.7993	51471.4341
2	Horizontal Leg		12.0000	3.2490	38.9880	0.5625	72.7650	63536.9427	63537.5052
	Vertical Leg		10.8750	7.2490	78.8329	47.6348	68.7650	51423.7993	51471.4341
3	Web Plate		91.4250	76.0140	6949.5800	163024.7813	0.0000	0.0000	163024.7813
4	Cover Plate Top		63.2280	150.5910	9521.5677	43.5213	74.5770	351656.9967	351700.5180
	Cover Plate Bottom		63.2280	1.4370	90.8586	43.5213	74.5770	351656.9967	351700.5180
<b>Total</b>			<b>263.63</b>		<b>20039.65</b>	<b>163208.22</b>		<b>933235.48</b>	<b>1096443.70</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 76.0140 in	S <sub>top</sub> = 14424.23 in <sup>3</sup>			y-bar = 76.0140 in	S <sub>top</sub> = 14424.23 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 14424.23 in <sup>3</sup>			I <sub>x</sub> = 1096443.70 in <sup>4</sup>	S <sub>bottom</sub> = 14424.23 in <sup>3</sup>		
C <sub>top</sub> = 76.0140 in	A = 263.6310 in <sup>2</sup>			C <sub>top</sub> = 76.0140 in	A = 263.6310 in <sup>2</sup>		
C <sub>bottom</sub> = 76.0140 in	r <sub>x</sub> = 64.4904 in			C <sub>bottom</sub> = 76.0140 in	r <sub>x</sub> = 64.4904 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		91.4250	11.0000	1005.6750	2.9761	0.0000	0.0000	2.9761
4	Cover Plate		126.4560	11.0000	1391.0160	5100.3920	0.0000	0.0000	5100.3920
<b>Total</b>			<b>263.63</b>		<b>2899.94</b>	<b>5232.39</b>		<b>456.62</b>	<b>5689.01</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 517.18 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 517.18 in <sup>3</sup>		
I <sub>y</sub> = 5689.01 in <sup>4</sup>	S <sub>left</sub> = 517.18 in <sup>3</sup>			I <sub>y</sub> = 5689.01 in <sup>4</sup>	S <sub>left</sub> = 517.18 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 263.6310 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 263.6310 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6454 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6454 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39666.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39666.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1749.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1749.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

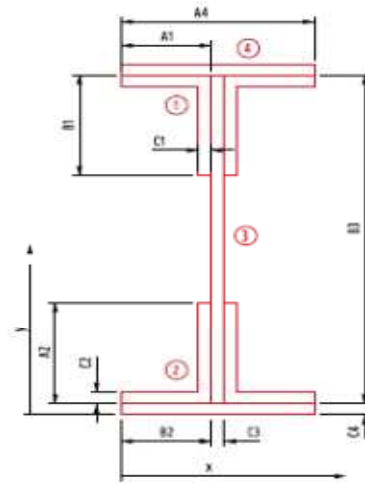
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 12**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>		
I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>			I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

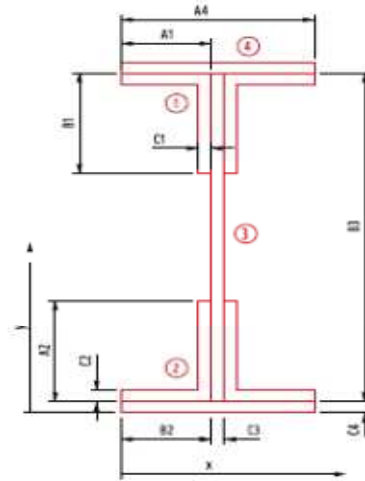
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 13**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>		
I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>			I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

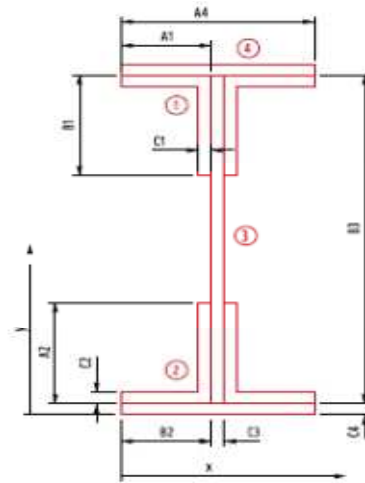
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 152.64$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



Section 14

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	153.0150	1836.1800	0.5625	75.9450	69211.7163	69212.2788
	Vertical Leg		10.8750	149.0150	1620.5381	47.6348	71.9450	56289.9029	56337.5377
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	75.9450	69211.7163	69212.2788
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	71.9450	56289.9029	56337.5377
3	Web Plate		95.4000	77.0700	7352.4780	185226.8083	0.0000	0.0000	185226.8083
4	Cover Plate Top		16.5000	153.7650	2537.1225	0.7734	76.6950	97055.0299	97055.8034
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	76.6950	97055.0299	97055.8034
<b>Total</b>			<b>174.15</b>		<b>13421.74</b>	<b>185324.75</b>		<b>445113.30</b>	<b>630438.05</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 77.0700 in	S <sub>top</sub> = 8180.07 in <sup>3</sup>			y-bar = 77.0700 in	S <sub>top</sub> = 8180.07 in <sup>3</sup>		
I <sub>x</sub> = 630438.05 in <sup>4</sup>	S <sub>bottom</sub> = 8180.07 in <sup>3</sup>			I <sub>x</sub> = 630438.05 in <sup>4</sup>	S <sub>bottom</sub> = 8180.07 in <sup>3</sup>		
C <sub>top</sub> = 77.0700 in	A = 174.1500 in <sup>2</sup>			C <sub>top</sub> = 77.0700 in	A = 174.1500 in <sup>2</sup>		
C <sub>bottom</sub> = 77.0700 in	r <sub>x</sub> = 60.1672 in			C <sub>bottom</sub> = 77.0700 in	r <sub>x</sub> = 60.1672 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		95.4000	11.0000	1049.4000	3.1055	0.0000	0.0000	3.1055
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>174.15</b>		<b>1915.65</b>	<b>1463.13</b>		<b>456.62</b>	<b>1919.75</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.52 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.52 in <sup>3</sup>		
I <sub>y</sub> = 1919.75 in <sup>4</sup>	S <sub>left</sub> = 174.52 in <sup>3</sup>			I <sub>y</sub> = 1919.75 in <sup>4</sup>	S <sub>left</sub> = 174.52 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 174.1500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 174.1500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3202 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3202 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	22495.2 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	22495.2 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1826.0 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1826.0 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

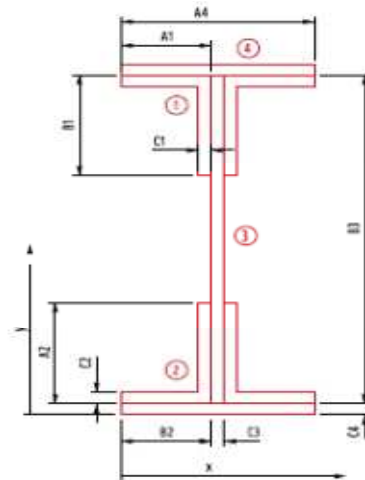
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 164.64$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 15**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	165.7650	1989.1800	0.5625	81.9450	80579.7963	80580.3588
	Vertical Leg		10.8750	161.7650	1759.1944	47.6348	77.9450	66070.2254	66117.8602
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	81.9450	80579.7963	80580.3588
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	77.9450	66070.2254	66117.8602
3	Web Plate		102.9000	83.8200	8625.0780	232436.7763	0.0000	0.0000	232436.7763
4	Cover Plate Top		33.0000	166.8900	5507.3700	6.1875	83.0700	227720.6217	227726.8092
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	83.0700	227720.6217	227726.8092
<b>Total</b>			<b>214.65</b>		<b>17991.96</b>	<b>232545.55</b>		<b>748741.29</b>	<b>981286.83</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 83.8200 in	S <sub>top</sub> = 11707.07 in <sup>3</sup>			y-bar = 83.8200 in	S <sub>top</sub> = 11707.07 in <sup>3</sup>		
I <sub>x</sub> = 981286.83 in <sup>4</sup>	S <sub>bottom</sub> = 11707.07 in <sup>3</sup>			I <sub>x</sub> = 981286.83 in <sup>4</sup>	S <sub>bottom</sub> = 11707.07 in <sup>3</sup>		
C <sub>top</sub> = 83.8200 in	A = 214.6500 in <sup>2</sup>			C <sub>top</sub> = 83.8200 in	A = 214.6500 in <sup>2</sup>		
C <sub>bottom</sub> = 83.8200 in	r <sub>x</sub> = 67.6134 in			C <sub>bottom</sub> = 83.8200 in	r <sub>x</sub> = 67.6134 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		102.9000	11.0000	1131.9000	3.3496	0.0000	0.0000	3.3496
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>214.65</b>		<b>2361.15</b>	<b>2794.37</b>		<b>456.62</b>	<b>3250.99</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 295.54 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 295.54 in <sup>3</sup>		
I <sub>y</sub> = 3250.99 in <sup>4</sup>	S <sub>left</sub> = 295.54 in <sup>3</sup>			I <sub>y</sub> = 3250.99 in <sup>4</sup>	S <sub>left</sub> = 295.54 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 214.6500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 214.6500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8917 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8917 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	32194.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	32194.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1969.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1969.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

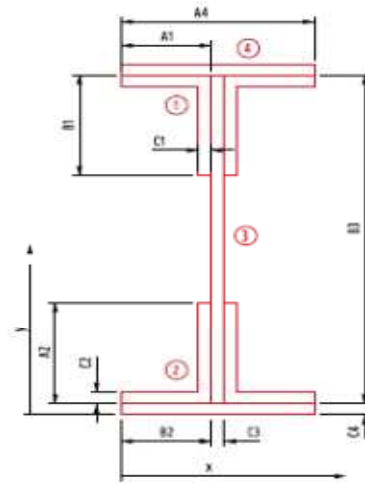
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 176.52$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 16**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	178.3950	2140.7400	0.5625	87.8850	92685.2787	92685.8412
	Vertical Leg		10.8750	174.3950	1896.5456	47.6348	83.8850	76524.0388	76571.6736
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	87.8850	92685.2787	92685.8412
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	83.8850	76524.0388	76571.6736
3	Web Plate		110.3250	90.5100	9985.5158	286470.9100	0.0000	0.0000	286470.9100
4	Cover Plate Top		49.5000	179.8950	8904.8025	20.8828	89.3850	395489.0721	395509.9550
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	89.3850	395489.0721	395509.9550
<b>Total</b>			<b>255.08</b>		<b>23086.84</b>	<b>286609.07</b>		<b>1129396.78</b>	<b>1416005.85</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 90.5100 in	S <sub>top</sub> = 15644.74 in <sup>3</sup>			y-bar = 90.5100 in	S <sub>top</sub> = 15644.74 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 15644.74 in <sup>3</sup>			I <sub>x</sub> = 1416005.85 in <sup>4</sup>	S <sub>bottom</sub> = 15644.74 in <sup>3</sup>		
C <sub>top</sub> = 90.5100 in	A = 255.0750 in <sup>2</sup>			C <sub>top</sub> = 90.5100 in	A = 255.0750 in <sup>2</sup>		
C <sub>bottom</sub> = 90.5100 in	r <sub>x</sub> = 74.5073 in			C <sub>bottom</sub> = 90.5100 in	r <sub>x</sub> = 74.5073 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		110.3250	11.0000	1213.5750	3.5913	0.0000	0.0000	3.5913
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>255.08</b>		<b>2805.83</b>	<b>4125.61</b>		<b>456.62</b>	<b>4582.23</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.57 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.57 in <sup>3</sup>		
I <sub>y</sub> = 4582.23 in <sup>4</sup>	S <sub>left</sub> = 416.57 in <sup>3</sup>			I <sub>y</sub> = 4582.23 in <sup>4</sup>	S <sub>left</sub> = 416.57 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 255.0750 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 255.0750 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.2384 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.2384 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	43023.0 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	43023.0 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2111.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2111.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

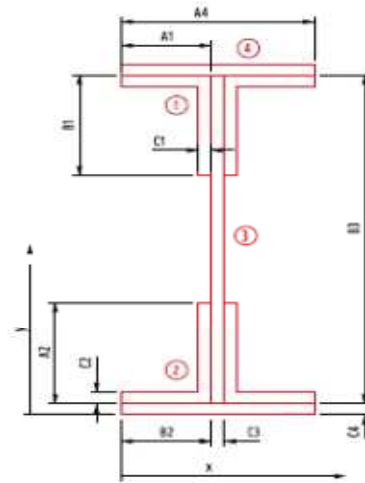
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 189.96$  in

Cover Plate:

$C_4 = 2.8750$  in  
 $A_4 = 22.0000$  in



**Section 17**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	192.4600	2309.5200	0.5625	94.6050	107401.2723	107401.8348
	Vertical Leg		10.8750	188.4600	2049.5025	47.6348	90.6050	89275.7680	89323.4028
2	Horizontal Leg		12.0000	3.2500	39.0000	0.5625	94.6050	107401.2723	107401.8348
	Vertical Leg		10.8750	7.2500	78.8438	47.6348	90.6050	89275.7680	89323.4028
3	Web Plate		130.5975	97.8550	12779.6184	392715.4064	0.0000	0.0000	392715.4064
4	Cover Plate Top		63.2500	194.2725	12287.7356	43.5667	96.4175	587993.1449	588036.7116
	Cover Plate Bottom		63.2500	1.4375	90.9219	43.5667	96.4175	587993.1449	588036.7116
<b>Total</b>			<b>302.85</b>		<b>29635.14</b>	<b>392898.93</b>		<b>1569340.37</b>	<b>1962239.30</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 97.8550 in	S <sub>top</sub> = 20052.52 in <sup>3</sup>			y-bar = 97.8550 in	S <sub>top</sub> = 20052.52 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 20052.52 in <sup>3</sup>			I <sub>x</sub> = 1962239.30 in <sup>4</sup>	S <sub>bottom</sub> = 20052.52 in <sup>3</sup>		
C <sub>top</sub> = 97.8550 in	A = 302.8475 in <sup>2</sup>			C <sub>top</sub> = 97.8550 in	A = 302.8475 in <sup>2</sup>		
C <sub>bottom</sub> = 97.8550 in	r <sub>x</sub> = 80.4941 in			C <sub>bottom</sub> = 97.8550 in	r <sub>x</sub> = 80.4941 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7187	2.8090	3.0639
2 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7187	2.8090	3.0639
3	Web Plate		130.5975	11.0000	1436.5725	5.1440	0.0000	0.0000	5.1440
4	Cover Plate		126.5000	11.0000	1391.5000	5102.1667	0.0000	0.0000	5102.1667
<b>Total</b>			<b>302.85</b>		<b>3331.32</b>	<b>5236.33</b>		<b>464.07</b>	<b>5700.40</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 518.22 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 518.22 in <sup>3</sup>		
I <sub>y</sub> = 5700.40 in <sup>4</sup>	S <sub>left</sub> = 518.22 in <sup>3</sup>			I <sub>y</sub> = 5700.40 in <sup>4</sup>	S <sub>left</sub> = 518.22 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 302.8475 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 302.8475 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.3385 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.3385 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	55144.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	55144.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2499.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2499.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

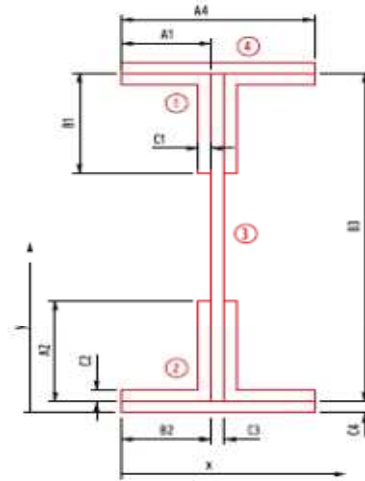
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 189.96$  in

Cover Plate:

$C_4 = 2.8750$  in  
 $A_4 = 22.0000$  in



**Section 18**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	192.4600	2309.5200	0.5625	94.6050	107401.2723	107401.8348
	Vertical Leg		10.8750	188.4600	2049.5025	47.6348	90.6050	89275.7680	89323.4028
2	Horizontal Leg		12.0000	3.2500	39.0000	0.5625	94.6050	107401.2723	107401.8348
	Vertical Leg		10.8750	7.2500	78.8438	47.6348	90.6050	89275.7680	89323.4028
3	Web Plate		142.4700	97.8550	13941.4019	428416.8070	0.0000	0.0000	428416.8070
4	Cover Plate Top		63.2500	194.2725	12287.7356	43.5667	96.4175	587993.1449	588036.7116
	Cover Plate Bottom		63.2500	1.4375	90.9219	43.5667	96.4175	587993.1449	588036.7116
<b>Total</b>			<b>314.72</b>		<b>30796.93</b>	<b>428600.33</b>		<b>1569340.37</b>	<b>1997940.71</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 97.8550 in	S <sub>top</sub> = 20417.36 in <sup>3</sup>			y-bar = 97.8550 in	S <sub>top</sub> = 20417.36 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 20417.36 in <sup>3</sup>			I <sub>x</sub> = 1997940.71 in <sup>4</sup>	S <sub>bottom</sub> = 20417.36 in <sup>3</sup>		
C <sub>top</sub> = 97.8550 in	A = 314.7200 in <sup>2</sup>			C <sub>top</sub> = 97.8550 in	A = 314.7200 in <sup>2</sup>		
C <sub>bottom</sub> = 97.8550 in	r <sub>x</sub> = 79.6763 in			C <sub>bottom</sub> = 97.8550 in	r <sub>x</sub> = 79.6763 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		142.4700	11.0000	1567.1700	6.6783	0.0000	0.0000	6.6783
4	Cover Plate		126.5000	11.0000	1391.5000	5102.1667	0.0000	0.0000	5102.1667
<b>Total</b>			<b>314.72</b>		<b>3461.92</b>	<b>5237.86</b>		<b>471.61</b>	<b>5709.47</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 519.04 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 519.04 in <sup>3</sup>		
I <sub>y</sub> = 5709.47 in <sup>4</sup>	S <sub>left</sub> = 519.04 in <sup>3</sup>			I <sub>y</sub> = 5709.47 in <sup>4</sup>	S <sub>left</sub> = 519.04 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 314.7200 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 314.7200 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.2593 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.2593 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	56147.7 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	56147.7 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2726.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2726.9 k



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

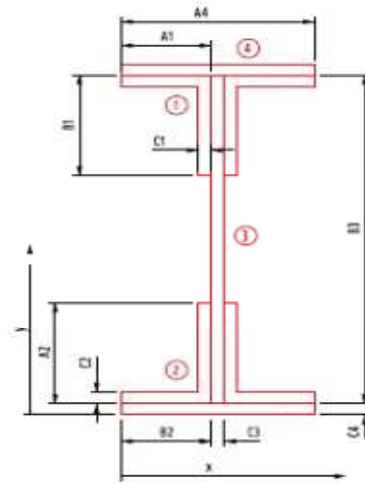
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 176.04$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 19**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	177.9150	2134.9800	0.5625	87.6450	92179.7523	92180.3148
	Vertical Leg		10.8750	173.9150	1891.3256	47.6348	83.6450	76086.7855	76134.4203
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	87.6450	92179.7523	92180.3148
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	83.6450	76086.7855	76134.4203
3	Web Plate		132.0300	90.2700	11918.3481	340968.3728	0.0000	0.0000	340968.3728
4	Cover Plate Top		49.5000	179.4150	8881.0425	20.8828	89.1450	393368.1357	393389.0186
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	89.1450	393368.1357	393389.0186
<b>Total</b>			<b>276.78</b>		<b>24984.93</b>	<b>341106.53</b>		<b>1123269.35</b>	<b>1464375.88</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.3750	174.5400	-65.4525	90.2700	-5908.3972	#####	0.0000	0.0000	-166163.2341
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-65.45</b>		<b>-5908.40</b>	<b>-166163.23</b>		<b>0.00</b>	<b>-166163.23</b>



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 90.2700 in	S <sub>top</sub> = 16222.18 in <sup>3</sup>			y-bar = 90.2700 in	S <sub>top</sub> = 14381.44 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 16222.18 in <sup>3</sup>			I <sub>x</sub> = 1298212.65 in <sup>4</sup>	S <sub>bottom</sub> = 14381.44 in <sup>3</sup>		
C <sub>top</sub> = 90.2700 in	A = 276.7800 in <sup>2</sup>			C <sub>top</sub> = 90.2700 in	A = 211.3275 in <sup>2</sup>		
C <sub>bottom</sub> = 90.2700 in	r <sub>x</sub> = 72.7376 in			C <sub>bottom</sub> = 90.2700 in	r <sub>x</sub> = 78.3781 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		132.0300	11.0000	1452.3300	6.1889	0.0000	0.0000	6.1889
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>276.78</b>		<b>3044.58</b>	<b>4128.21</b>		<b>471.61</b>	<b>4599.82</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	174.5400	0.3750	-65.4525	10.8125	-707.7052	-0.7670	0.2456	-3.9472	-4.7142
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-65.45</b>		<b>-707.71</b>	<b>-0.77</b>		<b>-3.95</b>	<b>-4.71</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 418.17 in <sup>3</sup>			x-bar = 11.0581 in	S <sub>right</sub> = 419.95 in <sup>3</sup>		
I <sub>y</sub> = 4599.82 in <sup>4</sup>	S <sub>left</sub> = 418.17 in <sup>3</sup>			I <sub>y</sub> = 4595.10 in <sup>4</sup>	S <sub>left</sub> = 415.54 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 276.7800 in <sup>2</sup>			C <sub>right</sub> = 10.9419 in	A = 211.3275 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0766 in			C <sub>left</sub> = 11.0581 in	r <sub>y</sub> = 4.6630 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	44611.0 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39549.0 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2527.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1274.3 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

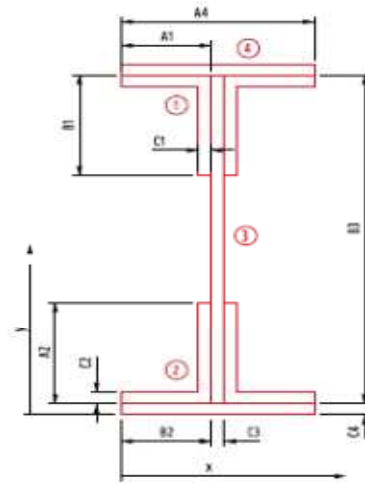
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 159.60$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 20**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	160.7250	1928.7000	0.5625	79.4250	75699.9675	75700.5300
	Vertical Leg		10.8750	156.7250	1704.3844	47.6348	75.4250	61867.1205	61914.7553
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	79.4250	75699.9675	75700.5300
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	75.4250	61867.1205	61914.7553
3	Web Plate		109.7250	81.3000	8920.6425	232911.0630	0.0000	0.0000	232911.0630
4	Cover Plate Top		33.0000	161.8500	5341.0500	6.1875	80.5500	214113.9825	214120.1700
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	80.5500	214113.9825	214120.1700
<b>Total</b>			<b>221.48</b>		<b>18005.92</b>	<b>233019.83</b>		<b>703362.14</b>	<b>936381.97</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 81.3000 in	S <sub>top</sub> = 11517.61 in <sup>3</sup>			y-bar = 81.3000 in	S <sub>top</sub> = 11517.61 in <sup>3</sup>		
I <sub>x</sub> = 936381.97 in <sup>4</sup>	S <sub>bottom</sub> = 11517.61 in <sup>3</sup>			I <sub>x</sub> = 936381.97 in <sup>4</sup>	S <sub>bottom</sub> = 11517.61 in <sup>3</sup>		
C <sub>top</sub> = 81.3000 in	A = 221.4750 in <sup>2</sup>			C <sub>top</sub> = 81.3000 in	A = 221.4750 in <sup>2</sup>		
C <sub>bottom</sub> = 81.3000 in	r <sub>x</sub> = 65.0226 in			C <sub>bottom</sub> = 81.3000 in	r <sub>x</sub> = 65.0226 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		109.7250	11.0000	1206.9750	4.3219	0.0000	0.0000	4.3219
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>221.48</b>		<b>2436.23</b>	<b>2795.34</b>		<b>464.07</b>	<b>3259.41</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 296.31 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 296.31 in <sup>3</sup>		
I <sub>y</sub> = 3259.41 in <sup>4</sup>	S <sub>left</sub> = 296.31 in <sup>3</sup>			I <sub>y</sub> = 3259.41 in <sup>4</sup>	S <sub>left</sub> = 296.31 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 221.4750 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 221.4750 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8363 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8363 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	31673.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	31673.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2100.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2100.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

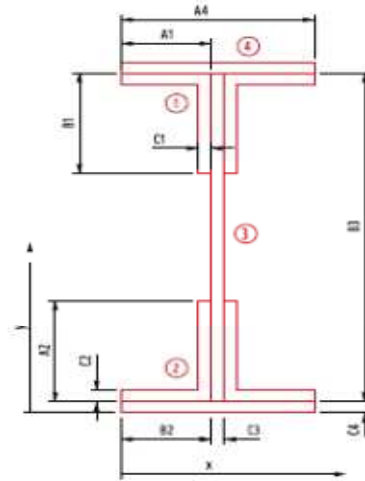
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 152.16$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 21**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	152.5350	1830.4200	0.5625	75.7050	68774.9643	68775.5268
	Vertical Leg		10.8750	148.5350	1615.3181	47.6348	71.7050	55914.9764	55962.6112
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	75.7050	68774.9643	68775.5268
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	71.7050	55914.9764	55962.6112
3	Web Plate		95.1000	76.8300	7306.5330	183484.8749	0.0000	0.0000	183484.8749
4	Cover Plate Top		16.5000	153.2850	2529.2025	0.7734	76.4550	96448.5559	96449.3294
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	76.4550	96448.5559	96449.3294
<b>Total</b>			<b>173.85</b>		<b>13356.90</b>	<b>183582.82</b>		<b>442276.99</b>	<b>625859.81</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 76.8300 in	S <sub>top</sub> = 8146.03 in <sup>3</sup>			y-bar = 76.8300 in	S <sub>top</sub> = 8146.03 in <sup>3</sup>		
I <sub>x</sub> = 625859.81 in <sup>4</sup>	S <sub>bottom</sub> = 8146.03 in <sup>3</sup>			I <sub>x</sub> = 625859.81 in <sup>4</sup>	S <sub>bottom</sub> = 8146.03 in <sup>3</sup>		
C <sub>top</sub> = 76.8300 in	A = 173.8500 in <sup>2</sup>			C <sub>top</sub> = 76.8300 in	A = 173.8500 in <sup>2</sup>		
C <sub>bottom</sub> = 76.8300 in	r <sub>x</sub> = 60.0000 in			C <sub>bottom</sub> = 76.8300 in	r <sub>x</sub> = 60.0000 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		95.1000	11.0000	1046.1000	3.0957	0.0000	0.0000	3.0957
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>173.85</b>		<b>1912.35</b>	<b>1463.12</b>		<b>456.62</b>	<b>1919.74</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.52 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.52 in <sup>3</sup>		
I <sub>y</sub> = 1919.74 in <sup>4</sup>	S <sub>left</sub> = 174.52 in <sup>3</sup>			I <sub>y</sub> = 1919.74 in <sup>4</sup>	S <sub>left</sub> = 174.52 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 173.8500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 173.8500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3230 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3230 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	22401.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	22401.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1820.2 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1820.2 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

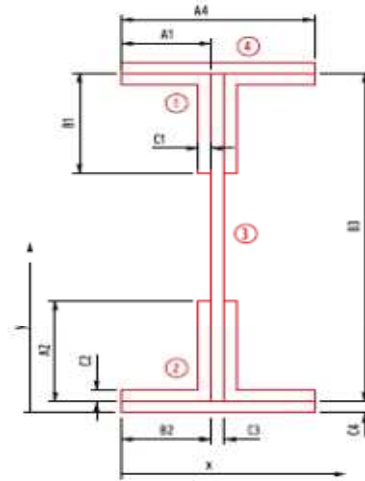
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 22**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

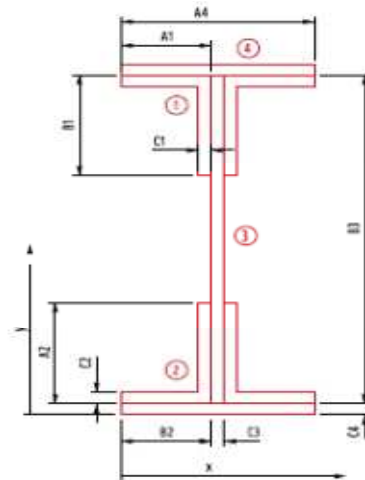
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 168.24$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 23**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	168.6150	2023.3800	0.5625	83.7450	84158.7003	84159.2628
	Vertical Leg		10.8750	164.6150	1790.1881	47.6348	79.7450	69157.0071	69204.6419
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	83.7450	84158.7003	84159.2628
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	79.7450	69157.0071	69204.6419
3	Web Plate		105.1500	84.8700	8924.0805	248019.9127	0.0000	0.0000	248019.9127
4	Cover Plate Top		16.5000	169.3650	2794.5225	0.7734	84.4950	117800.1829	117800.9564
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	84.4950	117800.1829	117800.9564
<b>Total</b>			<b>183.90</b>		<b>15607.59</b>	<b>248117.85</b>		<b>542231.78</b>	<b>790349.63</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 84.8700 in	S <sub>top</sub> = 9312.47 in <sup>3</sup>			y-bar = 84.8700 in	S <sub>top</sub> = 9312.47 in <sup>3</sup>		
I <sub>x</sub> = 790349.63 in <sup>4</sup>	S <sub>bottom</sub> = 9312.47 in <sup>3</sup>			I <sub>x</sub> = 790349.63 in <sup>4</sup>	S <sub>bottom</sub> = 9312.47 in <sup>3</sup>		
C <sub>top</sub> = 84.8700 in	A = 183.9000 in <sup>2</sup>			C <sub>top</sub> = 84.8700 in	A = 183.9000 in <sup>2</sup>		
C <sub>bottom</sub> = 84.8700 in	r <sub>x</sub> = 65.5570 in			C <sub>bottom</sub> = 84.8700 in	r <sub>x</sub> = 65.5570 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		105.1500	11.0000	1156.6500	3.4229	0.0000	0.0000	3.4229
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>183.90</b>		<b>2022.90</b>	<b>1463.44</b>		<b>456.62</b>	<b>1920.07</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.55 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.55 in <sup>3</sup>		
I <sub>y</sub> = 1920.07 in <sup>4</sup>	S <sub>left</sub> = 174.55 in <sup>3</sup>			I <sub>y</sub> = 1920.07 in <sup>4</sup>	S <sub>left</sub> = 174.55 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 183.9000 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 183.9000 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.2312 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.2312 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	25609.3 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	25609.3 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2012.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2012.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

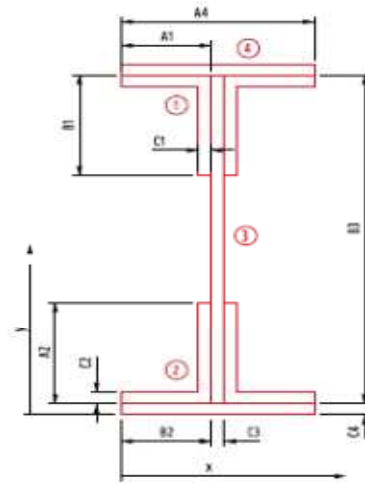
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 180.36$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



Section 24

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	181.4850	2177.8200	0.5625	89.8050	96779.2563	96779.8188
	Vertical Leg		10.8750	177.4850	1930.1494	47.6348	85.8050	80067.1660	80114.8008
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	89.8050	96779.2563	96779.8188
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	85.8050	80067.1660	80114.8008
3	Web Plate		135.2700	91.6800	12401.5536	366691.3769	0.0000	0.0000	366691.3769
4	Cover Plate Top		33.0000	182.6100	6026.1300	6.1875	90.9300	272852.7417	272858.9292
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	90.9300	272852.7417	272858.9292
<b>Total</b>			<b>247.02</b>		<b>22646.79</b>	<b>366800.15</b>		<b>899398.33</b>	<b>1266198.47</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 91.6800 in	S <sub>top</sub> = 13811.07 in <sup>3</sup>			y-bar = 91.6800 in	S <sub>top</sub> = 13811.07 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 13811.07 in <sup>3</sup>			I <sub>x</sub> = 1266198.47 in <sup>4</sup>	S <sub>bottom</sub> = 13811.07 in <sup>3</sup>		
C <sub>top</sub> = 91.6800 in	A = 247.0200 in <sup>2</sup>			C <sub>top</sub> = 91.6800 in	A = 247.0200 in <sup>2</sup>		
C <sub>bottom</sub> = 91.6800 in	r <sub>x</sub> = 71.5954 in			C <sub>bottom</sub> = 91.6800 in	r <sub>x</sub> = 71.5954 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		135.2700	11.0000	1487.9700	6.3408	0.0000	0.0000	6.3408
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>247.02</b>		<b>2717.22</b>	<b>2797.36</b>		<b>471.61</b>	<b>3268.97</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 297.18 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 297.18 in <sup>3</sup>		
I <sub>y</sub> = 3268.97 in <sup>4</sup>	S <sub>left</sub> = 297.18 in <sup>3</sup>			I <sub>y</sub> = 3268.97 in <sup>4</sup>	S <sub>left</sub> = 297.18 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 247.0200 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 247.0200 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.6378 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.6378 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	37980.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	37980.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2589.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2589.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

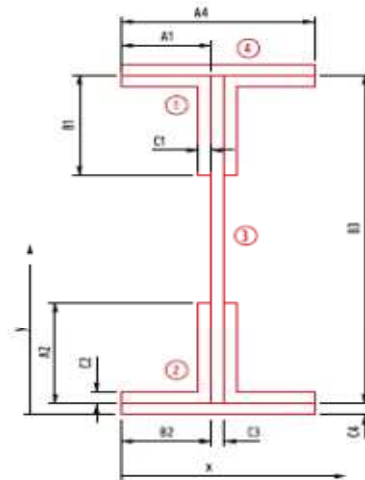
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 194.40$  in

Cover Plate:

$C_4 = 2.1240$  in  
 $A_4 = 22.0000$  in



**Section 25**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	196.1490	2353.7880	0.5625	96.8250	112500.9675	112501.5300
	Vertical Leg		10.8750	192.1490	2089.6204	47.6348	92.8250	93704.2268	93751.8616
2	Horizontal Leg		12.0000	2.4990	29.9880	0.5625	96.8250	112500.9675	112501.5300
	Vertical Leg		10.8750	6.4990	70.6766	47.6348	92.8250	93704.2268	93751.8616
3	Web Plate		145.8000	99.3240	14481.4392	459165.0240	0.0000	0.0000	459165.0240
4	Cover Plate Top		46.7280	197.5860	9232.7986	17.5673	98.2620	451178.4959	451196.0632
	Cover Plate Bottom		46.7280	1.0620	49.6251	17.5673	98.2620	451178.4959	451196.0632
<b>Total</b>			<b>285.01</b>		<b>28307.94</b>	<b>459296.55</b>		<b>1314767.38</b>	<b>1774063.93</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 99.3240 in	S <sub>top</sub> = 17861.38 in <sup>3</sup>			y-bar = 99.3240 in	S <sub>top</sub> = 17861.38 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 17861.38 in <sup>3</sup>			I <sub>x</sub> = 1774063.93 in <sup>4</sup>	S <sub>bottom</sub> = 17861.38 in <sup>3</sup>		
C <sub>top</sub> = 99.3240 in	A = 285.0060 in <sup>2</sup>			C <sub>top</sub> = 99.3240 in	A = 285.0060 in <sup>2</sup>		
C <sub>bottom</sub> = 99.3240 in	r <sub>x</sub> = 78.8965 in			C <sub>bottom</sub> = 99.3240 in	r <sub>x</sub> = 78.8965 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		145.8000	11.0000	1603.8000	6.8344	0.0000	0.0000	6.8344
4	Cover Plate		93.4560	11.0000	1028.0160	3769.3920	0.0000	0.0000	3769.3920
<b>Total</b>			<b>285.01</b>		<b>3135.07</b>	<b>3905.25</b>		<b>471.61</b>	<b>4376.86</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 397.90 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 397.90 in <sup>3</sup>		
I <sub>y</sub> = 4376.86 in <sup>4</sup>	S <sub>left</sub> = 397.90 in <sup>3</sup>			I <sub>y</sub> = 4376.86 in <sup>4</sup>	S <sub>left</sub> = 397.90 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 285.0060 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 285.0060 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.9188 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.9188 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	49118.8 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	49118.8 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2790.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2790.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

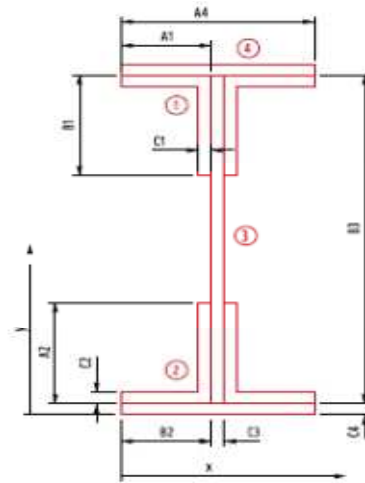
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 194.40$  in

Cover Plate:

$C_4 = 2.1240$  in  
 $A_4 = 22.0000$  in



**Section 26**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	196.1490	2353.7880	0.5625	96.8250	112500.9675	112501.5300
	Vertical Leg		10.8750	192.1490	2089.6204	47.6348	92.8250	93704.2268	93751.8616
2	Horizontal Leg		12.0000	2.4990	29.9880	0.5625	96.8250	112500.9675	112501.5300
	Vertical Leg		10.8750	6.4990	70.6766	47.6348	92.8250	93704.2268	93751.8616
3	Web Plate		133.6500	99.3240	13274.6526	420901.2720	0.0000	0.0000	420901.2720
4	Cover Plate Top		46.7280	197.5860	9232.7986	17.5673	98.2620	451178.4959	451196.0632
	Cover Plate Bottom		46.7280	1.0620	49.6251	17.5673	98.2620	451178.4959	451196.0632
<b>Total</b>			<b>272.86</b>		<b>27101.15</b>	<b>421032.80</b>		<b>1314767.38</b>	<b>1735800.18</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 99.3240 in	S <sub>top</sub> = 17476.14 in <sup>3</sup>			y-bar = 99.3240 in	S <sub>top</sub> = 17476.14 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 17476.14 in <sup>3</sup>			I <sub>x</sub> = 1735800.18 in <sup>4</sup>	S <sub>bottom</sub> = 17476.14 in <sup>3</sup>		
C <sub>top</sub> = 99.3240 in	A = 272.8560 in <sup>2</sup>			C <sub>top</sub> = 99.3240 in	A = 272.8560 in <sup>2</sup>		
C <sub>bottom</sub> = 99.3240 in	r <sub>x</sub> = 79.7596 in			C <sub>bottom</sub> = 99.3240 in	r <sub>x</sub> = 79.7596 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2 (Left)	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2 (Right)	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		133.6500	11.0000	1470.1500	5.2642	0.0000	0.0000	5.2642
4	Cover Plate		93.4560	11.0000	1028.0160	3769.3920	0.0000	0.0000	3769.3920
<b>Total</b>			<b>272.86</b>		<b>3001.42</b>	<b>3903.68</b>		<b>464.07</b>	<b>4367.75</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 397.07 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 397.07 in <sup>3</sup>		
I <sub>y</sub> = 4367.75 in <sup>4</sup>	S <sub>left</sub> = 397.07 in <sup>3</sup>			I <sub>y</sub> = 4367.75 in <sup>4</sup>	S <sub>left</sub> = 397.07 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 272.8560 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 272.8560 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0009 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0009 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	48059.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	48059.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2558.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2558.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

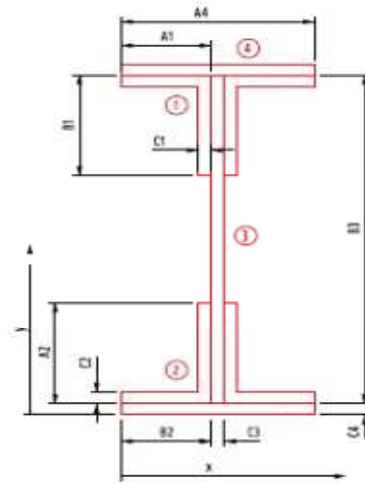
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 184.32$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



Section 27

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	185.4450	2225.3400	0.5625	91.7850	101093.8347	101094.3972
	Vertical Leg		10.8750	181.4450	1973.2144	47.6348	87.7850	83804.9927	83852.6275
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	91.7850	101093.8347	101094.3972
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	87.7850	83804.9927	83852.6275
3	Web Plate		115.2000	93.6600	10789.6320	326149.0790	0.0000	0.0000	326149.0790
4	Cover Plate Top		33.0000	186.5700	6156.8100	6.1875	92.9100	284864.8473	284871.0348
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	92.9100	284864.8473	284871.0348
<b>Total</b>			<b>226.95</b>		<b>21256.14</b>	<b>326257.85</b>		<b>939527.35</b>	<b>1265785.20</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 93.6600 in	S <sub>top</sub> = 13514.68 in <sup>3</sup>			y-bar = 93.6600 in	S <sub>top</sub> = 13514.68 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 13514.68 in <sup>3</sup>			I <sub>x</sub> = 1265785.20 in <sup>4</sup>	S <sub>bottom</sub> = 13514.68 in <sup>3</sup>		
C <sub>top</sub> = 93.6600 in	A = 226.9500 in <sup>2</sup>			C <sub>top</sub> = 93.6600 in	A = 226.9500 in <sup>2</sup>		
C <sub>bottom</sub> = 93.6600 in	r <sub>x</sub> = 74.6818 in			C <sub>bottom</sub> = 93.6600 in	r <sub>x</sub> = 74.6818 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		115.2000	11.0000	1267.2000	3.7500	0.0000	0.0000	3.7500
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>226.95</b>		<b>2496.45</b>	<b>2794.77</b>		<b>456.62</b>	<b>3251.39</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 295.58 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 295.58 in <sup>3</sup>		
I <sub>y</sub> = 3251.39 in <sup>4</sup>	S <sub>left</sub> = 295.58 in <sup>3</sup>			I <sub>y</sub> = 3251.39 in <sup>4</sup>	S <sub>left</sub> = 295.58 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 226.9500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 226.9500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.7850 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.7850 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	37165.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	37165.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2204.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2204.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

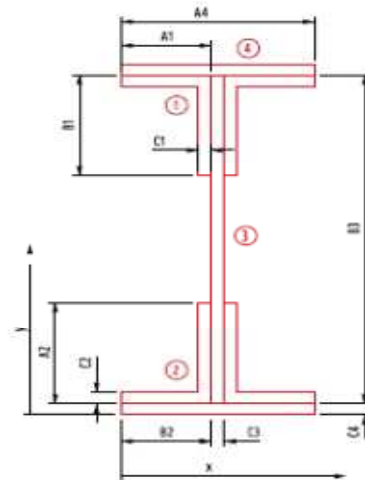
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 171.84$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 28**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	172.2150	2066.5800	0.5625	85.5450	87815.3643	87815.9268
	Vertical Leg		10.8750	168.2150	1829.3381	47.6348	81.5450	72314.2589	72361.8937
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	85.5450	87815.3643	87815.9268
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	81.5450	72314.2589	72361.8937
3	Web Plate		107.4000	86.6700	9308.3580	264284.4211	0.0000	0.0000	264284.4211
4	Cover Plate Top		16.5000	172.9650	2853.9225	0.7734	86.2950	122872.6459	122873.4194
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	86.2950	122872.6459	122873.4194
<b>Total</b>			<b>186.15</b>		<b>16133.62</b>	<b>264382.36</b>		<b>566004.54</b>	<b>830386.90</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 86.6700 in	S <sub>top</sub> = 9581.02 in <sup>3</sup>			y-bar = 86.6700 in	S <sub>top</sub> = 9581.02 in <sup>3</sup>		
I <sub>x</sub> = 830386.90 in <sup>4</sup>	S <sub>bottom</sub> = 9581.02 in <sup>3</sup>			I <sub>x</sub> = 830386.90 in <sup>4</sup>	S <sub>bottom</sub> = 9581.02 in <sup>3</sup>		
C <sub>top</sub> = 86.6700 in	A = 186.1500 in <sup>2</sup>			C <sub>top</sub> = 86.6700 in	A = 186.1500 in <sup>2</sup>		
C <sub>bottom</sub> = 86.6700 in	r <sub>x</sub> = 66.7896 in			C <sub>bottom</sub> = 86.6700 in	r <sub>x</sub> = 66.7896 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		107.4000	11.0000	1181.4000	3.4961	0.0000	0.0000	3.4961
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>186.15</b>		<b>2047.65</b>	<b>1463.52</b>		<b>456.62</b>	<b>1920.14</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.56 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.56 in <sup>3</sup>		
I <sub>y</sub> = 1920.14 in <sup>4</sup>	S <sub>left</sub> = 174.56 in <sup>3</sup>			I <sub>y</sub> = 1920.14 in <sup>4</sup>	S <sub>left</sub> = 174.56 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 186.1500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 186.1500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.2117 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.2117 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	26347.8 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	26347.8 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2055.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2055.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

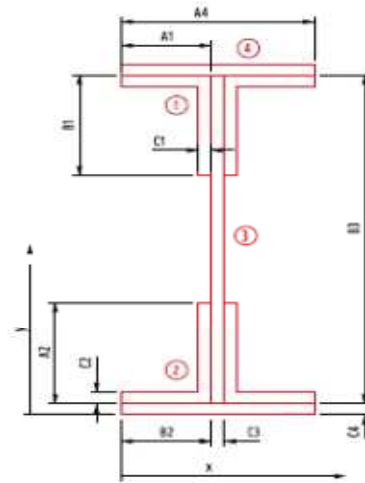
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 29**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>		
I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>			I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

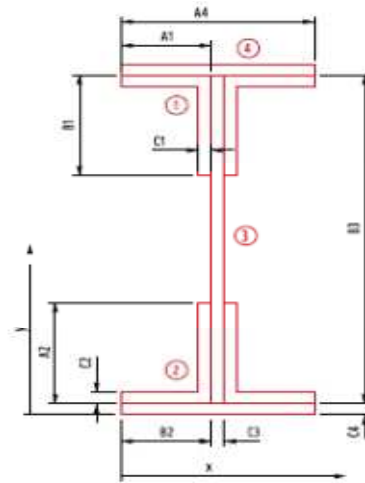
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 30**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>		
I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>			I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

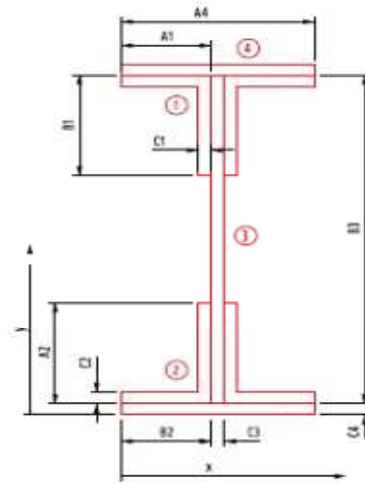
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 146.28$  in

Cover Plate:

$C_4 = 2.8740$  in  
 $A_4 = 22.0000$  in



Section 31

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	148.7790	1785.3480	0.5625	72.7650	63536.9427	63537.5052
	Vertical Leg		10.8750	144.7790	1574.4716	47.6348	68.7650	51423.7993	51471.4341
2	Horizontal Leg		12.0000	3.2490	38.9880	0.5625	72.7650	63536.9427	63537.5052
	Vertical Leg		10.8750	7.2490	78.8329	47.6348	68.7650	51423.7993	51471.4341
3	Web Plate		91.4250	76.0140	6949.5800	163024.7813	0.0000	0.0000	163024.7813
4	Cover Plate Top		63.2280	150.5910	9521.5677	43.5213	74.5770	351656.9967	351700.5180
	Cover Plate Bottom		63.2280	1.4370	90.8586	43.5213	74.5770	351656.9967	351700.5180
<b>Total</b>			<b>263.63</b>		<b>20039.65</b>	<b>163208.22</b>		<b>933235.48</b>	<b>1096443.70</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 76.0140 in	S <sub>top</sub> = 14424.23 in <sup>3</sup>			y-bar = 76.0140 in	S <sub>top</sub> = 14424.23 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 14424.23 in <sup>3</sup>			I <sub>x</sub> = 1096443.70 in <sup>4</sup>	S <sub>bottom</sub> = 14424.23 in <sup>3</sup>		
C <sub>top</sub> = 76.0140 in	A = 263.6310 in <sup>2</sup>			C <sub>top</sub> = 76.0140 in	A = 263.6310 in <sup>2</sup>		
C <sub>bottom</sub> = 76.0140 in	r <sub>x</sub> = 64.4904 in			C <sub>bottom</sub> = 76.0140 in	r <sub>x</sub> = 64.4904 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		91.4250	11.0000	1005.6750	2.9761	0.0000	0.0000	2.9761
4	Cover Plate		126.4560	11.0000	1391.0160	5100.3920	0.0000	0.0000	5100.3920
<b>Total</b>			<b>263.63</b>		<b>2899.94</b>	<b>5232.39</b>		<b>456.62</b>	<b>5689.01</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 517.18 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 517.18 in <sup>3</sup>		
I <sub>y</sub> = 5689.01 in <sup>4</sup>	S <sub>left</sub> = 517.18 in <sup>3</sup>			I <sub>y</sub> = 5689.01 in <sup>4</sup>	S <sub>left</sub> = 517.18 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 263.6310 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 263.6310 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6454 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6454 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39666.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39666.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1749.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1749.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

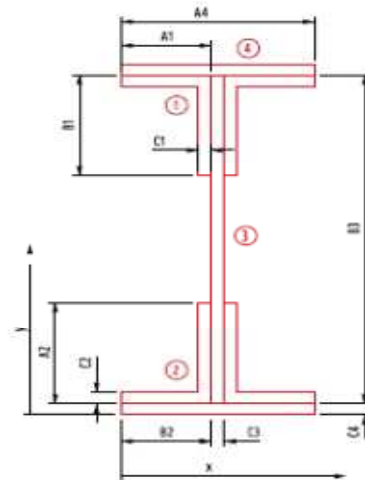
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 32**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>		
I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>			I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

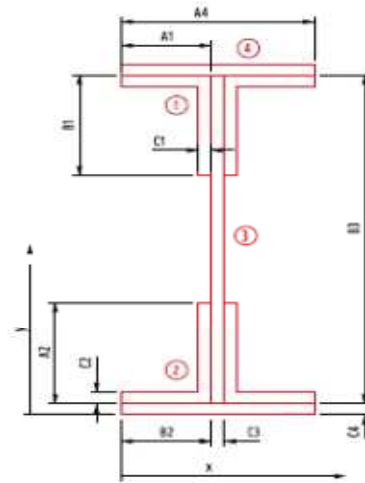
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 33**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>		
I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>			I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

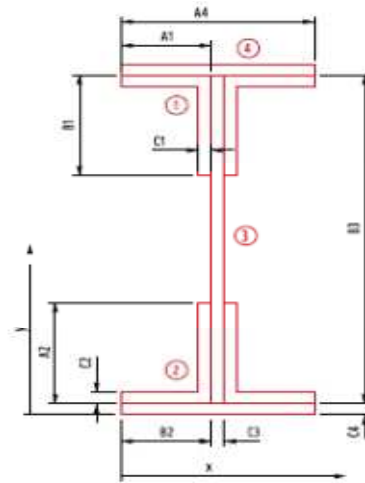
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 34**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 <sub>(web loss)</sub>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		

As-Built Section Properties			As-Inspected Section Properties		
<b>Capacity: About Y-Y Axis</b>			<b>Capacity: About Y-Y Axis</b>		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k

**Section I**

**Center Girder**

**Section Properties**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Section No.	Section Property Summary			Capacity Values of Built up Sections					
	I <sub>x, gross</sub> (in <sup>4</sup> )	A (in <sup>2</sup> )	Wt (k/ft) (+ 5%)	x/l	From Rear 0	As Built		As Inspected	
						Moment k-ft	Shear k	Moment k-ft	Shear k
1				0.000		20467	1700	20467	1700
1				0.100		20467	1700	20467	1700
1				0.200		20467	1700	20467	1700
1				0.300		20467	1700	20467	1700
1				0.400		20467	1700	20467	1700
1				0.500		20467	1700	20467	1700
1				0.600		20467	1700	20467	1700
1				0.700		20467	1700	20467	1700
1	534289.94	167.55	0.599	0.765	127.23	20467	1700	20467	1700
2				0.800		28590	1849	28590	1849
2	817735.41	202.85	0.725	0.832	138.23	28590	1849	28590	1849
3				0.900		40749	2299	40749	2299
3	1324135.83	253.87	0.907	0.916	152.23	40749	2299	40749	2299
4	1874343.26	303.09	1.083	1.000	166.23	53037	2715	53037	2715
5				0.000		53037	2715	53037	2715
5	1874343.26	303.09	1.083	0.033	9	53037	2715	53037	2715
6	1324135.83	253.87	0.907	0.065	17.5	40749	2299	40749	2299
7	924207.05	208.25	0.744	0.098	26.5	30631	1952	29171	1565
8				0.100		20467	1700	20467	1700
8				0.200		20467	1700	20467	1700
8	534289.94	167.55	0.599	0.268	72.66	20467	1700	20467	1700
9				0.300		27108	1717	27108	1717
9	722147.65	201.45	0.720	0.309	83.66	27108	1717	27108	1717
10	922457.92	235.43	0.841	0.361	97.66	33918	1736	33918	1736
11				0.400		40838	1753	40838	1753
11	1132479.74	269.33	0.962	0.431	116.66	40838	1753	40838	1753
12				0.500		45528	1764	45528	1764
12				0.600		45528	1764	45528	1764
12	1278757.81	291.93	1.043	0.628	170.16	45528	1764	45528	1764
13				0.700		40838	1753	40838	1753
13	1132479.74	269.33	0.962	0.702	190.16	40838	1753	40838	1753
14	922457.92	235.43	0.841	0.754	204.16	33918	1736	33918	1736
15	722147.65	201.45	0.720	0.796	215.66	27108	1717	27108	1717
16				0.800		20467	1700	20467	1700
16				0.900		20467	1700	20467	1700
16	534289.94	167.55	0.599	0.921	249.33	20467	1700	20467	1700
17	1140490.40	231.46	0.827	0.956	258.83	35415	2291	35415	2291
18	1709326.60	286.23	1.023	1.000	270.83	48676	2708	48676	2708

**Section I**

**Center Girder**

**Section Properties**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

19				0.000		48676	2708	46732	2260
19	1709326.60	286.23	1.023	0.081	16.5	48676	2708	46732	2260
20				0.100		33203	2179	33203	2179
20	1017833.75	225.60	0.806	0.159	32.5	33203	2179	33203	2179
21				0.200		20467	1700	20467	1700
21				0.300		20467	1700	20467	1700
21				0.400		20467	1700	20467	1700
21	534289.94	167.55	0.599	0.462	94.15	20467	1700	20467	1700
22				0.500		20467	1700	20467	1700
22				0.600		20467	1700	20467	1700
22				0.700		20467	1700	20467	1700
22	534289.94	167.55	0.599	0.766	156.15	20467	1700	20467	1700
23				0.800		27019	2094	27019	2094
23				0.900		27019	2094	27019	2094
23	867451.37	188.18	0.672	0.912	185.88	27019	2094	27019	2094
24	1327031.18	249.81	0.893	1.000	203.88	39014	2642	39014	2642
25				0.000		39014	2642	39014	2642
25	1327031.18	249.81	0.893	0.059	12.5	39014	2642	39014	2642
26				0.100		26944	2090	25254	1676
26				0.200		26944	2090	25254	1676
26	863284.52	187.95	0.672	0.273	57.98	26944	2090	25254	1676
27				0.300		27108	1717	27108	1717
27	722147.65	201.45	0.720	0.325	68.98	27108	1717	27108	1717
28	922457.92	235.43	0.841	0.393	83.48	33918	1736	33918	1736
				0.400		40838	1753	40838	1753
				0.500		40838	1753	40838	1753
				0.600		40838	1753	40838	1753
				0.700		40838	1753	40838	1753
29	1132479.74	269.33	0.962	0.755	160.48	40838	1753	40838	1753
				0.800		33918	1736	33918	1736
30	922457.92	235.43	0.841	0.821	174.48	33918	1736	33918	1736
31	722147.65	201.45	0.720	0.875	185.98	27108	1717	27108	1717
				0.900		20467	1700	20467	1700
32	534289.94	167.55	0.599	1.000	212.48	20467	1700	20467	1700



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

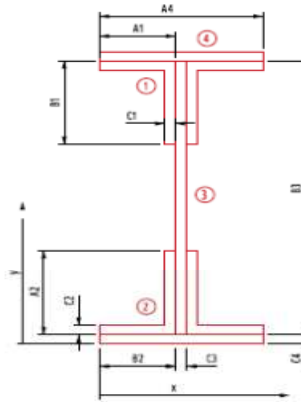
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



Section 1

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		( $in^2$ )	(in)	( $in^3$ )	( $in^4$ )	(in)	( $in^4$ )	( $in^4$ )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	( $in^2$ )	(in)	( $in^3$ )	( $in^4$ )	(in)	( $in^4$ )	( $in^4$ )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bott.</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bott.</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

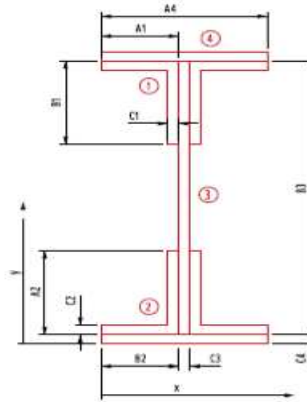
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 154.56$  in

Cover Plate:

$C_4 = 1.3750$  in  
 $A_4 = 22.0000$  in



**Section 2**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	155.5600	1866.7200	0.5625	76.9050	70972.5483	70973.1108
	Vertical Leg		10.8750	151.5600	1648.2150	47.6348	72.9050	57802.1369	57849.7717
2	Horizontal Leg		12.0000	1.7500	21.0000	0.5625	76.9050	70972.5483	70973.1108
	Vertical Leg		10.8750	5.7500	62.5313	47.6348	72.9050	57802.1369	57849.7717
3	Web Plate		96.6000	78.6550	7598.0730	192304.7885	0.0000	0.0000	192304.7885
4	Cover Plate Top		30.2500	156.6225	4737.8306	4.7660	77.9675	183887.6645	183892.4304
	Cover Plate Bottom		30.2500	0.6875	20.7969	4.7660	77.9675	183887.6645	183892.4304
<b>Total</b>			<b>202.85</b>		<b>15955.17</b>	<b>192410.71</b>		<b>625324.70</b>	<b>817735.41</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 78.6550 in	S <sub>top</sub> = 10396.48 in <sup>3</sup>			y-bar = 78.6550 in	S <sub>top</sub> = 10396.48 in <sup>3</sup>		
I <sub>x</sub> = 817735.41 in <sup>4</sup>	S <sub>bottom</sub> = 10396.48 in <sup>3</sup>			I <sub>x</sub> = 817735.41 in <sup>4</sup>	S <sub>bottom</sub> = 10396.48 in <sup>3</sup>		
C <sub>top</sub> = 78.6550 in	A = 202.8500 in <sup>2</sup>			C <sub>top</sub> = 78.6550 in	A = 202.8500 in <sup>2</sup>		
C <sub>bottom</sub> = 78.6550 in	r <sub>x</sub> = 63.4920 in			C <sub>bottom</sub> = 78.6550 in	r <sub>x</sub> = 63.4920 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		96.6000	11.0000	1062.6000	3.1445	0.0000	0.0000	3.1445
4	Cover Plate		60.5000	11.0000	665.5000	2440.1667	0.0000	0.0000	2440.1667
<b>Total</b>			<b>202.85</b>		<b>2231.35</b>	<b>2572.33</b>		<b>456.62</b>	<b>3028.95</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 275.36 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 275.36 in <sup>3</sup>		
I <sub>y</sub> = 3028.95 in <sup>4</sup>	S <sub>left</sub> = 275.36 in <sup>3</sup>			I <sub>y</sub> = 3028.95 in <sup>4</sup>	S <sub>left</sub> = 275.36 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 202.8500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 202.8500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8642 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8642 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

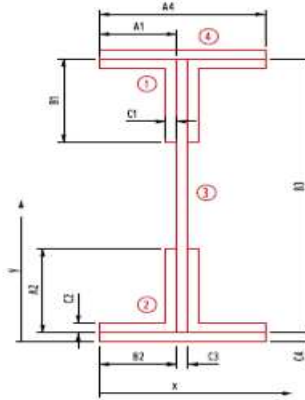
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 174.72$  in

Cover Plate:

$C_4 = 2.0000$  in  
 $A_4 = 22.0000$  in



**Section 3**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	176.3450	2116.1400	0.5625	86.9850	90796.6827	90797.2452
	Vertical Leg		10.8750	172.3450	1874.2519	47.6348	82.9850	74890.7987	74938.4335
2	Horizontal Leg		12.0000	2.3750	28.5000	0.5625	86.9850	90796.6827	90797.2452
	Vertical Leg		10.8750	6.3750	69.3281	47.6348	82.9850	74890.7987	74938.4335
3	Web Plate		120.1200	89.3600	10733.9232	305576.0548	0.0000	0.0000	305576.0548
4	Cover Plate Top		44.0000	177.7200	7819.6800	14.6667	88.3600	343529.5424	343544.2091
	Cover Plate Bottom		44.0000	1.0000	44.0000	14.6667	88.3600	343529.5424	343544.2091
<b>Total</b>			<b>253.87</b>		<b>22685.82</b>	<b>305701.78</b>		<b>1018434.05</b>	<b>1324135.83</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 89.3600 in	S <sub>top</sub> = 14817.99 in <sup>3</sup>			y-bar = 89.3600 in	S <sub>top</sub> = 14817.99 in <sup>3</sup>		
I <sub>x</sub> = 1324135.83 in <sup>4</sup>	S <sub>bottom</sub> = 14817.99 in <sup>3</sup>			I <sub>x</sub> = 1324135.83 in <sup>4</sup>	S <sub>bottom</sub> = 14817.99 in <sup>3</sup>		
C <sub>top</sub> = 89.3600 in	A = 253.8700 in <sup>2</sup>			C <sub>top</sub> = 89.3600 in	A = 253.8700 in <sup>2</sup>		
C <sub>bottom</sub> = 89.3600 in	r <sub>x</sub> = 72.2205 in			C <sub>bottom</sub> = 89.3600 in	r <sub>x</sub> = 72.2205 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
(Left)	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
(Right)	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
(Left)	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
(Right)	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		120.1200	11.0000	1321.3200	4.7313	0.0000	0.0000	4.7313
4	Cover Plate		88.0000	11.0000	968.0000	3549.3333	0.0000	0.0000	3549.3333
<b>Total</b>			<b>253.87</b>		<b>2792.57</b>	<b>3683.08</b>		<b>464.07</b>	<b>4147.16</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 377.01 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 377.01 in <sup>3</sup>		
I <sub>y</sub> = 4147.16 in <sup>4</sup>	S <sub>left</sub> = 377.01 in <sup>3</sup>			I <sub>y</sub> = 4147.16 in <sup>4</sup>	S <sub>left</sub> = 377.01 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 253.8700 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 253.8700 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0418 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0418 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

**Top Angles:**

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

**Bottom Angles:**

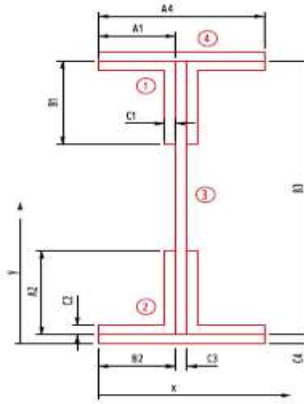
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

**Web Plate:**

$C_3 = 0.7500$  in  
 $B_3 = 189.12$  in

**Cover Plate:**

$C_4 = 2.6250$  in  
 $A_4 = 22.0000$  in



**Section 4**

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg	12.0000	191.3700	2296.4400	0.5625	94.1850	106449.7707	106450.3332
	Vertical Leg	10.8750	187.3700	2037.6488	47.6348	90.1850	88450.0097	88497.6445
2	Horizontal Leg	12.0000	3.0000	36.0000	0.5625	94.1850	106449.7707	106450.3332
	Vertical Leg	10.8750	7.0000	76.1250	47.6348	90.1850	88450.0097	88497.6445
3	Web Plate	141.8400	97.1850	13784.7204	422758.5454	0.0000	0.0000	422758.5454
4	Cover Plate Top	57.7500	193.0575	11149.0706	33.1611	95.8725	530811.2188	530844.3799
	Cover Plate Bottom	57.7500	1.3125	75.7969	33.1611	95.8725	530811.2188	530844.3799
<b>Total</b>		<b>303.09</b>		<b>29455.80</b>	<b>422921.26</b>		<b>1451422.00</b>	<b>1874343.26</b>
Section Losses		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 97.1850 in	S <sub>top</sub> = 19286.34 in <sup>3</sup>			y-bar = 97.1850 in	S <sub>top</sub> = 19286.34 in <sup>3</sup>		
I <sub>x</sub> = 1874343.26 in <sup>4</sup>	S <sub>bott.</sub> = 19286.34 in <sup>3</sup>			I <sub>x</sub> = 1874343.26 in <sup>4</sup>	S <sub>bott.</sub> = 19286.34 in <sup>3</sup>		
C <sub>top</sub> = 97.1850 in	A = 303.0900 in <sup>2</sup>			C <sub>top</sub> = 97.1850 in	A = 303.0900 in <sup>2</sup>		
C <sub>bottom</sub> = 97.1850 in	r <sub>x</sub> = 78.6391 in			C <sub>bottom</sub> = 97.1850 in	r <sub>x</sub> = 78.6391 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
(Left)	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
(Right)	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
(Left)	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
(Right)	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		141.8400	11.0000	1560.2400	6.6488	0.0000	0.0000	6.6488
4	Cover Plate		115.5000	11.0000	1270.5000	4658.5000	0.0000	0.0000	4658.5000
<b>Total</b>			<b>303.09</b>		<b>3333.99</b>	<b>4794.17</b>		<b>471.61</b>	<b>5265.78</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 478.71 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 478.71 in <sup>3</sup>		
I <sub>y</sub> = 5265.78 in <sup>4</sup>	S <sub>left</sub> = 478.71 in <sup>3</sup>			I <sub>y</sub> = 5265.78 in <sup>4</sup>	S <sub>left</sub> = 478.71 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 303.0900 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 303.0900 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.1682 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.1682 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

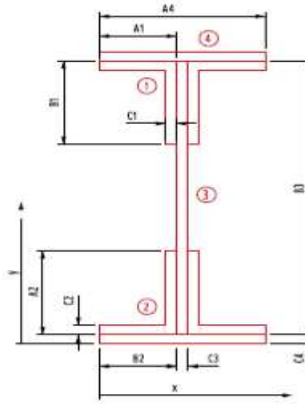
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 189.12$  in

Cover Plate:

$C_4 = 2.6250$  in  
 $A_4 = 22.0000$  in



**Section 5**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	191.3700	2296.4400	0.5625	94.1850	106449.7707	106450.3332
	Vertical Leg		10.8750	187.3700	2037.6488	47.6348	90.1850	88450.0097	88497.6445
2	Horizontal Leg		12.0000	3.0000	36.0000	0.5625	94.1850	106449.7707	106450.3332
	Vertical Leg		10.8750	7.0000	76.1250	47.6348	90.1850	88450.0097	88497.6445
3	Web Plate		141.8400	97.1850	13784.7204	422758.5454	0.0000	0.0000	422758.5454
4	Cover Plate Top		57.7500	193.0575	11149.0706	33.1611	95.8725	530811.2188	530844.3799
	Cover Plate Bottom		57.7500	1.3125	75.7969	33.1611	95.8725	530811.2188	530844.3799
<b>Total</b>			<b>303.09</b>		<b>29455.80</b>	<b>422921.26</b>		<b>1451422.00</b>	<b>1874343.26</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 97.1850 in	$S_{top} = 19286.34 \text{ in}^3$			y-bar = 97.1850 in	$S_{top} = 19286.34 \text{ in}^3$		
$I_x = 1874343.26 \text{ in}^4$	$S_{bott.} = 19286.34 \text{ in}^3$			$I_x = 1874343.26 \text{ in}^4$	$S_{bott.} = 19286.34 \text{ in}^3$		
$C_{top} = 97.1850 \text{ in}$	$A = 303.0900 \text{ in}^2$			$C_{top} = 97.1850 \text{ in}$	$A = 303.0900 \text{ in}^2$		
$C_{bottom} = 97.1850 \text{ in}$	$r_x = 78.6391 \text{ in}$			$C_{bottom} = 97.1850 \text{ in}$	$r_x = 78.6391 \text{ in}$		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	$I_o$	d	$Ad^2$	$I_{y,gross}$
Element	Description		( $\text{in}^2$ )	(in)	( $\text{in}^3$ )	( $\text{in}^4$ )	(in)	( $\text{in}^4$ )	( $\text{in}^4$ )
1	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
(Left)	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
(Right)	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
(Left)	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
(Right)	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		141.8400	11.0000	1560.2400	6.6488	0.0000	0.0000	6.6488
4	Cover Plate		115.5000	11.0000	1270.5000	4658.5000	0.0000	0.0000	4658.5000
<b>Total</b>			<b>303.09</b>		<b>3333.99</b>	<b>4794.17</b>		<b>471.61</b>	<b>5265.78</b>
Section Losses			A	x	Ax	$I_o$	d	$Ad^2$	$I_{y,loss}$
Loss #	b (in)	h (in)	( $\text{in}^2$ )	(in)	( $\text{in}^3$ )	( $\text{in}^4$ )	(in)	( $\text{in}^4$ )	( $\text{in}^4$ )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	$S_{right} = 478.71 \text{ in}^3$			x-bar = 11.0000 in	$S_{right} = 478.71 \text{ in}^3$		
$I_y = 5265.78 \text{ in}^4$	$S_{left} = 478.71 \text{ in}^3$			$I_y = 5265.78 \text{ in}^4$	$S_{left} = 478.71 \text{ in}^3$		
$C_{right} = 11.0000 \text{ in}$	$A = 303.0900 \text{ in}^2$			$C_{right} = 11.0000 \text{ in}$	$A = 303.0900 \text{ in}^2$		
$C_{left} = 11.0000 \text{ in}$	$r_y = 4.1682 \text{ in}$			$C_{left} = 11.0000 \text{ in}$	$r_y = 4.1682 \text{ in}$		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

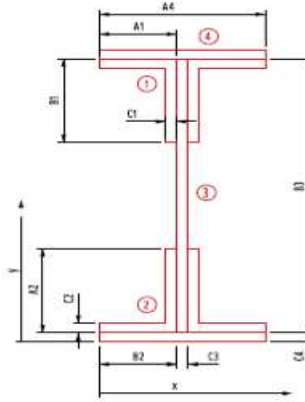
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 174.72$  in

Cover Plate:

$C_4 = 2.0000$  in  
 $A_4 = 22.0000$  in



**Section 6**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	176.3450	2116.1400	0.5625	86.9850	90796.6827	90797.2452
	Vertical Leg		10.8750	172.3450	1874.2519	47.6348	82.9850	74890.7987	74938.4335
2	Horizontal Leg		12.0000	2.3750	28.5000	0.5625	86.9850	90796.6827	90797.2452
	Vertical Leg		10.8750	6.3750	69.3281	47.6348	82.9850	74890.7987	74938.4335
3	Web Plate		120.1200	89.3600	10733.9232	305576.0548	0.0000	0.0000	305576.0548
4	Cover Plate Top		44.0000	177.7200	7819.6800	14.6667	88.3600	343529.5424	343544.2091
	Cover Plate Bottom		44.0000	1.0000	44.0000	14.6667	88.3600	343529.5424	343544.2091
<b>Total</b>			<b>253.87</b>		<b>22685.82</b>	<b>305701.78</b>		<b>1018434.05</b>	<b>1324135.83</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 89.3600 in	S <sub>top</sub> = 14817.99 in <sup>3</sup>			y-bar = 89.3600 in	S <sub>top</sub> = 14817.99 in <sup>3</sup>		
I <sub>x</sub> = 1324135.83 in <sup>4</sup>	S <sub>bottom</sub> = 14817.99 in <sup>3</sup>			I <sub>x</sub> = 1324135.83 in <sup>4</sup>	S <sub>bottom</sub> = 14817.99 in <sup>3</sup>		
C <sub>top</sub> = 89.3600 in	A = 253.8700 in <sup>2</sup>			C <sub>top</sub> = 89.3600 in	A = 253.8700 in <sup>2</sup>		
C <sub>bottom</sub> = 89.3600 in	r <sub>x</sub> = 72.2205 in			C <sub>bottom</sub> = 89.3600 in	r <sub>x</sub> = 72.2205 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
(Left)	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
(Right)	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
(Left)	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
(Right)	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		120.1200	11.0000	1321.3200	4.7313	0.0000	0.0000	4.7313
4	Cover Plate		88.0000	11.0000	968.0000	3549.3333	0.0000	0.0000	3549.3333
<b>Total</b>			<b>253.87</b>		<b>2792.57</b>	<b>3683.08</b>		<b>464.07</b>	<b>4147.16</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 377.01 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 377.01 in <sup>3</sup>		
I <sub>y</sub> = 4147.16 in <sup>4</sup>	S <sub>left</sub> = 377.01 in <sup>3</sup>			I <sub>y</sub> = 4147.16 in <sup>4</sup>	S <sub>left</sub> = 377.01 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 253.8700 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 253.8700 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0418 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0418 in		



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

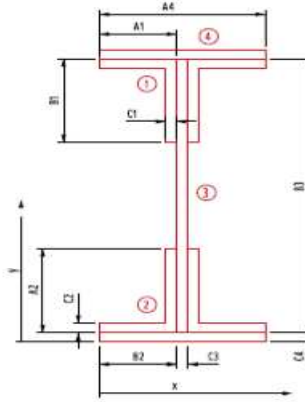
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 163.20$  in

Cover Plate:

$C_4 = 1.3750$  in  
 $A_4 = 22.0000$  in



Section 7

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	164.2000	1970.4000	0.5625	81.2250	79170.0075	79170.5700
	Vertical Leg		10.8750	160.2000	1742.1750	47.6348	77.2250	64855.2443	64902.8791
2	Horizontal Leg		12.0000	1.7500	21.0000	0.5625	81.2250	79170.0075	79170.5700
	Vertical Leg		10.8750	5.7500	62.5313	47.6348	77.2250	64855.2443	64902.8791
3	Web Plate		102.0000	82.9750	8463.4500	226391.0400	0.0000	0.0000	226391.0400
4	Cover Plate Top		30.2500	165.2625	4999.1906	4.7660	82.2875	204829.7879	204834.5538
	Cover Plate Bottom		30.2500	0.6875	20.7969	4.7660	82.2875	204829.7879	204834.5538
<b>Total</b>			<b>208.25</b>		<b>17279.54</b>	<b>226496.97</b>		<b>697710.08</b>	<b>924207.05</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.1250	161.7000	-20.2125	82.9750	-1677.1322	-44041.1678	0.0000	0.0000	-44041.1678
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-20.21</b>		<b>-1677.13</b>	<b>-44041.17</b>		<b>0.00</b>	<b>-44041.17</b>


 Made By CTG  
 Checked By DBH

 Date 3/8/2012  
 Date 3/10/2012

 Job No. P402110046  
 Sheet No. \_\_\_\_\_

 Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	82.9750	in	S <sub>top</sub> = 11138.38 in <sup>3</sup>	y-bar =	82.9750	in	S <sub>top</sub> = 10607.60 in <sup>3</sup>
I <sub>x</sub> =	924207.05	in <sup>4</sup>	S <sub>bott.</sub> = 11138.38 in <sup>3</sup>	I <sub>x</sub> =	880165.88	in <sup>4</sup>	S <sub>bott.</sub> = 10607.60 in <sup>3</sup>
C <sub>top</sub> =	82.9750	in	A = 208.2500 in <sup>2</sup>	C <sub>top</sub> =	82.9750	in	A = 188.0375 in <sup>2</sup>
C <sub>bottom</sub> =	82.9750	in	r <sub>x</sub> = 66.6181 in	C <sub>bottom</sub> =	82.9750	in	r <sub>x</sub> = 68.4164 in

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
(Left)	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
(Right)	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
(Left)	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
(Right)	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		102.0000	11.0000	1122.0000	3.3203	0.0000	0.0000	3.3203
4	Cover Plate		60.5000	11.0000	665.5000	2440.1667	0.0000	0.0000	2440.1667
<b>Total</b>			<b>208.25</b>		<b>2290.75</b>	<b>2572.51</b>		<b>456.62</b>	<b>3029.13</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	161.7000	0.1250	-20.2125	10.7500	-217.2844	-0.0263	0.2769	-1.5495	-1.5758
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-20.21</b>		<b>-217.28</b>	<b>-0.03</b>		<b>-1.55</b>	<b>-1.58</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000	in	S <sub>right</sub> = 275.38 in <sup>3</sup>	x-bar =	11.0269	in	S <sub>right</sub> = 275.91 in <sup>3</sup>
I <sub>y</sub> =	3029.13	in <sup>4</sup>	S <sub>left</sub> = 275.38 in <sup>3</sup>	I <sub>y</sub> =	3027.55	in <sup>4</sup>	S <sub>left</sub> = 274.56 in <sup>3</sup>
C <sub>right</sub> =	11.0000	in	A = 208.2500 in <sup>2</sup>	C <sub>right</sub> =	10.9731	in	A = 188.0375 in <sup>2</sup>
C <sub>left</sub> =	11.0000	in	r <sub>y</sub> = 3.8139 in	C <sub>left</sub> =	11.0269	in	r <sub>y</sub> = 4.0126 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

**Top Angles:**

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

**Bottom Angles:**

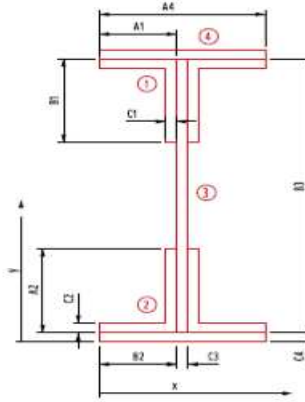
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

**Web Plate:**

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

**Cover Plate:**

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 8**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

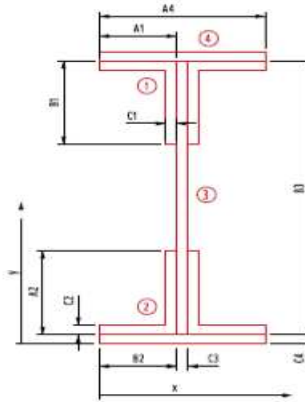
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 9**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>		
I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>			I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

**Top Angles:**

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

**Bottom Angles:**

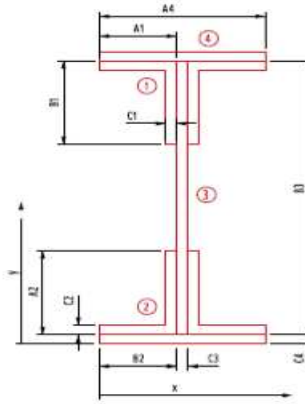
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

**Web Plate:**

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

**Cover Plate:**

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 10**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>		
I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>			I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

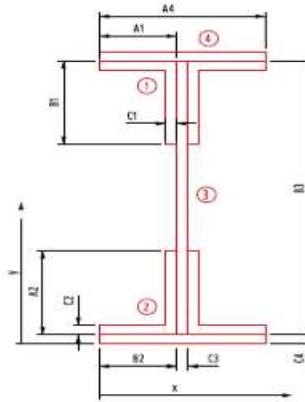
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 146.52$  in

Cover Plate:

$C_4 = 3.0000$  in  
 $A_4 = 22.0000$  in



**Section 11**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	149.1450	1789.7400	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	145.1450	1578.4519	47.6348	68.8850	51603.4326	51651.0673
2	Horizontal Leg		12.0000	3.3750	40.5000	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	7.3750	80.2031	47.6348	68.8850	51603.4326	51651.0673
3	Web Plate		91.5750	76.2600	6983.5095	163828.5175	0.0000	0.0000	163828.5175
4	Cover Plate Top		66.0000	151.0200	9967.3200	49.5000	74.7600	368877.8016	368927.3016
	Cover Plate Bottom		66.0000	1.5000	99.0000	49.5000	74.7600	368877.8016	368927.3016
<b>Total</b>			<b>269.33</b>		<b>20538.72</b>	<b>164023.91</b>		<b>968455.83</b>	<b>1132479.74</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>			y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>		
I <sub>x</sub> = 1132479.74 in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>			I <sub>x</sub> = 1132479.74 in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>		
C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>			C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>		
C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in			C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		91.5750	11.0000	1007.3250	2.9810	0.0000	0.0000	2.9810
4	Cover Plate		132.0000	11.0000	1452.0000	5324.0000	0.0000	0.0000	5324.0000
<b>Total</b>			<b>269.33</b>		<b>2962.58</b>	<b>5456.00</b>		<b>456.62</b>	<b>5912.62</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 537.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 537.51 in <sup>3</sup>		
I <sub>y</sub> = 5912.62 in <sup>4</sup>	S <sub>left</sub> = 537.51 in <sup>3</sup>			I <sub>y</sub> = 5912.62 in <sup>4</sup>	S <sub>left</sub> = 537.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 269.3250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 269.3250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6855 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6855 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

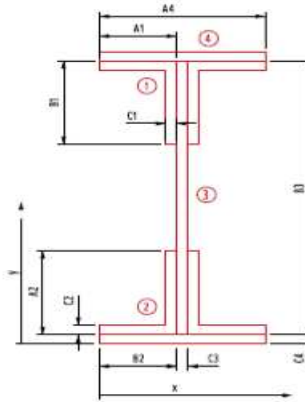
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 147.48$  in

Cover Plate:

$C_4 = 3.5000$  in  
 $A_4 = 22.0000$  in



**Section 12**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	150.6050	1807.2600	0.5625	73.3650	64589.0787	64589.6412
	Vertical Leg		10.8750	146.6050	1594.3294	47.6348	69.3650	52325.0976	52372.7323
2	Horizontal Leg		12.0000	3.8750	46.5000	0.5625	73.3650	64589.0787	64589.6412
	Vertical Leg		10.8750	7.8750	85.6406	47.6348	69.3650	52325.0976	52372.7323
3	Web Plate		92.1750	77.2400	7119.5970	167069.8790	0.0000	0.0000	167069.8790
4	Cover Plate Top		77.0000	152.7300	11760.2100	78.6042	75.4900	438802.9877	438881.5919
	Cover Plate Bottom		77.0000	1.7500	134.7500	78.6042	75.4900	438802.9877	438881.5919
<b>Total</b>			<b>291.93</b>		<b>22548.29</b>	<b>167323.48</b>		<b>1111434.33</b>	<b>1278757.81</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 77.2400 in	S <sub>top</sub> = 16555.64 in <sup>3</sup>			y-bar = 77.2400 in	S <sub>top</sub> = 16555.64 in <sup>3</sup>		
I <sub>x</sub> = 1278757.81 in <sup>4</sup>	S <sub>bottom</sub> = 16555.64 in <sup>3</sup>			I <sub>x</sub> = 1278757.81 in <sup>4</sup>	S <sub>bottom</sub> = 16555.64 in <sup>3</sup>		
C <sub>top</sub> = 77.2400 in	A = 291.9250 in <sup>2</sup>			C <sub>top</sub> = 77.2400 in	A = 291.9250 in <sup>2</sup>		
C <sub>bottom</sub> = 77.2400 in	r <sub>x</sub> = 66.1848 in			C <sub>bottom</sub> = 77.2400 in	r <sub>x</sub> = 66.1848 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		92.1750	11.0000	1013.9250	3.0005	0.0000	0.0000	3.0005
4	Cover Plate		154.0000	11.0000	1694.0000	6211.3333	0.0000	0.0000	6211.3333
<b>Total</b>			<b>291.93</b>		<b>3211.18</b>	<b>6343.35</b>		<b>456.62</b>	<b>6799.98</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 618.18 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 618.18 in <sup>3</sup>		
I <sub>y</sub> = 6799.98 in <sup>4</sup>	S <sub>left</sub> = 618.18 in <sup>3</sup>			I <sub>y</sub> = 6799.98 in <sup>4</sup>	S <sub>left</sub> = 618.18 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 291.9250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 291.9250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.8263 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.8263 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

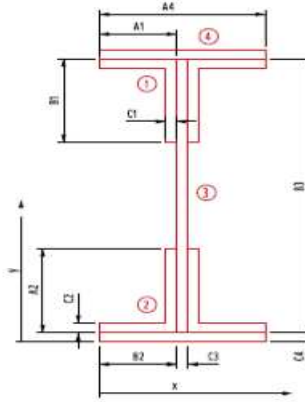
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 146.52$  in

Cover Plate:

$C_4 = 3.0000$  in  
 $A_4 = 22.0000$  in



**Section 13**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	149.1450	1789.7400	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	145.1450	1578.4519	47.6348	68.8850	51603.4326	51651.0673
2	Horizontal Leg		12.0000	3.3750	40.5000	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	7.3750	80.2031	47.6348	68.8850	51603.4326	51651.0673
3	Web Plate		91.5750	76.2600	6983.5095	163828.5175	0.0000	0.0000	163828.5175
4	Cover Plate Top		66.0000	151.0200	9967.3200	49.5000	74.7600	368877.8016	368927.3016
	Cover Plate Bottom		66.0000	1.5000	99.0000	49.5000	74.7600	368877.8016	368927.3016
<b>Total</b>			<b>269.33</b>		<b>20538.72</b>	<b>164023.91</b>		<b>968455.83</b>	<b>1132479.74</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>			y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>		
I <sub>x</sub> = 1132479.74 in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>			I <sub>x</sub> = 1132479.74 in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>		
C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>			C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>		
C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in			C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		91.5750	11.0000	1007.3250	2.9810	0.0000	0.0000	2.9810
4	Cover Plate		132.0000	11.0000	1452.0000	5324.0000	0.0000	0.0000	5324.0000
<b>Total</b>			<b>269.33</b>		<b>2962.58</b>	<b>5456.00</b>		<b>456.62</b>	<b>5912.62</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 537.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 537.51 in <sup>3</sup>		
I <sub>y</sub> = 5912.62 in <sup>4</sup>	S <sub>left</sub> = 537.51 in <sup>3</sup>			I <sub>y</sub> = 5912.62 in <sup>4</sup>	S <sub>left</sub> = 537.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 269.3250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 269.3250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6855 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6855 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

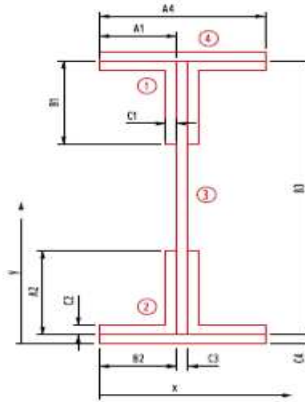
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 14**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>		
I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>			I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

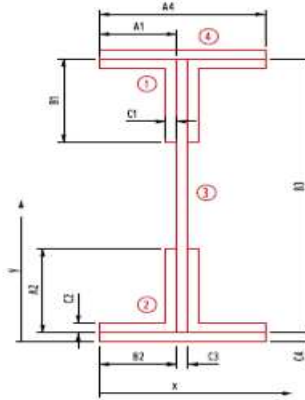
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 15**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 295.51 in <sup>3</sup>		
I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>			I <sub>y</sub> = 3250.56 in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 201.4500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0169 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

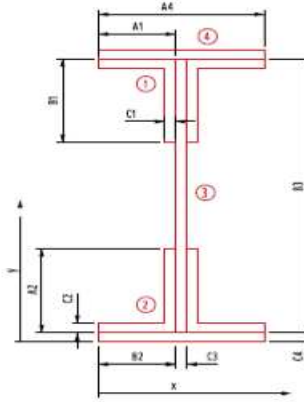
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 16**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

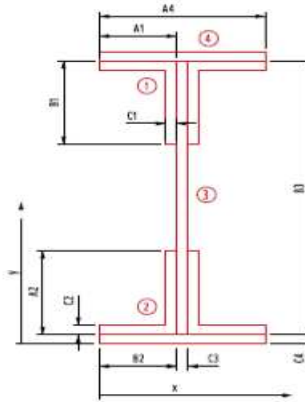
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 174.12$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 17**

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg	12.0000	175.2450	2102.9400	0.5625	86.6850	90171.4707	90172.0332
	Vertical Leg	10.8750	171.2450	1862.2894	47.6348	82.6850	74350.3003	74397.9351
2	Horizontal Leg	12.0000	1.8750	22.5000	0.5625	86.6850	90171.4707	90172.0332
	Vertical Leg	10.8750	5.8750	63.8906	47.6348	82.6850	74350.3003	74397.9351
3	Web Plate	119.7075	88.5600	10601.2962	302438.7482	0.0000	0.0000	302438.7482
4	Cover Plate Top	33.0000	176.3700	5820.2100	6.1875	87.8100	254449.6713	254455.8588
	Cover Plate Bottom	33.0000	0.7500	24.7500	6.1875	87.8100	254449.6713	254455.8588
<b>Total</b>		<b>231.46</b>		<b>20497.88</b>	<b>302547.52</b>		<b>837942.88</b>	<b>1140490.40</b>
Section Losses		A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 88.5600 in	S <sub>top</sub> = 12878.17 in <sup>3</sup>			y-bar = 88.5600 in	S <sub>top</sub> = 12878.17 in <sup>3</sup>		
I <sub>x</sub> = 1140490.40 in <sup>4</sup>	S <sub>bottom</sub> = 12878.17 in <sup>3</sup>			I <sub>x</sub> = 1140490.40 in <sup>4</sup>	S <sub>bottom</sub> = 12878.17 in <sup>3</sup>		
C <sub>top</sub> = 88.5600 in	A = 231.4575 in <sup>2</sup>			C <sub>top</sub> = 88.5600 in	A = 231.4575 in <sup>2</sup>		
C <sub>bottom</sub> = 88.5600 in	r <sub>x</sub> = 70.1956 in			C <sub>bottom</sub> = 88.5600 in	r <sub>x</sub> = 70.1956 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
(Left)	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
(Right)	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
(Left)	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
(Right)	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		119.7075	11.0000	1316.7825	4.7150	0.0000	0.0000	4.7150
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>231.46</b>		<b>2546.03</b>	<b>2795.73</b>		<b>464.07</b>	<b>3259.81</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 296.35 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 296.35 in <sup>3</sup>		
I <sub>y</sub> = 3259.81 in <sup>4</sup>	S <sub>left</sub> = 296.35 in <sup>3</sup>			I <sub>y</sub> = 3259.81 in <sup>4</sup>	S <sub>left</sub> = 296.35 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 231.4575 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 231.4575 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.7528 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.7528 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

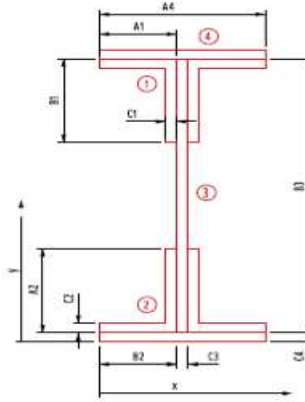
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 188.64$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



Section 18

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	190.5150	2286.1800	0.5625	93.9450	105907.9563	105908.5188
	Vertical Leg		10.8750	186.5150	2028.3506	47.6348	89.9450	87979.8704	88027.5052
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	93.9450	105907.9563	105908.5188
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	89.9450	87979.8704	88027.5052
3	Web Plate		141.4800	96.5700	13662.7236	419547.7348	0.0000	0.0000	419547.7348
4	Cover Plate Top		49.5000	192.0150	9504.7425	20.8828	95.4450	450932.5272	450953.4101
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	95.4450	450932.5272	450953.4101
<b>Total</b>			<b>286.23</b>		<b>27641.23</b>	<b>419685.89</b>		<b>1289640.71</b>	<b>1709326.60</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 96.5700 in	S <sub>top</sub> = 17700.39 in <sup>3</sup>			y-bar = 96.5700 in	S <sub>top</sub> = 17700.39 in <sup>3</sup>		
I <sub>x</sub> = 1709326.60 in <sup>4</sup>	S <sub>bottom</sub> = 17700.39 in <sup>3</sup>			I <sub>x</sub> = 1709326.60 in <sup>4</sup>	S <sub>bottom</sub> = 17700.39 in <sup>3</sup>		
C <sub>top</sub> = 96.5700 in	A = 286.2300 in <sup>2</sup>			C <sub>top</sub> = 96.5700 in	A = 286.2300 in <sup>2</sup>		
C <sub>bottom</sub> = 96.5700 in	r <sub>x</sub> = 77.2778 in			C <sub>bottom</sub> = 96.5700 in	r <sub>x</sub> = 77.2778 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		141.4800	11.0000	1556.2800	6.6319	0.0000	0.0000	6.6319
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>286.23</b>		<b>3148.53</b>	<b>4128.65</b>		<b>471.61</b>	<b>4600.26</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 418.21 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 418.21 in <sup>3</sup>		
I <sub>y</sub> = 4600.26 in <sup>4</sup>	S <sub>left</sub> = 418.21 in <sup>3</sup>			I <sub>y</sub> = 4600.26 in <sup>4</sup>	S <sub>left</sub> = 418.21 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 286.2300 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 286.2300 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0090 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0090 in		



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

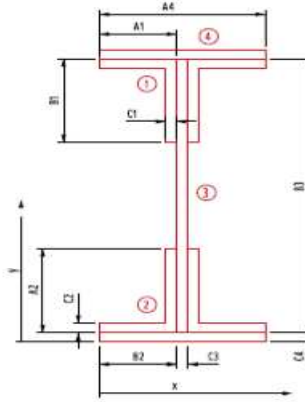
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 188.64$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 19**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	190.5150	2286.1800	0.5625	93.9450	105907.9563	105908.5188
	Vertical Leg		10.8750	186.5150	2028.3506	47.6348	89.9450	87979.8704	88027.5052
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	93.9450	105907.9563	105908.5188
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	89.9450	87979.8704	88027.5052
3	Web Plate		141.4800	96.5700	13662.7236	419547.7348	0.0000	0.0000	419547.7348
4	Cover Plate Top		49.5000	192.0150	9504.7425	20.8828	95.4450	450932.5272	450953.4101
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	95.4450	450932.5272	450953.4101
<b>Total</b>			<b>286.23</b>		<b>27641.23</b>	<b>419685.89</b>		<b>1289640.71</b>	<b>1709326.60</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.1250	187.1400	-23.3925	96.5700	-2259.0137	-68269.8019	0.0000	0.0000	-68269.8019
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-23.39</b>		<b>-2259.01</b>	<b>-68269.80</b>		<b>0.00</b>	<b>-68269.80</b>



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 96.5700 in	S <sub>top</sub> = 17700.39 in <sup>3</sup>			y-bar = 96.5700 in	S <sub>top</sub> = 16993.44 in <sup>3</sup>		
I <sub>x</sub> = 1709326.60 in <sup>4</sup>	S <sub>bottom</sub> = 17700.39 in <sup>3</sup>			I <sub>x</sub> = 1641056.80 in <sup>4</sup>	S <sub>bottom</sub> = 16993.44 in <sup>3</sup>		
C <sub>top</sub> = 96.5700 in	A = 286.2300 in <sup>2</sup>			C <sub>top</sub> = 96.5700 in	A = 262.8375 in <sup>2</sup>		
C <sub>bottom</sub> = 96.5700 in	r <sub>x</sub> = 77.2778 in			C <sub>bottom</sub> = 96.5700 in	r <sub>x</sub> = 79.0166 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2 (Left)	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2 (Right)	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		141.4800	11.0000	1556.2800	6.6319	0.0000	0.0000	6.6319
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>286.23</b>		<b>3148.53</b>	<b>4128.65</b>		<b>471.61</b>	<b>4600.26</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	187.1400	0.1250	-23.3925	10.6875	-250.0073	-0.0305	0.3403	-2.7091	-2.7396
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-23.39</b>		<b>-250.01</b>	<b>-0.03</b>		<b>-2.71</b>	<b>-2.74</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 418.21 in <sup>3</sup>			x-bar = 11.0278 in	S <sub>right</sub> = 419.02 in <sup>3</sup>		
I <sub>y</sub> = 4600.26 in <sup>4</sup>	S <sub>left</sub> = 418.21 in <sup>3</sup>			I <sub>y</sub> = 4597.52 in <sup>4</sup>	S <sub>left</sub> = 416.90 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 286.2300 in <sup>2</sup>			C <sub>right</sub> = 10.9722 in	A = 262.8375 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.0090 in			C <sub>left</sub> = 11.0278 in	r <sub>y</sub> = 4.1823 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

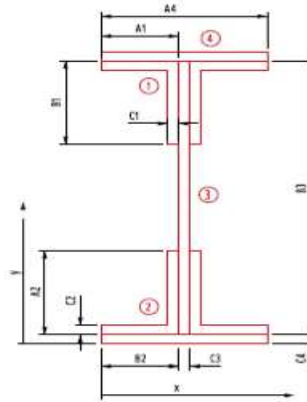
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 165.60$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 20**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	166.7250	2000.7000	0.5625	82.4250	81526.5675	81527.1300
	Vertical Leg		10.8750	162.7250	1769.6344	47.6348	78.4250	66886.4768	66934.1116
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	82.4250	81526.5675	81527.1300
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	78.4250	66886.4768	66934.1116
3	Web Plate		113.8500	84.3000	9597.5550	260179.1280	0.0000	0.0000	260179.1280
4	Cover Plate Top		33.0000	167.8500	5539.0500	6.1875	83.5500	230359.8825	230366.0700
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	83.5500	230359.8825	230366.0700
<b>Total</b>			<b>225.60</b>		<b>19018.08</b>	<b>260287.90</b>		<b>757545.85</b>	<b>1017833.75</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 84.3000 in	S <sub>top</sub> = 12073.95 in <sup>3</sup>			y-bar = 84.3000 in	S <sub>top</sub> = 12073.95 in <sup>3</sup>		
I <sub>x</sub> = 1017833.75 in <sup>4</sup>	S <sub>bott.</sub> = 12073.95 in <sup>3</sup>			I <sub>x</sub> = 1017833.75 in <sup>4</sup>	S <sub>bott.</sub> = 12073.95 in <sup>3</sup>		
C <sub>top</sub> = 84.3000 in	A = 225.6000 in <sup>2</sup>			C <sub>top</sub> = 84.3000 in	A = 225.6000 in <sup>2</sup>		
C <sub>bottom</sub> = 84.3000 in	r <sub>x</sub> = 67.1690 in			C <sub>bottom</sub> = 84.3000 in	r <sub>x</sub> = 67.1690 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
(Left)	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
1	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
(Right)	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
2	Horizontal Leg		6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090
(Left)	Vertical Leg		5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639
2	Horizontal Leg		6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090
(Right)	Vertical Leg		5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639
3	Web Plate		113.8500	11.0000	1252.3500	4.4843	0.0000	0.0000	4.4843
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>225.60</b>		<b>2481.60</b>	<b>2795.50</b>		<b>464.07</b>	<b>3259.58</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 296.33 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 296.33 in <sup>3</sup>		
I <sub>y</sub> = 3259.58 in <sup>4</sup>	S <sub>left</sub> = 296.33 in <sup>3</sup>			I <sub>y</sub> = 3259.58 in <sup>4</sup>	S <sub>left</sub> = 296.33 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 225.6000 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 225.6000 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8011 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.8011 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

**Element Dimensions (without Section Losses):**

**Top Angles:**

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

**Bottom Angles:**

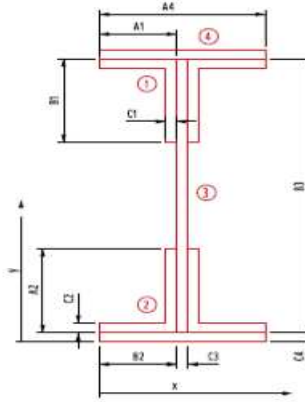
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

**Web Plate:**

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

**Cover Plate:**

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



Section 21

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		( $in^2$ )	(in)	( $in^3$ )	( $in^4$ )	(in)	( $in^4$ )	( $in^4$ )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	( $in^2$ )	(in)	( $in^3$ )	( $in^4$ )	(in)	( $in^4$ )	( $in^4$ )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

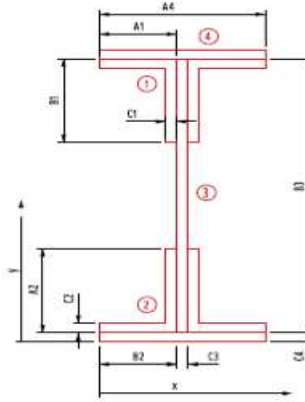
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 22**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

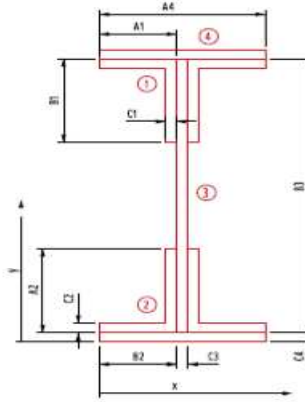
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 175.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 23**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	175.4550	2105.4600	0.5625	87.1650	91172.8467	91173.4092
	Vertical Leg		10.8750	171.4550	1864.5731	47.6348	83.1650	75216.0373	75263.6721
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	87.1650	91172.8467	91173.4092
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	83.1650	75216.0373	75263.6721
3	Web Plate		109.4250	88.2900	9661.1333	279517.1021	0.0000	0.0000	279517.1021
4	Cover Plate Top		16.5000	176.2050	2907.3825	0.7734	87.9150	127529.2792	127530.0527
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	87.9150	127529.2792	127530.0527
<b>Total</b>			<b>188.18</b>		<b>16613.97</b>	<b>279615.04</b>		<b>587836.33</b>	<b>867451.37</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	88.2900	in	S <sub>top</sub> = 9825.02 in <sup>3</sup>	y-bar =	88.2900	in	S <sub>top</sub> = 9825.02 in <sup>3</sup>
I <sub>x</sub> =	867451.37	in <sup>4</sup>	S <sub>bottom</sub> = 9825.02 in <sup>3</sup>	I <sub>x</sub> =	867451.37	in <sup>4</sup>	S <sub>bottom</sub> = 9825.02 in <sup>3</sup>
C <sub>top</sub> =	88.2900	in	A = 188.1750 in <sup>2</sup>	C <sub>top</sub> =	88.2900	in	A = 188.1750 in <sup>2</sup>
C <sub>bottom</sub> =	88.2900	in	r <sub>x</sub> = 67.8956 in	C <sub>bottom</sub> =	88.2900	in	r <sub>x</sub> = 67.8956 in

#### Y-Axis Section Properties:

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
(Left)	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
(Right)	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
(Left)	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
(Right)	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		109.4250	11.0000	1203.6750	3.5620	0.0000	0.0000	3.5620
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>188.18</b>		<b>2069.93</b>	<b>1463.58</b>		<b>456.62</b>	<b>1920.21</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000	in	S <sub>right</sub> = 174.56 in <sup>3</sup>	x-bar =	11.0000	in	S <sub>right</sub> = 174.56 in <sup>3</sup>
I <sub>y</sub> =	1920.21	in <sup>4</sup>	S <sub>left</sub> = 174.56 in <sup>3</sup>	I <sub>y</sub> =	1920.21	in <sup>4</sup>	S <sub>left</sub> = 174.56 in <sup>3</sup>
C <sub>right</sub> =	11.0000	in	A = 188.1750 in <sup>2</sup>	C <sub>right</sub> =	11.0000	in	A = 188.1750 in <sup>2</sup>
C <sub>left</sub> =	11.0000	in	r <sub>y</sub> = 3.1944 in	C <sub>left</sub> =	11.0000	in	r <sub>y</sub> = 3.1944 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

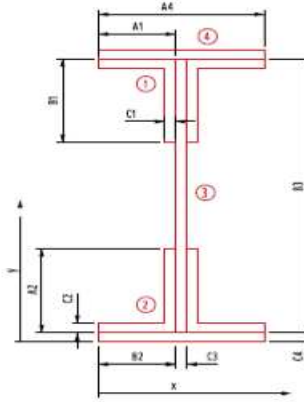
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 184.08$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 24**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	185.2050	2222.4600	0.5625	91.6650	100829.6667	100830.2292
	Vertical Leg		10.8750	181.2050	1970.6044	47.6348	87.6650	83576.0304	83623.6652
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	91.6650	100829.6667	100830.2292
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	87.6650	83576.0304	83623.6652
3	Web Plate		138.0600	93.5400	12914.1324	389852.0608	0.0000	0.0000	389852.0608
4	Cover Plate Top		33.0000	186.3300	6148.8900	6.1875	92.7900	284129.4753	284135.6628
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	92.7900	284129.4753	284135.6628
<b>Total</b>			<b>249.81</b>		<b>23367.23</b>	<b>389960.83</b>		<b>937070.34</b>	<b>1327031.18</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 93.5400 in	S <sub>top</sub> = 14186.78 in <sup>3</sup>			y-bar = 93.5400 in	S <sub>top</sub> = 14186.78 in <sup>3</sup>		
I <sub>x</sub> = 1327031.18 in <sup>4</sup>	S <sub>bottom</sub> = 14186.78 in <sup>3</sup>			I <sub>x</sub> = 1327031.18 in <sup>4</sup>	S <sub>bottom</sub> = 14186.78 in <sup>3</sup>		
C <sub>top</sub> = 93.5400 in	A = 249.8100 in <sup>2</sup>			C <sub>top</sub> = 93.5400 in	A = 249.8100 in <sup>2</sup>		
C <sub>bottom</sub> = 93.5400 in	r <sub>x</sub> = 72.8846 in			C <sub>bottom</sub> = 93.5400 in	r <sub>x</sub> = 72.8846 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
(Left)	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
(Right)	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
(Left)	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
(Right)	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		138.0600	11.0000	1518.6600	6.4716	0.0000	0.0000	6.4716
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>249.81</b>		<b>2747.91</b>	<b>2797.49</b>		<b>471.61</b>	<b>3269.10</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 297.19 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 297.19 in <sup>3</sup>		
I <sub>y</sub> = 3269.10 in <sup>4</sup>	S <sub>left</sub> = 297.19 in <sup>3</sup>			I <sub>y</sub> = 3269.10 in <sup>4</sup>	S <sub>left</sub> = 297.19 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 249.8100 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 249.8100 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.6175 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.6175 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

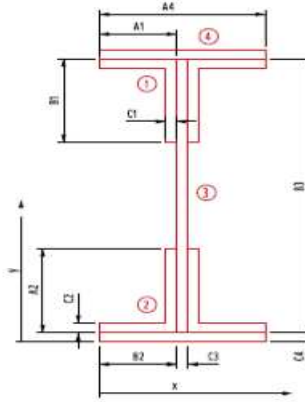
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 184.08$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 25**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	185.2050	2222.4600	0.5625	91.6650	100829.6667	100830.2292
	Vertical Leg		10.8750	181.2050	1970.6044	47.6348	87.6650	83576.0304	83623.6652
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	91.6650	100829.6667	100830.2292
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	87.6650	83576.0304	83623.6652
3	Web Plate		138.0600	93.5400	12914.1324	389852.0608	0.0000	0.0000	389852.0608
4	Cover Plate Top		33.0000	186.3300	6148.8900	6.1875	92.7900	284129.4753	284135.6628
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	92.7900	284129.4753	284135.6628
<b>Total</b>			<b>249.81</b>		<b>23367.23</b>	<b>389960.83</b>		<b>937070.34</b>	<b>1327031.18</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 93.5400 in	S <sub>top</sub> = 14186.78 in <sup>3</sup>			y-bar = 93.5400 in	S <sub>top</sub> = 14186.78 in <sup>3</sup>		
I <sub>x</sub> = 1327031.18 in <sup>4</sup>	S <sub>bottom</sub> = 14186.78 in <sup>3</sup>			I <sub>x</sub> = 1327031.18 in <sup>4</sup>	S <sub>bottom</sub> = 14186.78 in <sup>3</sup>		
C <sub>top</sub> = 93.5400 in	A = 249.8100 in <sup>2</sup>			C <sub>top</sub> = 93.5400 in	A = 249.8100 in <sup>2</sup>		
C <sub>bottom</sub> = 93.5400 in	r <sub>x</sub> = 72.8846 in			C <sub>bottom</sub> = 93.5400 in	r <sub>x</sub> = 72.8846 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
(Left)	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
1	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
(Right)	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
2	Horizontal Leg		6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438
(Left)	Vertical Leg		5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135
2	Horizontal Leg		6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438
(Right)	Vertical Leg		5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135
3	Web Plate		138.0600	11.0000	1518.6600	6.4716	0.0000	0.0000	6.4716
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>249.81</b>		<b>2747.91</b>	<b>2797.49</b>		<b>471.61</b>	<b>3269.10</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 297.19 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 297.19 in <sup>3</sup>		
I <sub>y</sub> = 3269.10 in <sup>4</sup>	S <sub>left</sub> = 297.19 in <sup>3</sup>			I <sub>y</sub> = 3269.10 in <sup>4</sup>	S <sub>left</sub> = 297.19 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 249.8100 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 249.8100 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.6175 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.6175 in		



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

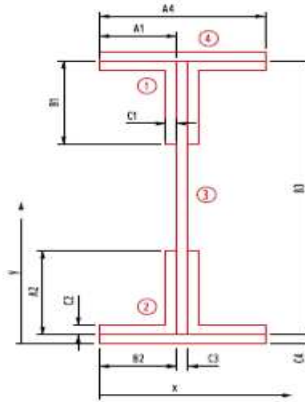
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 174.72$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 26**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	175.0950	2101.1400	0.5625	86.9850	90796.6827	90797.2452
	Vertical Leg		10.8750	171.0950	1860.6581	47.6348	82.9850	74890.7987	74938.4335
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	86.9850	90796.6827	90797.2452
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	82.9850	74890.7987	74938.4335
3	Web Plate		109.2000	88.1100	9621.6120	277796.4134	0.0000	0.0000	277796.4134
4	Cover Plate Top		16.5000	175.8450	2901.4425	0.7734	87.7350	127007.5987	127008.3722
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	87.7350	127007.5987	127008.3722
<b>Total</b>			<b>187.95</b>		<b>16560.27</b>	<b>277894.35</b>		<b>585390.16</b>	<b>863284.52</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.1250	173.2200	-21.6525	88.1100	-1907.8018	-54140.5757	0.0000	0.0000	-54140.5757
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-21.65</b>		<b>-1907.80</b>	<b>-54140.58</b>		<b>0.00</b>	<b>-54140.58</b>


 Made By CTG  
 Checked By DBH

 Date 3/8/2012  
 Date 3/10/2012

 Job No. P402110046  
 Sheet No. \_\_\_\_\_

 Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	88.1100	in	$S_{top} = 9797.80 \text{ in}^3$	y-bar =	88.1100	in	$S_{top} = 9183.34 \text{ in}^3$
$I_x =$	863284.52	$\text{in}^4$	$S_{bott.} = 9797.80 \text{ in}^3$	$I_x =$	809143.94	$\text{in}^4$	$S_{bott.} = 9183.34 \text{ in}^3$
$C_{top} =$	88.1100	in	$A = 187.9500 \text{ in}^2$	$C_{top} =$	88.1100	in	$A = 166.2975 \text{ in}^2$
$C_{bottom} =$	88.1100	in	$r_x = 67.7729 \text{ in}$	$C_{bottom} =$	88.1100	in	$r_x = 69.7541 \text{ in}$

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	$I_o$	d	$Ad^2$	$I_{y, gross}$
Element	Description		( $\text{in}^2$ )	(in)	( $\text{in}^3$ )	( $\text{in}^4$ )	(in)	( $\text{in}^4$ )	( $\text{in}^4$ )
1	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
(Left)	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
(Right)	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
(Left)	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
(Right)	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		109.2000	11.0000	1201.2000	3.5547	0.0000	0.0000	3.5547
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>187.95</b>		<b>2067.45</b>	<b>1463.57</b>		<b>456.62</b>	<b>1920.20</b>
Section Losses			A	x	Ax	$I_o$	d	$Ad^2$	$I_{y, loss}$
Loss #	b (in)	h (in)	( $\text{in}^2$ )	(in)	( $\text{in}^3$ )	( $\text{in}^4$ )	(in)	( $\text{in}^4$ )	( $\text{in}^4$ )
1	173.2200	0.1250	-21.6525	10.7500	-232.7644	-0.0282	0.2826	-1.7286	-1.7568
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-21.65</b>		<b>-232.76</b>	<b>-0.03</b>		<b>-1.73</b>	<b>-1.76</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000	in	$S_{right} = 174.56 \text{ in}^3$	x-bar =	11.0326	in	$S_{right} = 174.92 \text{ in}^3$
$I_y =$	1920.20	$\text{in}^4$	$S_{left} = 174.56 \text{ in}^3$	$I_y =$	1918.44	$\text{in}^4$	$S_{left} = 173.89 \text{ in}^3$
$C_{right} =$	11.0000	in	$A = 187.9500 \text{ in}^2$	$C_{right} =$	10.9674	in	$A = 166.2975 \text{ in}^2$
$C_{left} =$	11.0000	in	$r_y = 3.1963 \text{ in}$	$C_{left} =$	11.0326	in	$r_y = 3.3965 \text{ in}$



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

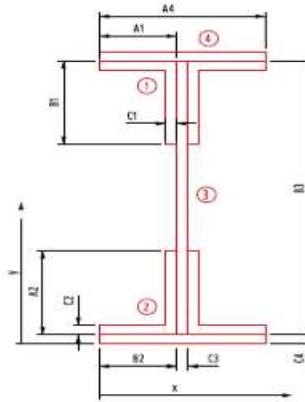
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 27**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	73.2600	in	S <sub>top</sub> = 9857.33 in <sup>3</sup>	y-bar =	73.2600	in	S <sub>top</sub> = 9857.33 in <sup>3</sup>
I <sub>x</sub> =	722147.65	in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>	I <sub>x</sub> =	722147.65	in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>
C <sub>top</sub> =	73.2600	in	A = 201.4500 in <sup>2</sup>	C <sub>top</sub> =	73.2600	in	A = 201.4500 in <sup>2</sup>
C <sub>bottom</sub> =	73.2600	in	r <sub>x</sub> = 59.8728 in	C <sub>bottom</sub> =	73.2600	in	r <sub>x</sub> = 59.8728 in

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000	in	S <sub>right</sub> = 295.51 in <sup>3</sup>	x-bar =	11.0000	in	S <sub>right</sub> = 295.51 in <sup>3</sup>
I <sub>y</sub> =	3250.56	in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>	I <sub>y</sub> =	3250.56	in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000	in	A = 201.4500 in <sup>2</sup>	C <sub>right</sub> =	11.0000	in	A = 201.4500 in <sup>2</sup>
C <sub>left</sub> =	11.0000	in	r <sub>y</sub> = 4.0169 in	C <sub>left</sub> =	11.0000	in	r <sub>y</sub> = 4.0169 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

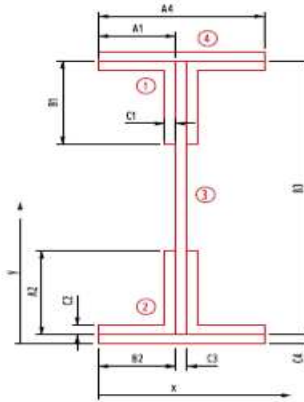
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



Section 28

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>		
I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>			I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = I_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = I_v = 8.0000$  in

Bottom Angles:

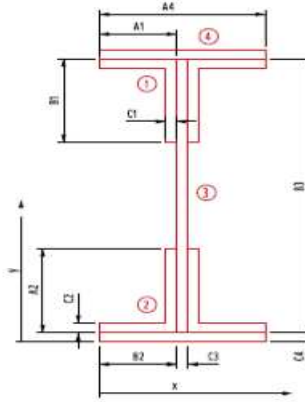
$B_2 = I_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = I_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 146.52$  in

Cover Plate:

$C_4 = 3.0000$  in  
 $A_4 = 22.0000$  in



**Section 29**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	149.1450	1789.7400	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	145.1450	1578.4519	47.6348	68.8850	51603.4326	51651.0673
2	Horizontal Leg		12.0000	3.3750	40.5000	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	7.3750	80.2031	47.6348	68.8850	51603.4326	51651.0673
3	Web Plate		91.5750	76.2600	6983.5095	163828.5175	0.0000	0.0000	163828.5175
4	Cover Plate Top		66.0000	151.0200	9967.3200	49.5000	74.7600	368877.8016	368927.3016
	Cover Plate Bottom		66.0000	1.5000	99.0000	49.5000	74.7600	368877.8016	368927.3016
<b>Total</b>			<b>269.33</b>		<b>20538.72</b>	<b>164023.91</b>		<b>968455.83</b>	<b>1132479.74</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>			y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>		
I <sub>x</sub> = 1132479.74 in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>			I <sub>x</sub> = 1132479.74 in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>		
C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>			C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>		
C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in			C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		91.5750	11.0000	1007.3250	2.9810	0.0000	0.0000	2.9810
4	Cover Plate		132.0000	11.0000	1452.0000	5324.0000	0.0000	0.0000	5324.0000
<b>Total</b>			<b>269.33</b>		<b>2962.58</b>	<b>5456.00</b>		<b>456.62</b>	<b>5912.62</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 537.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 537.51 in <sup>3</sup>		
I <sub>y</sub> = 5912.62 in <sup>4</sup>	S <sub>left</sub> = 537.51 in <sup>3</sup>			I <sub>y</sub> = 5912.62 in <sup>4</sup>	S <sub>left</sub> = 537.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 269.3250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 269.3250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6855 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.6855 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

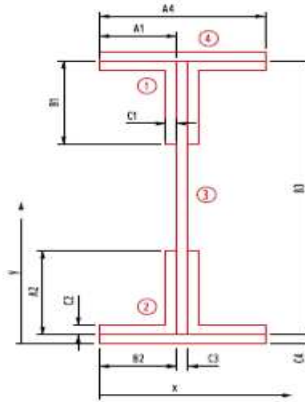
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



Section 30

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517
4	Cover Plate		99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000
<b>Total</b>			<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 416.51 in <sup>3</sup>		
I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>			I <sub>y</sub> = 4581.60 in <sup>4</sup>	S <sub>left</sub> = 416.51 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 235.4250 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 4.4115 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

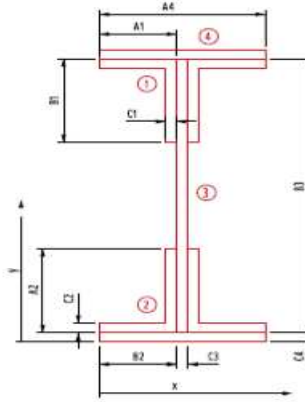
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 31**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	73.2600	in	S <sub>top</sub> = 9857.33 in <sup>3</sup>	y-bar =	73.2600	in	S <sub>top</sub> = 9857.33 in <sup>3</sup>
I <sub>x</sub> =	722147.65	in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>	I <sub>x</sub> =	722147.65	in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>
C <sub>top</sub> =	73.2600	in	A = 201.4500 in <sup>2</sup>	C <sub>top</sub> =	73.2600	in	A = 201.4500 in <sup>2</sup>
C <sub>bottom</sub> =	73.2600	in	r <sub>x</sub> = 59.8728 in	C <sub>bottom</sub> =	73.2600	in	r <sub>x</sub> = 59.8728 in

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
(Left)	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
(Right)	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
(Left)	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
(Right)	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199
4	Cover Plate		66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000
<b>Total</b>			<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000	in	S <sub>right</sub> = 295.51 in <sup>3</sup>	x-bar =	11.0000	in	S <sub>right</sub> = 295.51 in <sup>3</sup>
I <sub>y</sub> =	3250.56	in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>	I <sub>y</sub> =	3250.56	in <sup>4</sup>	S <sub>left</sub> = 295.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000	in	A = 201.4500 in <sup>2</sup>	C <sub>right</sub> =	11.0000	in	A = 201.4500 in <sup>2</sup>
C <sub>left</sub> =	11.0000	in	r <sub>y</sub> = 4.0169 in	C <sub>left</sub> =	11.0000	in	r <sub>y</sub> = 4.0169 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No.

Calculations For: CUY-2-1441

**Element Dimensions (without Section Losses):**

**Top Angles:**

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

**Bottom Angles:**

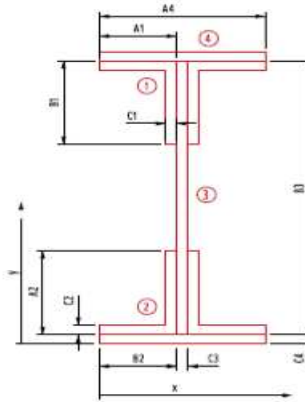
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

**Web Plate:**

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

**Cover Plate:**

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 32**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/10/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		

**Y-Axis Section Properties:**

Gross Section (without Losses)			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg		6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg		6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg		5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate		88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate		33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>			<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>			x-bar = 11.0000 in	S <sub>right</sub> = 174.50 in <sup>3</sup>		
I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>			I <sub>y</sub> = 1919.53 in <sup>4</sup>	S <sub>left</sub> = 174.50 in <sup>3</sup>		
C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>			C <sub>right</sub> = 11.0000 in	A = 167.5500 in <sup>2</sup>		
C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in			C <sub>left</sub> = 11.0000 in	r <sub>y</sub> = 3.3847 in		

**Section I**

**South Girder**

**Section Properties**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

Section No.	Section Property Summary			Capacity Values of Built up Sections					
	I <sub>x, gross</sub> (in <sup>4</sup> )	A (in <sup>2</sup> )	Wt (k/ft) (+ 5%)	x/l 0	From Rear 0	As Built		As Inspected	
						Moment	Shear	Moment	Shear
1	534289.94	167.55	0.599	0.100	43.53	20467	1700	20467	1700
				0.200		20467	1700	20467	1700
				0.222		20467	1700	20467	1700
				0.300		24879	1711	24879	1711
				0.400		24879	1711	24879	1711
2	658340.88	190.15	0.679	0.500	98.53	24879	1711	24879	1711
				0.503		24879	1711	24879	1711
				0.600		21036	1736	21036	1736
3	560638.71	169.43	0.605	0.700	151.53	21036	1736	21036	1736
				0.774		21036	1736	21036	1736
4	811026.87	206.25	0.737	0.800	161.53	28928	1809	28928	1809
				0.825		28928	1809	28928	1809
5	1129760.51	244.28	0.873	0.883	173.03	37948	1905	37948	1905
				0.900		53750	2397	53750	2397
6	1838842.00	302.99	1.083	0.957	187.53	53750	2397	53750	2397
				1.000		63433	2735	63433	2735
7	2278528.11	342.67	1.224	0.000	195.86	63433	2735	63433	2735
				0.024		6.5	63433	2735	63433
8	2278528.11	342.67	1.224	0.070	19	53322	2381	53322	2381
				0.100		39726	1978	39726	1978
9	1812567.16	302.16	1.080	0.109	29.5	39726	1978	39726	1978
				0.140		38	29590	1842	29590
10	1226884.88	248.10	0.886	0.200	79.56	21174	1744	21174	1744
				0.293		21174	1744	21174	1744
11	844446.20	207.98	0.743	0.300	92.56	27108	1717	27108	1717
				0.341		27108	1717	27108	1717
12	567075.55	169.88	0.607	0.400	108.56	33918	1736	33918	1736
				0.500		40838	1753	40838	1753
13	722147.65	201.45	0.720	0.668	181.06	40838	1753	40838	1753
				0.700		33918	1736	33918	1736
14	922457.92	235.43	0.841	0.731	198.06	33918	1736	33918	1736
				0.780		211.56	27108	1717	27108
15	1132479.74	269.33	0.962	0.800	255.83	23320	1876	23320	1876
				0.900		23320	1876	23320	1876
16	922457.92	235.43	0.841	0.944	263.83	23320	1876	23320	1876
				0.731		198.06	33918	1736	33918
17	722147.65	201.45	0.720	0.800	211.56	23320	1876	23320	1876
				0.900		23320	1876	23320	1876
18	671357.22	176.78	0.632	0.944	255.83	23320	1876	23320	1876
				0.973		263.83	33581	2331	31853
19	1096696.82	222.52	0.795	1.000	271.08	41846	2471	41846	2471
				0.000		42838	2696	42838	2696
20	1455470.37	251.86	0.900	0.064	11	42838	2696	42838	2696
				0.100		32127	2253	32127	2253
21	1489967.70	263.60	0.942	0.064	11	42838	2696	42838	2696
				0.100		32127	2253	32127	2253



**Section I**

**South Girder**

**Section Properties**

22	1014850.22	218.48	0.781	0.165	28.5	32127	2253	32127	2253
				0.200		22029	1797	22029	1797
				0.300		22029	1797	22029	1797
23	607746.79	172.65	0.617	0.374	64.56	22029	1797	22029	1797
				0.400		20473	1700	20473	1700
				0.500		20473	1700	20473	1700
				0.600		20473	1700	20473	1700
				0.700		20473	1700	20473	1700
24	534601.64	167.57	0.599	0.770	132.9	20473	1700	20473	1700
				0.800		25365	1998	25365	1998
				0.900		25365	1998	25365	1998
25	777269.42	183.15	0.654	0.904	156.09	25365	1998	25365	1998
26	1087143.03	231.61	0.828	1.000	172.59	33785	2505	33785	2505
				0.000		33785	2505	33785	2505
27	1087143.03	231.61	0.828	0.052	11	33785	2505	33785	2505
				0.100		24299	1935	22854	1552
				0.200		24299	1935	22854	1552
28	721275.77	179.85	0.643	0.264	55.4	24299	1935	22854	1552
				0.300		27108	1717	27108	1717
29	722147.65	201.45	0.720	0.319	66.9	27108	1717	27108	1717
30	922457.92	235.43	0.841	0.391	81.9	33918	1736	33918	1736
				0.400		40838	1753	40838	1753
				0.500		40838	1753	40838	1753
				0.600		40838	1753	40838	1753
				0.700		40838	1753	40838	1753
31	1132479.74	269.33	0.962	0.749	156.9	40838	1753	40838	1753
				0.800		33918	1736	33918	1736
32	922457.92	235.43	0.841	0.818	171.4	33918	1736	33918	1736
33	722147.65	201.45	0.720	0.870	182.4	27108	1717	27108	1717
				0.900		20467	1700	20467	1700
34	534289.94	167.55	0.599	1.000	209.54	20467	1700	20467	1700

**Properties developed at  
start member nodes**



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

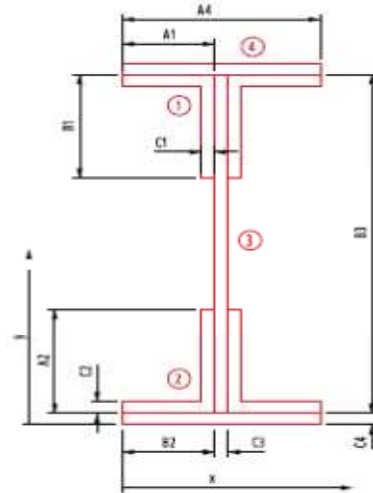
Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles: Bottom Angles:  
 $A_1 = l_w = 8.0000$  in  $B_2 = l_h = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  $C_2 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in  $A_2 = l_v = 8.0000$  in

Web Plate:  
 $C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:  
 $C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 1**

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg	12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg	10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg	12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg	10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate	88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top	16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom	16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>		<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses		A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	$S_{top} = 7442.40$ in <sup>3</sup>			y-bar = 71.7900 in	$S_{top} = 7442.40$ in <sup>3</sup>		
$I_x = 534289.94$ in <sup>4</sup>	$S_{bott.} = 7442.40$ in <sup>3</sup>			$I_x = 534289.94$ in <sup>4</sup>	$S_{bott.} = 7442.40$ in <sup>3</sup>		
$C_{top} = 71.7900$ in	$A = 167.5500$ in <sup>2</sup>			$C_{top} = 71.7900$ in	$A = 167.5500$ in <sup>2</sup>		
$C_{bottom} = 71.7900$ in	$r_x = 56.4698$ in			$C_{bottom} = 71.7900$ in	$r_x = 56.4698$ in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250
3	Web Plate	88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000
<b>Total</b>		<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>
Section Losses		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.50 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	174.50 in <sup>3</sup>
I <sub>y</sub> =	1919.53 in <sup>4</sup>	S <sub>left</sub> =	174.50 in <sup>3</sup>	I <sub>y</sub> =	1919.53 in <sup>4</sup>	S <sub>left</sub> =	174.50 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	167.5500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	167.5500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3847 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3847 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

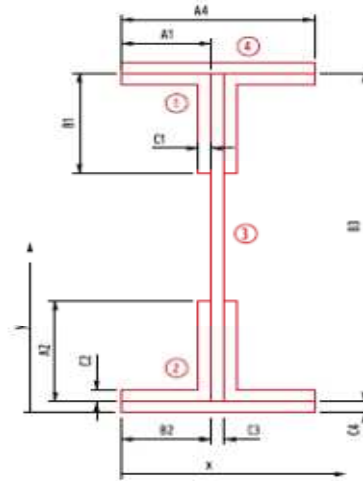
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.04$  in

Cover Plate:

$C_4 = 1.2500$  in  
 $A_4 = 22.0000$  in



**Section 2**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	143.9150	1726.9800	0.5625	71.1450	60739.3323	60739.8948
	Vertical Leg		10.8750	139.9150	1521.5756	47.6348	67.1450	49029.4049	49077.0397
2	Horizontal Leg		12.0000	1.6250	19.5000	0.5625	71.1450	60739.3323	60739.8948
	Vertical Leg		10.8750	5.6250	61.1719	47.6348	67.1450	49029.4049	49077.0397
3	Web Plate		89.4000	72.7700	6505.6380	152430.2899	0.0000	0.0000	152430.2899
4	Cover Plate Top		27.5000	144.9150	3985.1625	3.5807	72.1450	143134.7782	143138.3589
	Cover Plate Bottom		27.5000	0.6250	17.1875	3.5807	72.1450	143134.7782	143138.3589
<b>Total</b>			<b>190.15</b>		<b>13837.22</b>	<b>152533.85</b>		<b>505807.03</b>	<b>658340.88</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 72.7700 in	S <sub>top</sub> = 9046.87 in <sup>3</sup>			y-bar = 72.7700 in	S <sub>top</sub> = 9046.87 in <sup>3</sup>		
I <sub>x</sub> = 658340.88 in <sup>4</sup>	S <sub>bottom</sub> = 9046.87 in <sup>3</sup>			I <sub>x</sub> = 658340.88 in <sup>4</sup>	S <sub>bottom</sub> = 9046.87 in <sup>3</sup>		
C <sub>top</sub> = 72.7700 in	A = 190.1500 in <sup>2</sup>			C <sub>top</sub> = 72.7700 in	A = 190.1500 in <sup>2</sup>		
C <sub>bottom</sub> = 72.7700 in	r <sub>x</sub> = 58.8406 in			C <sub>bottom</sub> = 72.7700 in	r <sub>x</sub> = 58.8406 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	89.4000	11.0000	983.4000	2.9102	0.0000	0.0000	2.9102	
4	Cover Plate	55.0000	11.0000	605.0000	2218.3333	0.0000	0.0000	2218.3333	
<b>Total</b>		<b>190.15</b>		<b>2091.65</b>	<b>2350.26</b>		<b>456.62</b>	<b>2806.89</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	255.17 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	255.17 in <sup>3</sup>
I <sub>y</sub> =	2806.89 in <sup>4</sup>	S <sub>left</sub> =	255.17 in <sup>3</sup>	I <sub>y</sub> =	2806.89 in <sup>4</sup>	S <sub>left</sub> =	255.17 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	190.1500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	190.1500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.8421 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.8421 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	24878.9 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	24878.9 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1711.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1711.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

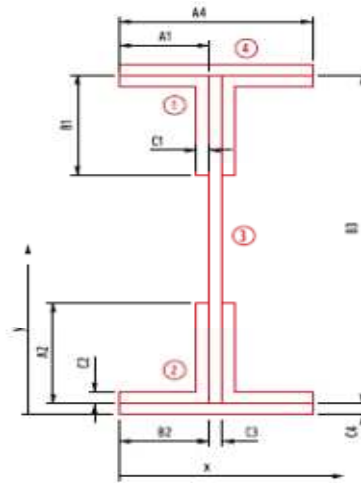
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 3**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	145.4550	1745.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	141.4550	1538.3231	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	73.2900	6645.5708	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		16.5000	146.2050	2412.3825	0.7734	72.9150	87723.8542	87724.6277
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	72.9150	87723.8542	87724.6277
<b>Total</b>			<b>169.43</b>		<b>12417.16</b>	<b>159143.45</b>		<b>401495.26</b>	<b>560638.71</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2900 in	S <sub>top</sub> = 7649.59 in <sup>3</sup>			y-bar = 73.2900 in	S <sub>top</sub> = 7649.59 in <sup>3</sup>		
I <sub>x</sub> = 560638.71 in <sup>4</sup>	S <sub>bottom</sub> = 7649.59 in <sup>3</sup>			I <sub>x</sub> = 560638.71 in <sup>4</sup>	S <sub>bottom</sub> = 7649.59 in <sup>3</sup>		
C <sub>top</sub> = 73.2900 in	A = 169.4250 in <sup>2</sup>			C <sub>top</sub> = 73.2900 in	A = 169.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2900 in	r <sub>x</sub> = 57.5245 in			C <sub>bottom</sub> = 73.2900 in	r <sub>x</sub> = 57.5245 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517	
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000	
<b>Total</b>		<b>169.43</b>		<b>1863.68</b>	<b>1462.97</b>		<b>456.62</b>	<b>1919.60</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	174.51 in <sup>3</sup>
I <sub>y</sub> =	1919.60 in <sup>4</sup>	S <sub>left</sub> =	174.51 in <sup>3</sup>	I <sub>y</sub> =	1919.60 in <sup>4</sup>	S <sub>left</sub> =	174.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	169.4250 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	169.4250 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3660 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3660 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	21036.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	21036.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

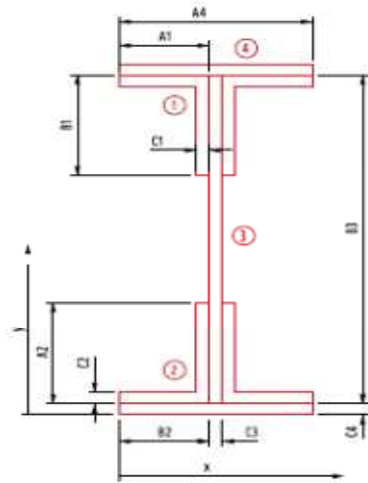
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 151.20$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 4**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	152.3250	1827.9000	0.5625	75.2250	67905.6075	67906.1700
	Vertical Leg		10.8750	148.3250	1613.0344	47.6348	71.2250	55168.8818	55216.5166
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	75.2250	67905.6075	67906.1700
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	71.2250	55168.8818	55216.5166
3	Web Plate		94.5000	77.1000	7285.9500	180033.8400	0.0000	0.0000	180033.8400
4	Cover Plate Top		33.0000	153.4500	5063.8500	6.1875	76.3500	192367.6425	192373.8300
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	76.3500	192367.6425	192373.8300
<b>Total</b>			<b>206.25</b>		<b>15901.88</b>	<b>180142.61</b>		<b>630884.26</b>	<b>811026.87</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 77.1000 in	S <sub>top</sub> = 10519.16 in <sup>3</sup>			y-bar = 77.1000 in	S <sub>top</sub> = 10519.16 in <sup>3</sup>		
I <sub>x</sub> = 811026.87 in <sup>4</sup>	S <sub>bottom</sub> = 10519.16 in <sup>3</sup>			I <sub>x</sub> = 811026.87 in <sup>4</sup>	S <sub>bottom</sub> = 10519.16 in <sup>3</sup>		
C <sub>top</sub> = 77.1000 in	A = 206.2500 in <sup>2</sup>			C <sub>top</sub> = 77.1000 in	A = 206.2500 in <sup>2</sup>		
C <sub>bottom</sub> = 77.1000 in	r <sub>x</sub> = 62.7077 in			C <sub>bottom</sub> = 77.1000 in	r <sub>x</sub> = 62.7077 in		





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	94.5000	11.0000	1039.5000	3.0762	0.0000	0.0000	3.0762	
4	Cover Plate	66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000	
<b>Total</b>		<b>206.25</b>		<b>2268.75</b>	<b>2794.10</b>		<b>456.62</b>	<b>3250.72</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	295.52 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	295.52 in <sup>3</sup>
I <sub>y</sub> =	3250.72 in <sup>4</sup>	S <sub>left</sub> =	295.52 in <sup>3</sup>	I <sub>y</sub> =	3250.72 in <sup>4</sup>	S <sub>left</sub> =	295.52 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	206.2500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	206.2500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.9700 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.9700 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	28927.7 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	28927.7 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1808.7 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1808.7 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

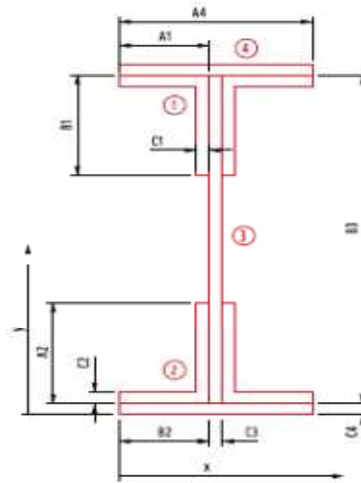
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 159.24$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 5**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	161.1150	1933.3800	0.5625	79.2450	75357.2403	75357.8028
	Vertical Leg		10.8750	157.1150	1708.6256	47.6348	75.2450	61572.1840	61619.8188
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	79.2450	75357.2403	75357.8028
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	75.2450	61572.1840	61619.8188
3	Web Plate		99.5250	81.8700	8148.1118	210307.7505	0.0000	0.0000	210307.7505
4	Cover Plate Top		49.5000	162.6150	8049.4425	20.8828	80.7450	322727.8737	322748.7566
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	80.7450	322727.8737	322748.7566
<b>Total</b>			<b>244.28</b>		<b>19998.79</b>	<b>210445.91</b>		<b>919314.60</b>	<b>1129760.51</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	81.8700 in	S <sub>top</sub> =	13799.44 in <sup>3</sup>	y-bar =	81.8700 in	S <sub>top</sub> =	13799.44 in <sup>3</sup>
I <sub>x</sub> =	##### in <sup>4</sup>	S <sub>bottom</sub> =	13799.44 in <sup>3</sup>	I <sub>x</sub> =	1129760.51 in <sup>4</sup>	S <sub>bottom</sub> =	13799.44 in <sup>3</sup>
C <sub>top</sub> =	81.8700 in	A =	244.2750 in <sup>2</sup>	C <sub>top</sub> =	81.8700 in	A =	244.2750 in <sup>2</sup>
C <sub>bottom</sub> =	81.8700 in	r <sub>x</sub> =	68.0070 in	C <sub>bottom</sub> =	81.8700 in	r <sub>x</sub> =	68.0070 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	99.5250	11.0000	1094.7750	3.2397	0.0000	0.0000	3.2397	
4	Cover Plate	99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000	
<b>Total</b>		<b>244.28</b>		<b>2687.03</b>	<b>4125.26</b>		<b>456.62</b>	<b>4581.88</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	416.53 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	416.53 in <sup>3</sup>
I <sub>y</sub> =	4581.88 in <sup>4</sup>	S <sub>left</sub> =	416.53 in <sup>3</sup>	I <sub>y</sub> =	4581.88 in <sup>4</sup>	S <sub>left</sub> =	416.53 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	244.2750 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	244.2750 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.3309 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.3309 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	37948.5 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	37948.5 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1904.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1904.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

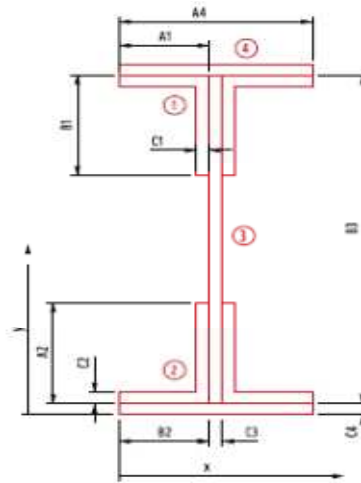
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 182.16$  in

Cover Plate:

$C_4 = 3.0000$  in  
 $A_4 = 22.0000$  in



**Section 6**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	184.7850	2217.4200	0.5625	90.7050	98728.7643	98729.3268
	Vertical Leg		10.8750	180.7850	1966.0369	47.6348	86.7050	81755.6076	81803.2424
2	Horizontal Leg		12.0000	3.3750	40.5000	0.5625	90.7050	98728.7643	98729.3268
	Vertical Leg		10.8750	7.3750	80.2031	47.6348	86.7050	81755.6076	81803.2424
3	Web Plate		125.2350	94.0800	11782.1088	346298.4194	0.0000	0.0000	346298.4194
4	Cover Plate Top		66.0000	186.6600	12319.5600	49.5000	92.5800	565689.7224	565739.2224
	Cover Plate Bottom		66.0000	1.5000	99.0000	49.5000	92.5800	565689.7224	565739.2224
<b>Total</b>			<b>302.99</b>		<b>28504.83</b>	<b>346493.81</b>		<b>1492348.19</b>	<b>1838842.00</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 94.0800 in	S <sub>top</sub> = 19545.51 in <sup>3</sup>			y-bar = 94.0800 in	S <sub>top</sub> = 19545.51 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 19545.51 in <sup>3</sup>			I <sub>x</sub> = 1838842.00 in <sup>4</sup>	S <sub>bottom</sub> = 19545.51 in <sup>3</sup>		
C <sub>top</sub> = 94.0800 in	A = 302.9850 in <sup>2</sup>			C <sub>top</sub> = 94.0800 in	A = 302.9850 in <sup>2</sup>		
C <sub>bottom</sub> = 94.0800 in	r <sub>x</sub> = 77.9043 in			C <sub>bottom</sub> = 94.0800 in	r <sub>x</sub> = 77.9043 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
1 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
2 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
2 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
3	Web Plate	125.2350	11.0000	1377.5850	4.9328	0.0000	0.0000	4.9328	
4	Cover Plate	132.0000	11.0000	1452.0000	5324.0000	0.0000	0.0000	5324.0000	
<b>Total</b>		<b>302.99</b>		<b>3332.84</b>	<b>5457.95</b>		<b>464.07</b>	<b>5922.02</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	538.37 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	538.37 in <sup>3</sup>
I <sub>y</sub> =	5922.02 in <sup>4</sup>	S <sub>left</sub> =	538.37 in <sup>3</sup>	I <sub>y</sub> =	5922.02 in <sup>4</sup>	S <sub>left</sub> =	538.37 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	302.9850 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	302.9850 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4210 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4210 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	53750.2 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	53750.2 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2397.0 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2397.0 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

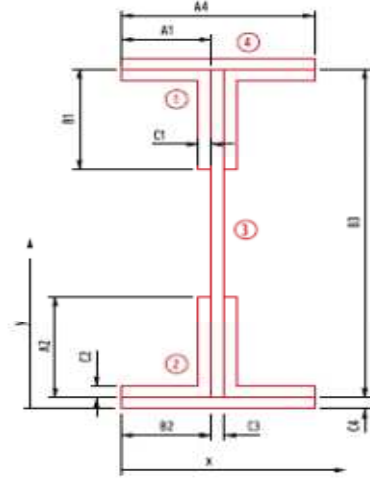
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 190.56$  in

Cover Plate:

$C_4 = 3.5000$  in  
 $A_4 = 22.0000$  in



Section 7

**X-Axis Section Properties:**

Gross Section (without Losses)		A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg	12.0000	193.6850	2324.2200	0.5625	94.9050	108083.5083	108084.0708
	Vertical Leg	10.8750	189.6850	2062.8244	47.6348	90.9050	89867.9444	89915.5792
2	Horizontal Leg	12.0000	3.8750	46.5000	0.5625	94.9050	108083.5083	108084.0708
	Vertical Leg	10.8750	7.8750	85.6406	47.6348	90.9050	89867.9444	89915.5792
3	Web Plate	142.9200	98.7800	14117.6376	432489.1830	0.0000	0.0000	432489.1830
4	Cover Plate Top	77.0000	195.8100	15077.3700	78.6042	97.0300	724941.2093	725019.8135
	Cover Plate Bottom	77.0000	1.7500	134.7500	78.6042	97.0300	724941.2093	725019.8135
<b>Total</b>		<b>342.67</b>		<b>33848.94</b>	<b>432742.79</b>		<b>1845785.32</b>	<b>2278528.11</b>
Section Losses		A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	98.7800 in	S <sub>top</sub> =	23066.69 in <sup>3</sup>	y-bar =	98.7800 in	S <sub>top</sub> =	23066.69 in <sup>3</sup>
I <sub>x</sub> =	##### in <sup>4</sup>	S <sub>bottom</sub> =	23066.69 in <sup>3</sup>	I <sub>x</sub> =	2278528.11 in <sup>4</sup>	S <sub>bottom</sub> =	23066.69 in <sup>3</sup>
C <sub>top</sub> =	98.7800 in	A =	342.6700 in <sup>2</sup>	C <sub>top</sub> =	98.7800 in	A =	342.6700 in <sup>2</sup>
C <sub>bottom</sub> =	98.7800 in	r <sub>x</sub> =	81.5435 in	C <sub>bottom</sub> =	98.7800 in	r <sub>x</sub> =	81.5435 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
1 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
2 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
2 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
3	Web Plate	142.9200	11.0000	1572.1200	6.6994	0.0000	0.0000	6.6994	
4	Cover Plate	154.0000	11.0000	1694.0000	6211.3333	0.0000	0.0000	6211.3333	
<b>Total</b>		<b>342.67</b>		<b>3769.37</b>	<b>6347.05</b>		<b>471.61</b>	<b>6818.66</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	619.88 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	619.88 in <sup>3</sup>
I <sub>y</sub> =	6818.66 in <sup>4</sup>	S <sub>left</sub> =	619.88 in <sup>3</sup>	I <sub>y</sub> =	6818.66 in <sup>4</sup>	S <sub>left</sub> =	619.88 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	342.6700 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	342.6700 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4608 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4608 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	63433.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	63433.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

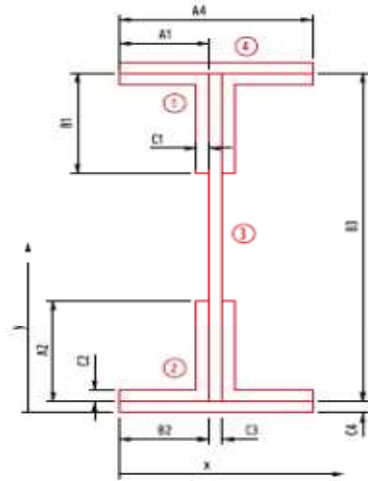
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 190.56$  in

Cover Plate:

$C_4 = 3.5000$  in  
 $A_4 = 22.0000$  in



**Section 8**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	193.6850	2324.2200	0.5625	94.9050	108083.5083	108084.0708
	Vertical Leg		10.8750	189.6850	2062.8244	47.6348	90.9050	89867.9444	89915.5792
2	Horizontal Leg		12.0000	3.8750	46.5000	0.5625	94.9050	108083.5083	108084.0708
	Vertical Leg		10.8750	7.8750	85.6406	47.6348	90.9050	89867.9444	89915.5792
3	Web Plate		142.9200	98.7800	14117.6376	432489.1830	0.0000	0.0000	432489.1830
4	Cover Plate Top		77.0000	195.8100	15077.3700	78.6042	97.0300	724941.2093	725019.8135
	Cover Plate Bottom		77.0000	1.7500	134.7500	78.6042	97.0300	724941.2093	725019.8135
<b>Total</b>			<b>342.67</b>		<b>33848.94</b>	<b>432742.79</b>		<b>1845785.32</b>	<b>2278528.11</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	98.7800 in	S <sub>top</sub> =	23066.69 in <sup>3</sup>	y-bar =	98.7800 in	S <sub>top</sub> =	23066.69 in <sup>3</sup>
I <sub>x</sub> =	##### in <sup>4</sup>	S <sub>bottom</sub> =	23066.69 in <sup>3</sup>	I <sub>x</sub> =	2278528.11 in <sup>4</sup>	S <sub>bottom</sub> =	23066.69 in <sup>3</sup>
C <sub>top</sub> =	98.7800 in	A =	342.6700 in <sup>2</sup>	C <sub>top</sub> =	98.7800 in	A =	342.6700 in <sup>2</sup>
C <sub>bottom</sub> =	98.7800 in	r <sub>x</sub> =	81.5435 in	C <sub>bottom</sub> =	98.7800 in	r <sub>x</sub> =	81.5435 in





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
1 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
2 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
2 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
3	Web Plate	142.9200	11.0000	1572.1200	6.6994	0.0000	0.0000	6.6994	
4	Cover Plate	154.0000	11.0000	1694.0000	6211.3333	0.0000	0.0000	6211.3333	
<b>Total</b>		<b>342.67</b>		<b>3769.37</b>	<b>6347.05</b>		<b>471.61</b>	<b>6818.66</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	619.88 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	619.88 in <sup>3</sup>
I <sub>y</sub> =	6818.66 in <sup>4</sup>	S <sub>left</sub> =	619.88 in <sup>3</sup>	I <sub>y</sub> =	6818.66 in <sup>4</sup>	S <sub>left</sub> =	619.88 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	342.6700 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	342.6700 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4608 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4608 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	63433.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	63433.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

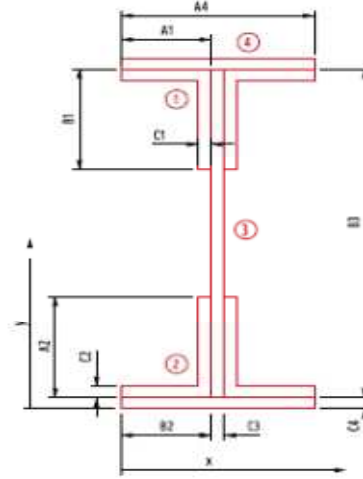
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 180.96$  in

Cover Plate:

$C_4 = 3.0000$  in  
 $A_4 = 22.0000$  in



**Section 9**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	183.5850	2203.0200	0.5625	90.1050	97426.9323	97427.4948
	Vertical Leg		10.8750	179.5850	1952.9869	47.6348	86.1050	80628.0224	80675.6572
2	Horizontal Leg		12.0000	3.3750	40.5000	0.5625	90.1050	97426.9323	97427.4948
	Vertical Leg		10.8750	7.3750	80.2031	47.6348	86.1050	80628.0224	80675.6572
3	Web Plate		124.4100	93.4800	11629.8468	339499.5627	0.0000	0.0000	339499.5627
4	Cover Plate Top		66.0000	185.4600	12240.3600	49.5000	91.9800	558381.1464	558430.6464
	Cover Plate Bottom		66.0000	1.5000	99.0000	49.5000	91.9800	558381.1464	558430.6464
<b>Total</b>			<b>302.16</b>		<b>28245.92</b>	<b>339694.96</b>		<b>1472872.20</b>	<b>1812567.16</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	93.4800 in	S <sub>top</sub> =	19389.89 in <sup>3</sup>	y-bar =	93.4800 in	S <sub>top</sub> =	19389.89 in <sup>3</sup>
I <sub>x</sub> =	##### in <sup>4</sup>	S <sub>bottom</sub> =	19389.89 in <sup>3</sup>	I <sub>x</sub> =	1812567.16 in <sup>4</sup>	S <sub>bottom</sub> =	19389.89 in <sup>3</sup>
C <sub>top</sub> =	93.4800 in	A =	302.1600 in <sup>2</sup>	C <sub>top</sub> =	93.4800 in	A =	302.1600 in <sup>2</sup>
C <sub>bottom</sub> =	93.4800 in	r <sub>x</sub> =	77.4513 in	C <sub>bottom</sub> =	93.4800 in	r <sub>x</sub> =	77.4513 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
1 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
2 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
2 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
3	Web Plate	124.4100	11.0000	1368.5100	4.9003	0.0000	0.0000	4.9003	
4	Cover Plate	132.0000	11.0000	1452.0000	5324.0000	0.0000	0.0000	5324.0000	
<b>Total</b>		<b>302.16</b>		<b>3323.76</b>	<b>5457.92</b>		<b>464.07</b>	<b>5921.99</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	538.36 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	538.36 in <sup>3</sup>
I <sub>y</sub> =	5921.99 in <sup>4</sup>	S <sub>left</sub> =	538.36 in <sup>3</sup>	I <sub>y</sub> =	5921.99 in <sup>4</sup>	S <sub>left</sub> =	538.36 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	302.1600 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	302.1600 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4271 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4271 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	53322.2 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	53322.2 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2381.2 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2381.2 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

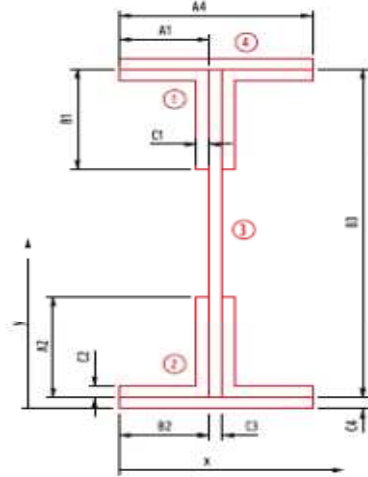
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 165.36$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 10**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	167.2350	2006.8200	0.5625	82.3050	81289.3563	81289.9188
	Vertical Leg		10.8750	163.2350	1775.1806	47.6348	78.3050	66681.9441	66729.5789
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	82.3050	81289.3563	81289.9188
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	78.3050	66681.9441	66729.5789
3	Web Plate		103.3500	84.9300	8777.5155	235499.5937	0.0000	0.0000	235499.5937
4	Cover Plate Top		49.5000	168.7350	8352.3825	20.8828	83.8050	347652.2622	347673.1451
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	83.8050	347652.2622	347673.1451
<b>Total</b>			<b>248.10</b>		<b>21071.13</b>	<b>235637.75</b>		<b>991247.13</b>	<b>1226884.88</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	84.9300 in	S <sub>top</sub> =	14445.84 in <sup>3</sup>	y-bar =	84.9300 in	S <sub>top</sub> =	14445.84 in <sup>3</sup>
I <sub>x</sub> =	##### in <sup>4</sup>	S <sub>bottom</sub> =	14445.84 in <sup>3</sup>	I <sub>x</sub> =	1226884.88 in <sup>4</sup>	S <sub>bottom</sub> =	14445.84 in <sup>3</sup>
C <sub>top</sub> =	84.9300 in	A =	248.1000 in <sup>2</sup>	C <sub>top</sub> =	84.9300 in	A =	248.1000 in <sup>2</sup>
C <sub>bottom</sub> =	84.9300 in	r <sub>x</sub> =	70.3216 in	C <sub>bottom</sub> =	84.9300 in	r <sub>x</sub> =	70.3216 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	103.3500	11.0000	1136.8500	3.3643	0.0000	0.0000	3.3643	
4	Cover Plate	99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000	
<b>Total</b>		<b>248.10</b>		<b>2729.10</b>	<b>4125.38</b>		<b>456.62</b>	<b>4582.01</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	416.55 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	416.55 in <sup>3</sup>
I <sub>y</sub> =	4582.01 in <sup>4</sup>	S <sub>left</sub> =	416.55 in <sup>3</sup>	I <sub>y</sub> =	4582.01 in <sup>4</sup>	S <sub>left</sub> =	416.55 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	248.1000 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	248.1000 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.2975 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.2975 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39726.0 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	39726.0 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1978.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1978.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

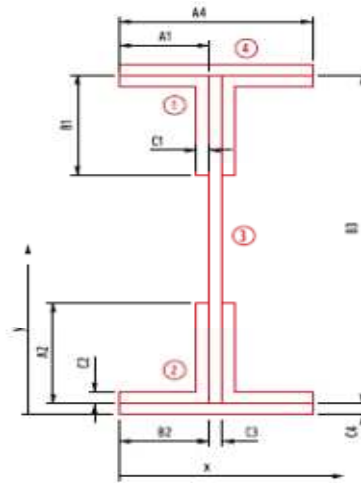
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 153.96$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 11**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	155.0850	1861.0200	0.5625	76.6050	70419.9123	70420.4748
	Vertical Leg		10.8750	151.0850	1643.0494	47.6348	72.6050	57327.4105	57375.0453
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	76.6050	70419.9123	70420.4748
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	72.6050	57327.4105	57375.0453
3	Web Plate		96.2250	78.4800	7551.7380	190073.8968	0.0000	0.0000	190073.8968
4	Cover Plate Top		33.0000	156.2100	5154.9300	6.1875	77.7300	199384.4457	199390.6332
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	77.7300	199384.4457	199390.6332
<b>Total</b>			<b>207.98</b>		<b>16321.88</b>	<b>190182.67</b>		<b>654263.54</b>	<b>844446.20</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 78.4800 in	S <sub>top</sub> = 10760.02 in <sup>3</sup>			y-bar = 78.4800 in	S <sub>top</sub> = 10760.02 in <sup>3</sup>		
I <sub>x</sub> = 844446.20 in <sup>4</sup>	S <sub>bottom</sub> = 10760.02 in <sup>3</sup>			I <sub>x</sub> = 844446.20 in <sup>4</sup>	S <sub>bottom</sub> = 10760.02 in <sup>3</sup>		
C <sub>top</sub> = 78.4800 in	A = 207.9750 in <sup>2</sup>			C <sub>top</sub> = 78.4800 in	A = 207.9750 in <sup>2</sup>		
C <sub>bottom</sub> = 78.4800 in	r <sub>x</sub> = 63.7207 in			C <sub>bottom</sub> = 78.4800 in	r <sub>x</sub> = 63.7207 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	96.2250	11.0000	1058.4750	3.1323	0.0000	0.0000	3.1323	
4	Cover Plate	66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000	
<b>Total</b>		<b>207.98</b>		<b>2287.73</b>	<b>2794.15</b>		<b>456.62</b>	<b>3250.78</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	295.53 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	295.53 in <sup>3</sup>
I <sub>y</sub> =	3250.78 in <sup>4</sup>	S <sub>left</sub> =	295.53 in <sup>3</sup>	I <sub>y</sub> =	3250.78 in <sup>4</sup>	S <sub>left</sub> =	295.53 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	207.9750 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	207.9750 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.9536 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.9536 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	29590.0 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	29590.0 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1841.7 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1841.7 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

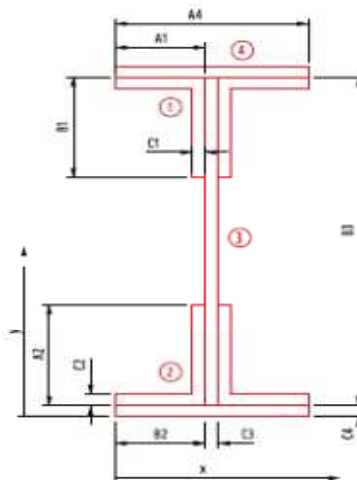
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.80$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 12**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.1750	1754.1000	0.5625	72.5250	63118.5075	63119.0700
	Vertical Leg		10.8750	142.1750	1546.1531	47.6348	68.5250	51065.4724	51113.1072
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	72.5250	63118.5075	63119.0700
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	68.5250	51065.4724	51113.1072
3	Web Plate		91.1250	73.6500	6711.3563	161425.2038	0.0000	0.0000	161425.2038
4	Cover Plate Top		16.5000	146.9250	2424.2625	0.7734	73.2750	88592.2228	88592.9963
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	73.2750	88592.2228	88592.9963
<b>Total</b>			<b>169.88</b>		<b>12511.29</b>	<b>161523.15</b>		<b>405552.41</b>	<b>567075.55</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.6500 in	S <sub>top</sub> = 7699.60 in <sup>3</sup>			y-bar = 73.6500 in	S <sub>top</sub> = 7699.60 in <sup>3</sup>		
I <sub>x</sub> = 567075.55 in <sup>4</sup>	S <sub>bottom</sub> = 7699.60 in <sup>3</sup>			I <sub>x</sub> = 567075.55 in <sup>4</sup>	S <sub>bottom</sub> = 7699.60 in <sup>3</sup>		
C <sub>top</sub> = 73.6500 in	A = 169.8750 in <sup>2</sup>			C <sub>top</sub> = 73.6500 in	A = 169.8750 in <sup>2</sup>		
C <sub>bottom</sub> = 73.6500 in	r <sub>x</sub> = 57.7771 in			C <sub>bottom</sub> = 73.6500 in	r <sub>x</sub> = 57.7771 in		





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	91.1250	11.0000	1002.3750	2.9663	0.0000	0.0000	2.9663	
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000	
<b>Total</b>		<b>169.88</b>		<b>1868.63</b>	<b>1462.99</b>		<b>456.62</b>	<b>1919.61</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	174.51 in <sup>3</sup>
I <sub>y</sub> =	1919.61 in <sup>4</sup>	S <sub>left</sub> =	174.51 in <sup>3</sup>	I <sub>y</sub> =	1919.61 in <sup>4</sup>	S <sub>left</sub> =	174.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	169.8750 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	169.8750 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3616 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3616 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	21173.9 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	21173.9 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1744.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1744.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

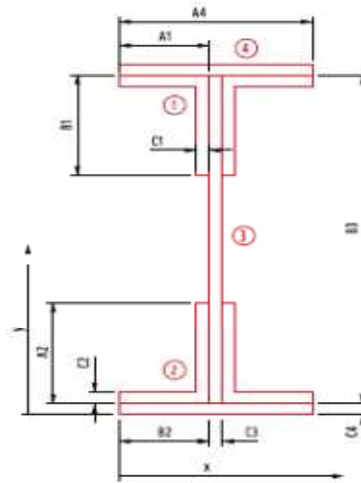
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 13**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	$S_{top} = 9857.33$ in <sup>3</sup>			y-bar = 73.2600 in	$S_{top} = 9857.33$ in <sup>3</sup>		
$I_x = 722147.65$ in <sup>4</sup>	$S_{bottom} = 9857.33$ in <sup>3</sup>			$I_x = 722147.65$ in <sup>4</sup>	$S_{bottom} = 9857.33$ in <sup>3</sup>		
$C_{top} = 73.2600$ in	$A = 201.4500$ in <sup>2</sup>			$C_{top} = 73.2600$ in	$A = 201.4500$ in <sup>2</sup>		
$C_{bottom} = 73.2600$ in	$r_x = 59.8728$ in			$C_{bottom} = 73.2600$ in	$r_x = 59.8728$ in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199	
4	Cover Plate	66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000	
<b>Total</b>		<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	295.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	295.51 in <sup>3</sup>
I <sub>y</sub> =	3250.56 in <sup>4</sup>	S <sub>left</sub> =	295.51 in <sup>3</sup>	I <sub>y</sub> =	3250.56 in <sup>4</sup>	S <sub>left</sub> =	295.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	201.4500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	201.4500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.0169 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.0169 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

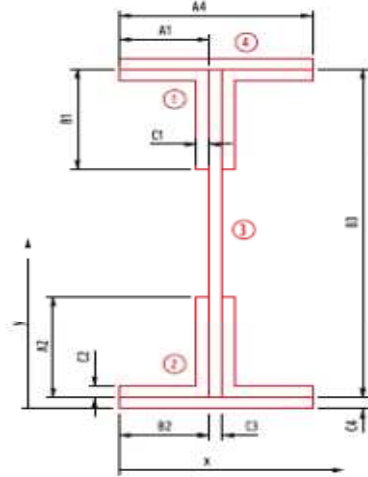
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 14**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517	
4	Cover Plate	99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000	
<b>Total</b>		<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	416.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	416.51 in <sup>3</sup>
I <sub>y</sub> =	4581.60 in <sup>4</sup>	S <sub>left</sub> =	416.51 in <sup>3</sup>	I <sub>y</sub> =	4581.60 in <sup>4</sup>	S <sub>left</sub> =	416.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	235.4250 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	235.4250 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4115 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4115 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

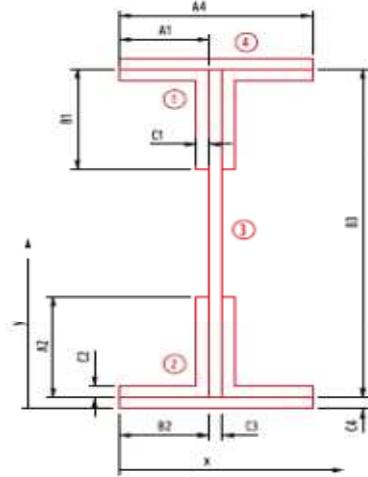
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 146.52$  in

Cover Plate:

$C_4 = 3.0000$  in  
 $A_4 = 22.0000$  in



**Section 15**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	149.1450	1789.7400	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	145.1450	1578.4519	47.6348	68.8850	51603.4326	51651.0673
2	Horizontal Leg		12.0000	3.3750	40.5000	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	7.3750	80.2031	47.6348	68.8850	51603.4326	51651.0673
3	Web Plate		91.5750	76.2600	6983.5095	163828.5175	0.0000	0.0000	163828.5175
4	Cover Plate Top		66.0000	151.0200	9967.3200	49.5000	74.7600	368877.8016	368927.3016
	Cover Plate Bottom		66.0000	1.5000	99.0000	49.5000	74.7600	368877.8016	368927.3016
<b>Total</b>			<b>269.33</b>		<b>20538.72</b>	<b>164023.91</b>		<b>968455.83</b>	<b>1132479.74</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>	I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>	y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>	I <sub>x</sub> = 1132479.74 in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>
C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>			C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>		
C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in			C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	91.5750	11.0000	1007.3250	2.9810	0.0000	0.0000	2.9810	
4	Cover Plate	132.0000	11.0000	1452.0000	5324.0000	0.0000	0.0000	5324.0000	
<b>Total</b>		<b>269.33</b>		<b>2962.58</b>	<b>5456.00</b>		<b>456.62</b>	<b>5912.62</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	537.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	537.51 in <sup>3</sup>
I <sub>y</sub> =	5912.62 in <sup>4</sup>	S <sub>left</sub> =	537.51 in <sup>3</sup>	I <sub>y</sub> =	5912.62 in <sup>4</sup>	S <sub>left</sub> =	537.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	269.3250 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	269.3250 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.6855 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.6855 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	40838.2 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	40838.2 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1752.7 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1752.7 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

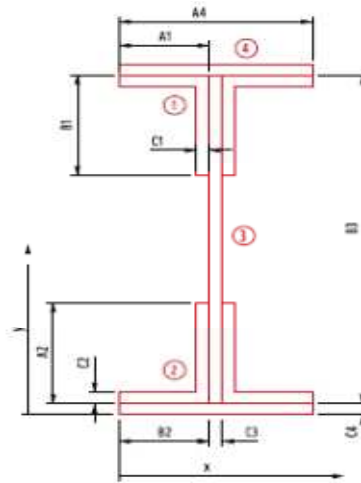
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 16**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517	
4	Cover Plate	99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000	
<b>Total</b>		<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	416.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	416.51 in <sup>3</sup>
I <sub>y</sub> =	4581.60 in <sup>4</sup>	S <sub>left</sub> =	416.51 in <sup>3</sup>	I <sub>y</sub> =	4581.60 in <sup>4</sup>	S <sub>left</sub> =	416.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	235.4250 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	235.4250 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4115 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4115 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

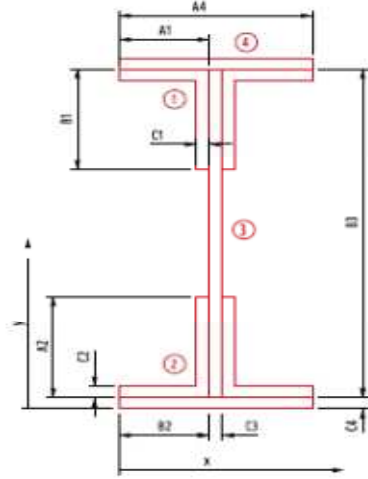
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



Section 17

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199	
4	Cover Plate	66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000	
<b>Total</b>		<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	295.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	295.51 in <sup>3</sup>
I <sub>y</sub> =	3250.56 in <sup>4</sup>	S <sub>left</sub> =	295.51 in <sup>3</sup>	I <sub>y</sub> =	3250.56 in <sup>4</sup>	S <sub>left</sub> =	295.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	201.4500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	201.4500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.0169 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.0169 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

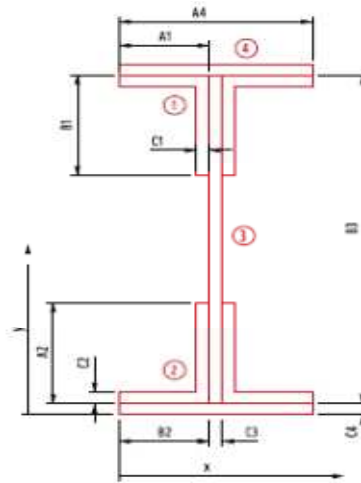
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 156.84$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 18**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	157.2150	1886.5800	0.5625	78.0450	73092.2643	73092.8268
	Vertical Leg		10.8750	153.2150	1666.2131	47.6348	74.0450	59623.9495	59671.5843
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	78.0450	73092.2643	73092.8268
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	74.0450	59623.9495	59671.5843
3	Web Plate		98.0250	79.1700	7760.6393	200941.3299	0.0000	0.0000	200941.3299
4	Cover Plate Top		16.5000	157.9650	2606.4225	0.7734	78.7950	102442.7584	102443.5319
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	78.7950	102442.7584	102443.5319
<b>Total</b>			<b>176.78</b>		<b>13995.28</b>	<b>201039.27</b>		<b>470317.94</b>	<b>671357.22</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 79.1700 in	S <sub>top</sub> = 8479.94 in <sup>3</sup>			y-bar = 79.1700 in	S <sub>top</sub> = 8479.94 in <sup>3</sup>		
I <sub>x</sub> = 671357.22 in <sup>4</sup>	S <sub>bottom</sub> = 8479.94 in <sup>3</sup>			I <sub>x</sub> = 671357.22 in <sup>4</sup>	S <sub>bottom</sub> = 8479.94 in <sup>3</sup>		
C <sub>top</sub> = 79.1700 in	A = 176.7750 in <sup>2</sup>			C <sub>top</sub> = 79.1700 in	A = 176.7750 in <sup>2</sup>		
C <sub>bottom</sub> = 79.1700 in	r <sub>x</sub> = 61.6263 in			C <sub>bottom</sub> = 79.1700 in	r <sub>x</sub> = 61.6263 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	98.0250	11.0000	1078.2750	3.1909	0.0000	0.0000	3.1909	
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000	
<b>Total</b>		<b>176.78</b>		<b>1944.53</b>	<b>1463.21</b>		<b>456.62</b>	<b>1919.83</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.53 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	174.53 in <sup>3</sup>
I <sub>y</sub> =	1919.83 in <sup>4</sup>	S <sub>left</sub> =	174.53 in <sup>3</sup>	I <sub>y</sub> =	1919.83 in <sup>4</sup>	S <sub>left</sub> =	174.53 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	176.7750 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	176.7750 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.2955 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.2955 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	23319.8 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	23319.8 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1876.2 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1876.2 k



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

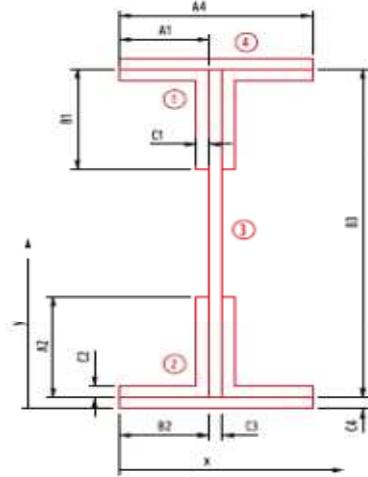
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 177.12$  in

Cover Plate:

$C_4 = 1.2500$  in  
 $A_4 = 22.0000$  in



**Section 19**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	177.9950	2135.9400	0.5625	88.1850	93319.1307	93319.6932
	Vertical Leg		10.8750	173.9950	1892.1956	47.6348	84.1850	77072.3672	77120.0020
2	Horizontal Leg		12.0000	1.6250	19.5000	0.5625	88.1850	93319.1307	93319.6932
	Vertical Leg		10.8750	5.6250	61.1719	47.6348	84.1850	77072.3672	77120.0020
3	Web Plate		121.7700	89.8100	10936.1637	318342.2394	0.0000	0.0000	318342.2394
4	Cover Plate Top		27.5000	178.9950	4922.3625	3.5807	89.1850	218734.0162	218737.5969
	Cover Plate Bottom		27.5000	0.6250	17.1875	3.5807	89.1850	218734.0162	218737.5969
<b>Total</b>			<b>222.52</b>		<b>19984.52</b>	<b>318445.80</b>		<b>778251.03</b>	<b>1096696.82</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.1250	175.6200	-21.9525	89.8100	-1971.5540	-56422.2870	0.0000	0.0000	-56422.2870
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-21.95</b>		<b>-1971.55</b>	<b>-56422.29</b>		<b>0.00</b>	<b>-56422.29</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	89.8100 in	S <sub>top</sub> =	12211.30 in <sup>3</sup>	y-bar =	89.8100 in	S <sub>top</sub> =	11583.06 in <sup>3</sup>
I <sub>x</sub> =	##### in <sup>4</sup>	S <sub>bottom</sub> =	12211.30 in <sup>3</sup>	I <sub>x</sub> =	1040274.54 in <sup>4</sup>	S <sub>bottom</sub> =	11583.06 in <sup>3</sup>
C <sub>top</sub> =	89.8100 in	A =	222.5200 in <sup>2</sup>	C <sub>top</sub> =	89.8100 in	A =	200.5675 in <sup>2</sup>
C <sub>bottom</sub> =	89.8100 in	r <sub>x</sub> =	70.2035 in	C <sub>bottom</sub> =	89.8100 in	r <sub>x</sub> =	72.0184 in



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
1 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
2 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
2 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
3	Web Plate	121.7700	11.0000	1339.4700	4.7963	0.0000	0.0000	4.7963	
4	Cover Plate	55.0000	11.0000	605.0000	2218.3333	0.0000	0.0000	2218.3333	
<b>Total</b>		<b>222.52</b>		<b>2447.72</b>	<b>2352.15</b>		<b>464.07</b>	<b>2816.22</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	175.6200	0.1250	-21.9525	10.7188	-235.3034	-0.0286	0.3120	-2.1374	-2.1660
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-21.95</b>		<b>-235.30</b>	<b>-0.03</b>		<b>-2.14</b>	<b>-2.17</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	256.02 in <sup>3</sup>	x-bar =	11.0308 in	S <sub>right</sub> =	256.54 in <sup>3</sup>
I <sub>y</sub> =	2816.22 in <sup>4</sup>	S <sub>left</sub> =	256.02 in <sup>3</sup>	I <sub>y</sub> =	2814.06 in <sup>4</sup>	S <sub>left</sub> =	255.11 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	222.5200 in <sup>2</sup>	C <sub>right</sub> =	10.9692 in	A =	200.5675 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.5575 in	C <sub>left</sub> =	11.0308 in	r <sub>y</sub> =	3.7457 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33581.1 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	31853.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2330.7 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1910.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

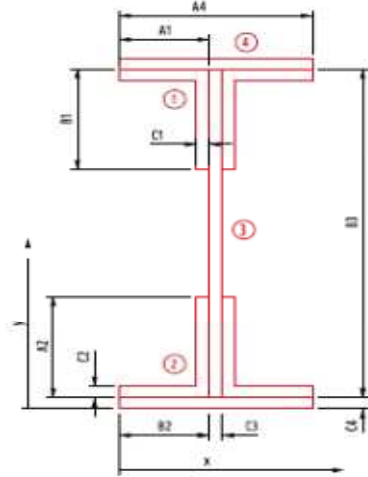
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 187.80$  in

Cover Plate:

$C_4 = 1.7500$  in  
 $A_4 = 22.0000$  in



**Section 20**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	189.1750	2270.1000	0.5625	93.5250	104963.1075	104963.6700
	Vertical Leg		10.8750	185.1750	2013.7781	47.6348	89.5250	87160.1412	87207.7759
2	Horizontal Leg		12.0000	2.1250	25.5000	0.5625	93.5250	104963.1075	104963.6700
	Vertical Leg		10.8750	6.1250	66.6094	47.6348	89.5250	87160.1412	87207.7759
3	Web Plate		129.1125	95.6500	12349.6106	379470.6754	0.0000	0.0000	379470.6754
4	Cover Plate Top		38.5000	190.4250	7331.3625	9.8255	94.7750	345818.5741	345828.3996
	Cover Plate Bottom		38.5000	0.8750	33.6875	9.8255	94.7750	345818.5741	345828.3996
<b>Total</b>			<b>251.86</b>		<b>24090.65</b>	<b>379586.72</b>		<b>1075883.65</b>	<b>1455470.37</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 95.6500 in	S <sub>top</sub> = 15216.63 in <sup>3</sup>	I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 15216.63 in <sup>3</sup>	y-bar = 95.6500 in	S <sub>top</sub> = 15216.63 in <sup>3</sup>	I <sub>x</sub> = 1455470.37 in <sup>4</sup>	S <sub>bottom</sub> = 15216.63 in <sup>3</sup>
C <sub>top</sub> = 95.6500 in	A = 251.8625 in <sup>2</sup>			C <sub>top</sub> = 95.6500 in	A = 251.8625 in <sup>2</sup>		
C <sub>bottom</sub> = 95.6500 in	r <sub>x</sub> = 76.0186 in			C <sub>bottom</sub> = 95.6500 in	r <sub>x</sub> = 76.0186 in		





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
1 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
2 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
2 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
3	Web Plate	129.1125	11.0000	1420.2375	5.0855	0.0000	0.0000	5.0855	
4	Cover Plate	77.0000	11.0000	847.0000	3105.6667	0.0000	0.0000	3105.6667	
<b>Total</b>		<b>251.86</b>		<b>2770.49</b>	<b>3239.77</b>		<b>464.07</b>	<b>3703.84</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	336.71 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	336.71 in <sup>3</sup>
I <sub>y</sub> =	3703.84 in <sup>4</sup>	S <sub>left</sub> =	336.71 in <sup>3</sup>	I <sub>y</sub> =	3703.84 in <sup>4</sup>	S <sub>left</sub> =	336.71 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	251.8625 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	251.8625 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.8348 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.8348 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	41845.7 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	41845.7 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2471.2 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2471.2 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

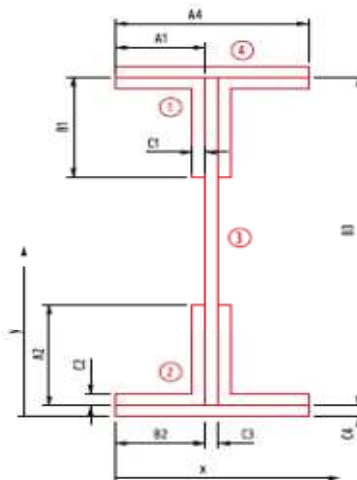
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 187.80$  in

Cover Plate:

$C_4 = 1.7500$  in  
 $A_4 = 22.0000$  in



**Section 21**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	189.1750	2270.1000	0.5625	93.5250	104963.1075	104963.6700
	Vertical Leg		10.8750	185.1750	2013.7781	47.6348	89.5250	87160.1412	87207.7759
2	Horizontal Leg		12.0000	2.1250	25.5000	0.5625	93.5250	104963.1075	104963.6700
	Vertical Leg		10.8750	6.1250	66.6094	47.6348	89.5250	87160.1412	87207.7759
3	Web Plate		140.8500	95.6500	13472.3025	413968.0095	0.0000	0.0000	413968.0095
4	Cover Plate Top		38.5000	190.4250	7331.3625	9.8255	94.7750	345818.5741	345828.3996
	Cover Plate Bottom		38.5000	0.8750	33.6875	9.8255	94.7750	345818.5741	345828.3996
<b>Total</b>			<b>263.60</b>		<b>25213.34</b>	<b>414084.06</b>		<b>1075883.65</b>	<b>1489967.70</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 95.6500 in	S <sub>top</sub> = 15577.29 in <sup>3</sup>	I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 15577.29 in <sup>3</sup>	y-bar = 95.6500 in	S <sub>top</sub> = 15577.29 in <sup>3</sup>	I <sub>x</sub> = 1489967.70 in <sup>4</sup>	S <sub>bottom</sub> = 15577.29 in <sup>3</sup>
C <sub>top</sub> = 95.6500 in	A = 263.6000 in <sup>2</sup>			C <sub>top</sub> = 95.6500 in	A = 263.6000 in <sup>2</sup>		
C <sub>bottom</sub> = 95.6500 in	r <sub>x</sub> = 75.1823 in			C <sub>bottom</sub> = 95.6500 in	r <sub>x</sub> = 75.1823 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
1 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
2 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
2 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
3	Web Plate	140.8500	11.0000	1549.3500	6.6023	0.0000	0.0000	6.6023	
4	Cover Plate	77.0000	11.0000	847.0000	3105.6667	0.0000	0.0000	3105.6667	
<b>Total</b>		<b>263.60</b>		<b>2899.60</b>	<b>3241.29</b>		<b>471.61</b>	<b>3712.90</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	337.54 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	337.54 in <sup>3</sup>
I <sub>y</sub> =	3712.90 in <sup>4</sup>	S <sub>left</sub> =	337.54 in <sup>3</sup>	I <sub>y</sub> =	3712.90 in <sup>4</sup>	S <sub>left</sub> =	337.54 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	263.6000 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	263.6000 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.7530 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.7530 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	42837.5 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	42837.5 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2695.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2695.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

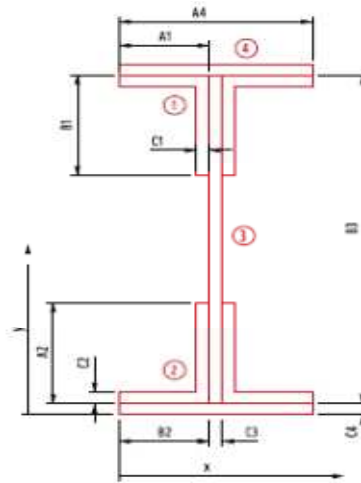
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6875$  in  
 $B_3 = 171.24$  in

Cover Plate:

$C_4 = 1.2500$  in  
 $A_4 = 22.0000$  in



**Section 22**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	172.1150	2065.3800	0.5625	85.2450	87200.5203	87201.0828
	Vertical Leg		10.8750	168.1150	1828.2506	47.6348	81.2450	71783.1565	71830.7913
2	Horizontal Leg		12.0000	1.6250	19.5000	0.5625	85.2450	87200.5203	87201.0828
	Vertical Leg		10.8750	5.6250	61.1719	47.6348	81.2450	71783.1565	71830.7913
3	Web Plate		117.7275	86.8700	10226.9879	287678.3068	0.0000	0.0000	287678.3068
4	Cover Plate Top		27.5000	173.1150	4760.6625	3.5807	86.2450	204550.5007	204554.0814
	Cover Plate Bottom		27.5000	0.6250	17.1875	3.5807	86.2450	204550.5007	204554.0814
<b>Total</b>			<b>218.48</b>		<b>18979.14</b>	<b>287781.86</b>		<b>727068.36</b>	<b>1014850.22</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 86.8700 in	S <sub>top</sub> = 11682.40 in <sup>3</sup>			y-bar = 86.8700 in	S <sub>top</sub> = 11682.40 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 11682.40 in <sup>3</sup>			I <sub>x</sub> = 1014850.22 in <sup>4</sup>	S <sub>bottom</sub> = 11682.40 in <sup>3</sup>		
C <sub>top</sub> = 86.8700 in	A = 218.4775 in <sup>2</sup>			C <sub>top</sub> = 86.8700 in	A = 218.4775 in <sup>2</sup>		
C <sub>bottom</sub> = 86.8700 in	r <sub>x</sub> = 68.1550 in			C <sub>bottom</sub> = 86.8700 in	r <sub>x</sub> = 68.1550 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
1 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
2 (Left)	Horizontal Leg	6.0000	6.6563	39.9375	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	10.2813	55.9043	0.2549	0.7188	2.8090	3.0639	
2 (Right)	Horizontal Leg	6.0000	15.3438	92.0625	32.0000	4.3438	113.2090	145.2090	
	Vertical Leg	5.4375	11.7188	63.7207	0.2549	0.7188	2.8090	3.0639	
3	Web Plate	117.7275	11.0000	1295.0025	4.6371	0.0000	0.0000	4.6371	
4	Cover Plate	55.0000	11.0000	605.0000	2218.3333	0.0000	0.0000	2218.3333	
<b>Total</b>		<b>218.48</b>		<b>2403.25</b>	<b>2351.99</b>		<b>464.07</b>	<b>2816.06</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	256.01 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	256.01 in <sup>3</sup>
I <sub>y</sub> =	2816.06 in <sup>4</sup>	S <sub>left</sub> =	256.01 in <sup>3</sup>	I <sub>y</sub> =	2816.06 in <sup>4</sup>	S <sub>left</sub> =	256.01 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	218.4775 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	218.4775 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.5902 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.5902 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	32126.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	32126.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2253.3 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2253.3 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

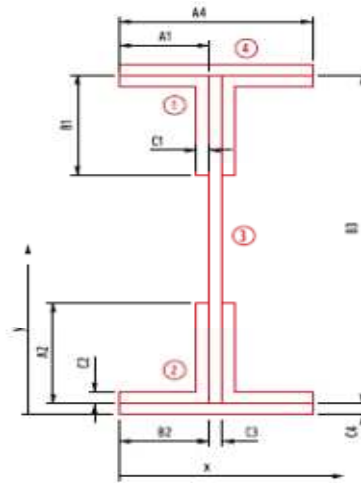
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 150.24$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 23**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	150.6150	1807.3800	0.5625	74.7450	67041.7803	67042.3428
	Vertical Leg		10.8750	146.6150	1594.4381	47.6348	70.7450	54427.7984	54475.4332
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	74.7450	67041.7803	67042.3428
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	70.7450	54427.7984	54475.4332
3	Web Plate		93.9000	75.8700	7124.1930	176626.3507	0.0000	0.0000	176626.3507
4	Cover Plate Top		16.5000	151.3650	2497.5225	0.7734	75.4950	94041.6679	94042.4414
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	75.4950	94041.6679	94042.4414
<b>Total</b>			<b>172.65</b>		<b>13098.96</b>	<b>176724.29</b>		<b>431022.49</b>	<b>607746.79</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 75.8700 in	S <sub>top</sub> = 8010.37 in <sup>3</sup>			y-bar = 75.8700 in	S <sub>top</sub> = 8010.37 in <sup>3</sup>		
I <sub>x</sub> = 607746.79 in <sup>4</sup>	S <sub>bottom</sub> = 8010.37 in <sup>3</sup>			I <sub>x</sub> = 607746.79 in <sup>4</sup>	S <sub>bottom</sub> = 8010.37 in <sup>3</sup>		
C <sub>top</sub> = 75.8700 in	A = 172.6500 in <sup>2</sup>			C <sub>top</sub> = 75.8700 in	A = 172.6500 in <sup>2</sup>		
C <sub>bottom</sub> = 75.8700 in	r <sub>x</sub> = 59.3305 in			C <sub>bottom</sub> = 75.8700 in	r <sub>x</sub> = 59.3305 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	93.9000	11.0000	1032.9000	3.0566	0.0000	0.0000	3.0566	
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000	
<b>Total</b>		<b>172.65</b>		<b>1899.15</b>	<b>1463.08</b>		<b>456.62</b>	<b>1919.70</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.52 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	174.52 in <sup>3</sup>
I <sub>y</sub> =	1919.70 in <sup>4</sup>	S <sub>left</sub> =	174.52 in <sup>3</sup>	I <sub>y</sub> =	1919.70 in <sup>4</sup>	S <sub>left</sub> =	174.52 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	172.6500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	172.6500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3345 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3345 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	22028.5 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	22028.5 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1797.2 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1797.2 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

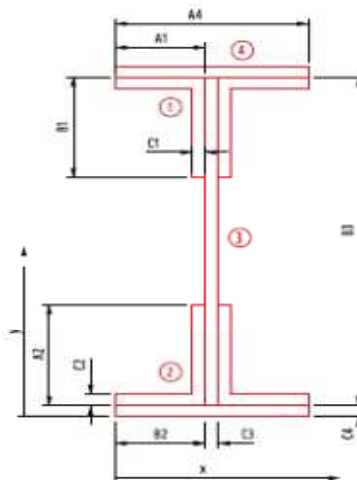
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.12$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



Section 24

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, gross}$
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4910	1709.8920	0.5625	70.6830	59953.0379	59953.6004
	Vertical Leg		10.8750	138.4910	1506.0896	47.6348	66.6830	48357.0196	48404.6543
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6830	59953.0379	59953.6004
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6830	48357.0196	48404.6543
3	Web Plate		88.8225	71.8080	6378.1661	149495.3545	0.0000	0.0000	149495.3545
4	Cover Plate Top		16.5000	143.2410	2363.4765	0.7734	71.4330	84194.1126	84194.8860
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4330	84194.1126	84194.8860
<b>Total</b>			<b>167.57</b>		<b>12033.05</b>	<b>149593.30</b>		<b>385008.34</b>	<b>534601.64</b>
Section Losses			A	y	Ay	$I_o$	d	$Ad^2$	$I_{x, loss}$
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.8080 in	$S_{top} = 7444.88$ in <sup>3</sup>			y-bar = 71.8080 in	$S_{top} = 7444.88$ in <sup>3</sup>		
$I_x = 534601.64$ in <sup>4</sup>	$S_{bott.} = 7444.88$ in <sup>3</sup>			$I_x = 534601.64$ in <sup>4</sup>	$S_{bott.} = 7444.88$ in <sup>3</sup>		
$C_{top} = 71.8080$ in	$A = 167.5725$ in <sup>2</sup>			$C_{top} = 71.8080$ in	$A = 167.5725$ in <sup>2</sup>		
$C_{bottom} = 71.8080$ in	$r_x = 56.4825$ in			$C_{bottom} = 71.8080$ in	$r_x = 56.4825$ in		





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	88.8225	11.0000	977.0475	2.8914	0.0000	0.0000	2.8914	
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000	
<b>Total</b>		<b>167.57</b>		<b>1843.30</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.50 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	174.50 in <sup>3</sup>
I <sub>y</sub> =	1919.53 in <sup>4</sup>	S <sub>left</sub> =	174.50 in <sup>3</sup>	I <sub>y</sub> =	1919.53 in <sup>4</sup>	S <sub>left</sub> =	174.50 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	167.5725 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	167.5725 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3845 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3845 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20473.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20473.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1700.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1700.1 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

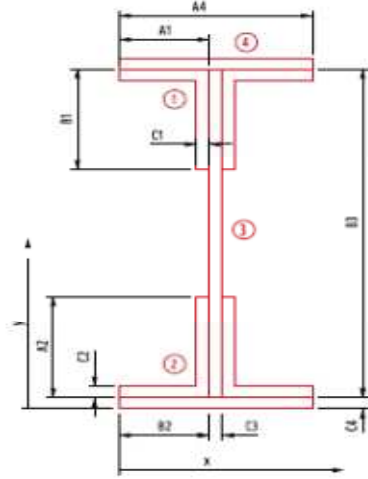
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 167.04$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



**Section 25**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	167.4150	2008.9800	0.5625	83.1450	82957.0923	82957.6548
	Vertical Leg		10.8750	163.4150	1777.1381	47.6348	79.1450	68120.2499	68167.8847
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	83.1450	82957.0923	82957.6548
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	79.1450	68120.2499	68167.8847
3	Web Plate		104.4000	84.2700	8797.7880	242750.5459	0.0000	0.0000	242750.5459
4	Cover Plate Top		16.5000	168.1650	2774.7225	0.7734	83.8950	116133.1219	116133.8954
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	83.8950	116133.1219	116133.8954
<b>Total</b>			<b>183.15</b>		<b>15434.05</b>	<b>242848.49</b>		<b>534420.93</b>	<b>777269.42</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	84.2700 in	S <sub>top</sub> =	9223.56 in <sup>3</sup>	y-bar =	84.2700 in	S <sub>top</sub> =	9223.56 in <sup>3</sup>
I <sub>x</sub> =	777269.42 in <sup>4</sup>	S <sub>bottom</sub> =	9223.56 in <sup>3</sup>	I <sub>x</sub> =	777269.42 in <sup>4</sup>	S <sub>bottom</sub> =	9223.56 in <sup>3</sup>
C <sub>top</sub> =	84.2700 in	A =	183.1500 in <sup>2</sup>	C <sub>top</sub> =	84.2700 in	A =	183.1500 in <sup>2</sup>
C <sub>bottom</sub> =	84.2700 in	r <sub>x</sub> =	65.1452 in	C <sub>bottom</sub> =	84.2700 in	r <sub>x</sub> =	65.1452 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	104.4000	11.0000	1148.4000	3.3984	0.0000	0.0000	3.3984	
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000	
<b>Total</b>		<b>183.15</b>		<b>2014.65</b>	<b>1463.42</b>		<b>456.62</b>	<b>1920.04</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.55 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	174.55 in <sup>3</sup>
I <sub>y</sub> =	1920.04 in <sup>4</sup>	S <sub>left</sub> =	174.55 in <sup>3</sup>	I <sub>y</sub> =	1920.04 in <sup>4</sup>	S <sub>left</sub> =	174.55 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	183.1500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	183.1500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.2378 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.2378 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	25364.8 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	25364.8 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1998.2 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1998.2 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

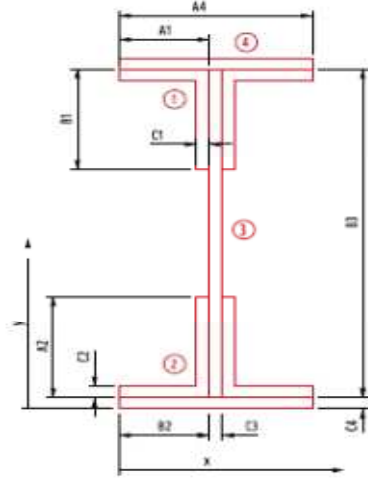
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 174.48$  in

Cover Plate:

$C_4 = 1.2500$  in  
 $A_4 = 22.0000$  in



Section 26

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	175.3550	2104.2600	0.5625	86.8650	90546.3387	90546.9012
	Vertical Leg		10.8750	171.3550	1863.4856	47.6348	82.8650	74674.3644	74721.9992
2	Horizontal Leg		12.0000	1.6250	19.5000	0.5625	86.8650	90546.3387	90546.9012
	Vertical Leg		10.8750	5.6250	61.1719	47.6348	82.8650	74674.3644	74721.9992
3	Web Plate		130.8600	88.4900	11579.8014	331983.8637	0.0000	0.0000	331983.8637
4	Cover Plate Top		27.5000	176.3550	4849.7625	3.5807	87.8650	212307.1012	212310.6819
	Cover Plate Bottom		27.5000	0.6250	17.1875	3.5807	87.8650	212307.1012	212310.6819
<b>Total</b>			<b>231.61</b>		<b>20495.17</b>	<b>332087.42</b>		<b>755055.61</b>	<b>1087143.03</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 88.4900 in	S <sub>top</sub> = 12285.49 in <sup>3</sup>			y-bar = 88.4900 in	S <sub>top</sub> = 12285.49 in <sup>3</sup>		
I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 12285.49 in <sup>3</sup>			I <sub>x</sub> = 1087143.03 in <sup>4</sup>	S <sub>bottom</sub> = 12285.49 in <sup>3</sup>		
C <sub>top</sub> = 88.4900 in	A = 231.6100 in <sup>2</sup>			C <sub>top</sub> = 88.4900 in	A = 231.6100 in <sup>2</sup>		
C <sub>bottom</sub> = 88.4900 in	r <sub>x</sub> = 68.5117 in			C <sub>bottom</sub> = 88.4900 in	r <sub>x</sub> = 68.5117 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
1 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
2 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
2 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
3	Web Plate	130.8600	11.0000	1439.4600	6.1341	0.0000	0.0000	6.1341	
4	Cover Plate	55.0000	11.0000	605.0000	2218.3333	0.0000	0.0000	2218.3333	
<b>Total</b>		<b>231.61</b>		<b>2547.71</b>	<b>2353.49</b>		<b>471.61</b>	<b>2825.10</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	256.83 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	256.83 in <sup>3</sup>
I <sub>y</sub> =	2825.10 in <sup>4</sup>	S <sub>left</sub> =	256.83 in <sup>3</sup>	I <sub>y</sub> =	2825.10 in <sup>4</sup>	S <sub>left</sub> =	256.83 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	231.6100 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	231.6100 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.4925 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.4925 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33785.1 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33785.1 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2504.7 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2504.7 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

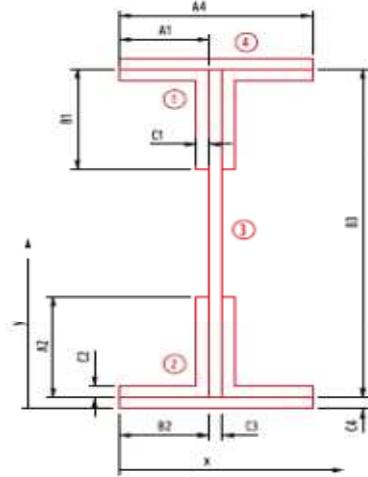
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.7500$  in  
 $B_3 = 174.48$  in

Cover Plate:

$C_4 = 1.2500$  in  
 $A_4 = 22.0000$  in



**Section 27**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	175.3550	2104.2600	0.5625	86.8650	90546.3387	90546.9012
	Vertical Leg		10.8750	171.3550	1863.4856	47.6348	82.8650	74674.3644	74721.9992
2	Horizontal Leg		12.0000	1.6250	19.5000	0.5625	86.8650	90546.3387	90546.9012
	Vertical Leg		10.8750	5.6250	61.1719	47.6348	82.8650	74674.3644	74721.9992
3	Web Plate		130.8600	88.4900	11579.8014	331983.8637	0.0000	0.0000	331983.8637
4	Cover Plate Top		27.5000	176.3550	4849.7625	3.5807	87.8650	212307.1012	212310.6819
	Cover Plate Bottom		27.5000	0.6250	17.1875	3.5807	87.8650	212307.1012	212310.6819
<b>Total</b>			<b>231.61</b>		<b>20495.17</b>	<b>332087.42</b>		<b>755055.61</b>	<b>1087143.03</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	88.4900 in	S <sub>top</sub> =	12285.49 in <sup>3</sup>	y-bar =	88.4900 in	S <sub>top</sub> =	12285.49 in <sup>3</sup>
I <sub>x</sub> =	##### in <sup>4</sup>	S <sub>bottom</sub> =	12285.49 in <sup>3</sup>	I <sub>x</sub> =	1087143.03 in <sup>4</sup>	S <sub>bottom</sub> =	12285.49 in <sup>3</sup>
C <sub>top</sub> =	88.4900 in	A =	231.6100 in <sup>2</sup>	C <sub>top</sub> =	88.4900 in	A =	231.6100 in <sup>2</sup>
C <sub>bottom</sub> =	88.4900 in	r <sub>x</sub> =	68.5117 in	C <sub>bottom</sub> =	88.4900 in	r <sub>x</sub> =	68.5117 in



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
1 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
2 (Left)	Horizontal Leg	6.0000	6.6250	39.7500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	10.2500	55.7344	0.2549	0.7500	3.0586	3.3135	
2 (Right)	Horizontal Leg	6.0000	15.3750	92.2500	32.0000	4.3750	114.8438	146.8438	
	Vertical Leg	5.4375	11.7500	63.8906	0.2549	0.7500	3.0586	3.3135	
3	Web Plate	130.8600	11.0000	1439.4600	6.1341	0.0000	0.0000	6.1341	
4	Cover Plate	55.0000	11.0000	605.0000	2218.3333	0.0000	0.0000	2218.3333	
<b>Total</b>		<b>231.61</b>		<b>2547.71</b>	<b>2353.49</b>		<b>471.61</b>	<b>2825.10</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	256.83 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	256.83 in <sup>3</sup>
I <sub>y</sub> =	2825.10 in <sup>4</sup>	S <sub>left</sub> =	256.83 in <sup>3</sup>	I <sub>y</sub> =	2825.10 in <sup>4</sup>	S <sub>left</sub> =	256.83 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	231.6100 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	231.6100 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.4925 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.4925 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33785.1 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33785.1 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2504.7 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	2504.7 k



Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

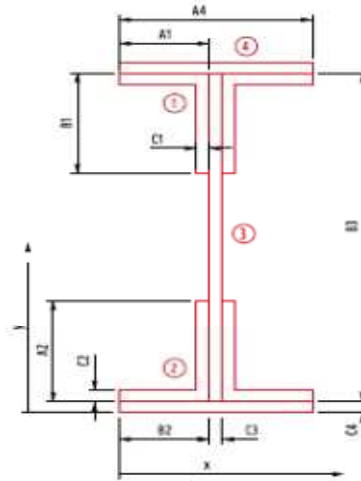
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 161.76$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



Section 28

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	162.1350	1945.6200	0.5625	80.5050	77772.6603	77773.2228
	Vertical Leg		10.8750	158.1350	1719.7181	47.6348	76.5050	63651.5384	63699.1732
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	80.5050	77772.6603	77773.2228
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	76.5050	63651.5384	63699.1732
3	Web Plate		101.1000	81.6300	8252.7930	220451.0573	0.0000	0.0000	220451.0573
4	Cover Plate Top		16.5000	162.8850	2687.6025	0.7734	81.2550	108939.1879	108939.9614
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	81.2550	108939.1879	108939.9614
<b>Total</b>			<b>179.85</b>		<b>14681.16</b>	<b>220549.00</b>		<b>500726.77</b>	<b>721275.77</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.1250	160.2600	-20.0325	81.6300	-1635.2530	-42875.0048	0.0000	0.0000	-42875.0048
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-20.03</b>		<b>-1635.25</b>	<b>-42875.00</b>		<b>0.00</b>	<b>-42875.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar =	81.6300 in	S <sub>top</sub> =	8835.92 in <sup>3</sup>	y-bar =	81.6300 in	S <sub>top</sub> =	8310.68 in <sup>3</sup>
I <sub>x</sub> =	721275.77 in <sup>4</sup>	S <sub>bottom</sub> =	8835.92 in <sup>3</sup>	I <sub>x</sub> =	678400.77 in <sup>4</sup>	S <sub>bottom</sub> =	8310.68 in <sup>3</sup>
C <sub>top</sub> =	81.6300 in	A =	179.8500 in <sup>2</sup>	C <sub>top</sub> =	81.6300 in	A =	159.8175 in <sup>2</sup>
C <sub>bottom</sub> =	81.6300 in	r <sub>x</sub> =	63.3280 in	C <sub>bottom</sub> =	81.6300 in	r <sub>x</sub> =	65.1525 in





Made By CTG  
Checked By DBH

Date 3/8/2012  
Date 3/9/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	101.1000	11.0000	1112.1000	3.2910	0.0000	0.0000	3.2910	
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000	
<b>Total</b>		<b>179.85</b>		<b>1978.35</b>	<b>1463.31</b>		<b>456.62</b>	<b>1919.93</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	160.2600	0.1250	-20.0325	10.7500	-215.3494	-0.0261	0.2813	-1.5856	-1.6117
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>-20.03</b>		<b>-215.35</b>	<b>-0.03</b>		<b>-1.59</b>	<b>-1.61</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.54 in <sup>3</sup>	x-bar =	11.0313 in	S <sub>right</sub> =	174.89 in <sup>3</sup>
I <sub>y</sub> =	1919.93 in <sup>4</sup>	S <sub>left</sub> =	174.54 in <sup>3</sup>	I <sub>y</sub> =	1918.32 in <sup>4</sup>	S <sub>left</sub> =	173.90 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	179.8500 in <sup>2</sup>	C <sub>right</sub> =	10.9687 in	A =	159.8175 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.2673 in	C <sub>left</sub> =	11.0313 in	r <sub>y</sub> =	3.4646 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	24298.8 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	22854.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1935.1 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1551.6 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

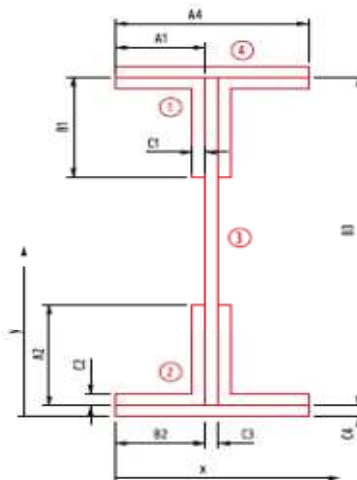
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



Section 29

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199	
4	Cover Plate	66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000	
<b>Total</b>		<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	295.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	295.51 in <sup>3</sup>
I <sub>y</sub> =	3250.56 in <sup>4</sup>	S <sub>left</sub> =	295.51 in <sup>3</sup>	I <sub>y</sub> =	3250.56 in <sup>4</sup>	S <sub>left</sub> =	295.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	201.4500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	201.4500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.0169 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.0169 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

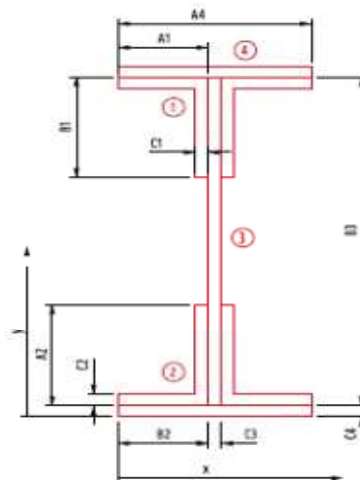
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 30**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517	
4	Cover Plate	99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000	
<b>Total</b>		<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	416.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	416.51 in <sup>3</sup>
I <sub>y</sub> =	4581.60 in <sup>4</sup>	S <sub>left</sub> =	416.51 in <sup>3</sup>	I <sub>y</sub> =	4581.60 in <sup>4</sup>	S <sub>left</sub> =	416.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	235.4250 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	235.4250 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4115 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4115 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

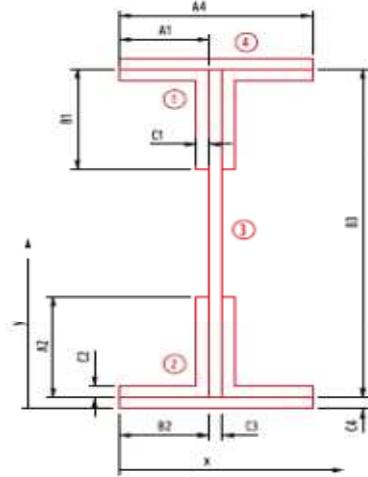
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 146.52$  in

Cover Plate:

$C_4 = 3.0000$  in  
 $A_4 = 22.0000$  in



Section 31

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	149.1450	1789.7400	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	145.1450	1578.4519	47.6348	68.8850	51603.4326	51651.0673
2	Horizontal Leg		12.0000	3.3750	40.5000	0.5625	72.8850	63746.6787	63747.2412
	Vertical Leg		10.8750	7.3750	80.2031	47.6348	68.8850	51603.4326	51651.0673
3	Web Plate		91.5750	76.2600	6983.5095	163828.5175	0.0000	0.0000	163828.5175
4	Cover Plate Top		66.0000	151.0200	9967.3200	49.5000	74.7600	368877.8016	368927.3016
	Cover Plate Bottom		66.0000	1.5000	99.0000	49.5000	74.7600	368877.8016	368927.3016
<b>Total</b>			<b>269.33</b>		<b>20538.72</b>	<b>164023.91</b>		<b>968455.83</b>	<b>1132479.74</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>	I <sub>x</sub> = ##### in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>	y-bar = 76.2600 in	S <sub>top</sub> = 14850.25 in <sup>3</sup>	I <sub>x</sub> = 1132479.74 in <sup>4</sup>	S <sub>bottom</sub> = 14850.25 in <sup>3</sup>
C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>			C <sub>top</sub> = 76.2600 in	A = 269.3250 in <sup>2</sup>		
C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in			C <sub>bottom</sub> = 76.2600 in	r <sub>x</sub> = 64.8451 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	91.5750	11.0000	1007.3250	2.9810	0.0000	0.0000	2.9810	
4	Cover Plate	132.0000	11.0000	1452.0000	5324.0000	0.0000	0.0000	5324.0000	
<b>Total</b>		<b>269.33</b>		<b>2962.58</b>	<b>5456.00</b>		<b>456.62</b>	<b>5912.62</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	537.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	537.51 in <sup>3</sup>
I <sub>y</sub> =	5912.62 in <sup>4</sup>	S <sub>left</sub> =	537.51 in <sup>3</sup>	I <sub>y</sub> =	5912.62 in <sup>4</sup>	S <sub>left</sub> =	537.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	269.3250 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	269.3250 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.6855 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.6855 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	<b>33.0 ksi</b>		F <sub>y</sub> =	<b>33.0 ksi</b>	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	40838.2 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	40838.2 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1752.7 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1752.7 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

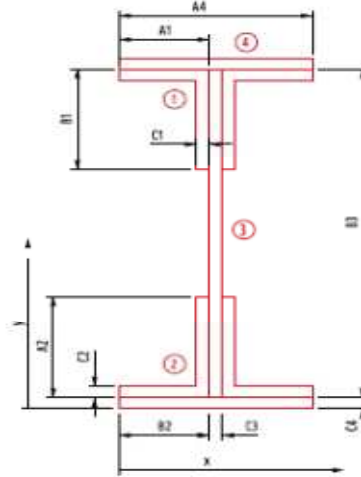
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 145.08$  in

Cover Plate:

$C_4 = 2.2500$  in  
 $A_4 = 22.0000$  in



**Section 32**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	146.9550	1763.4600	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	142.9550	1554.6356	47.6348	68.1650	50530.3311	50577.9658
2	Horizontal Leg		12.0000	2.6250	31.5000	0.5625	72.1650	62493.4467	62494.0092
	Vertical Leg		10.8750	6.6250	72.0469	47.6348	68.1650	50530.3311	50577.9658
3	Web Plate		90.6750	74.7900	6781.5833	159045.5096	0.0000	0.0000	159045.5096
4	Cover Plate Top		49.5000	148.4550	7348.5225	20.8828	73.6650	268613.3451	268634.2280
	Cover Plate Bottom		49.5000	1.1250	55.6875	20.8828	73.6650	268613.3451	268634.2280
<b>Total</b>			<b>235.43</b>		<b>17607.44</b>	<b>159183.67</b>		<b>763274.25</b>	<b>922457.92</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>			y-bar = 74.7900 in	S <sub>top</sub> = 12333.97 in <sup>3</sup>		
I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>			I <sub>x</sub> = 922457.92 in <sup>4</sup>	S <sub>bottom</sub> = 12333.97 in <sup>3</sup>		
C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>			C <sub>top</sub> = 74.7900 in	A = 235.4250 in <sup>2</sup>		
C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in			C <sub>bottom</sub> = 74.7900 in	r <sub>x</sub> = 62.5961 in		





Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	90.6750	11.0000	997.4250	2.9517	0.0000	0.0000	2.9517	
4	Cover Plate	99.0000	11.0000	1089.0000	3993.0000	0.0000	0.0000	3993.0000	
<b>Total</b>		<b>235.43</b>		<b>2589.68</b>	<b>4124.97</b>		<b>456.62</b>	<b>4581.60</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	416.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	416.51 in <sup>3</sup>
I <sub>y</sub> =	4581.60 in <sup>4</sup>	S <sub>left</sub> =	416.51 in <sup>3</sup>	I <sub>y</sub> =	4581.60 in <sup>4</sup>	S <sub>left</sub> =	416.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	235.4250 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	235.4250 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4115 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.4115 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	33918.4 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1735.5 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

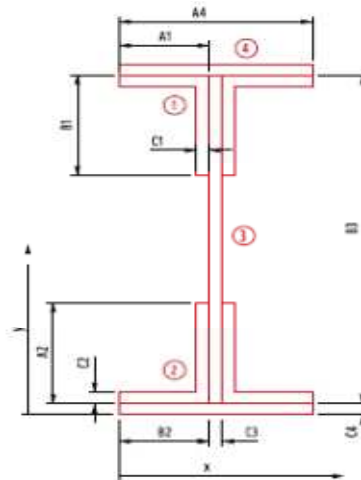
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 143.52$  in

Cover Plate:

$C_4 = 1.5000$  in  
 $A_4 = 22.0000$  in



**Section 33**

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	144.6450	1735.7400	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	140.6450	1529.5144	47.6348	67.3850	49380.5282	49428.1630
2	Horizontal Leg		12.0000	1.8750	22.5000	0.5625	71.3850	61149.8187	61150.3812
	Vertical Leg		10.8750	5.8750	63.8906	47.6348	67.3850	49380.5282	49428.1630
3	Web Plate		89.7000	73.2600	6571.4220	153969.9782	0.0000	0.0000	153969.9782
4	Cover Plate Top		33.0000	145.7700	4810.4100	6.1875	72.5100	173504.1033	173510.2908
	Cover Plate Bottom		33.0000	0.7500	24.7500	6.1875	72.5100	173504.1033	173510.2908
<b>Total</b>			<b>201.45</b>		<b>14758.23</b>	<b>154078.75</b>		<b>568068.90</b>	<b>722147.65</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>			y-bar = 73.2600 in	S <sub>top</sub> = 9857.33 in <sup>3</sup>		
I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>			I <sub>x</sub> = 722147.65 in <sup>4</sup>	S <sub>bottom</sub> = 9857.33 in <sup>3</sup>		
C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>			C <sub>top</sub> = 73.2600 in	A = 201.4500 in <sup>2</sup>		
C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in			C <sub>bottom</sub> = 73.2600 in	r <sub>x</sub> = 59.8728 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	89.7000	11.0000	986.7000	2.9199	0.0000	0.0000	2.9199	
4	Cover Plate	66.0000	11.0000	726.0000	2662.0000	0.0000	0.0000	2662.0000	
<b>Total</b>		<b>201.45</b>		<b>2215.95</b>	<b>2793.94</b>		<b>456.62</b>	<b>3250.56</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	295.51 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	295.51 in <sup>3</sup>
I <sub>y</sub> =	3250.56 in <sup>4</sup>	S <sub>left</sub> =	295.51 in <sup>3</sup>	I <sub>y</sub> =	3250.56 in <sup>4</sup>	S <sub>left</sub> =	295.51 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	201.4500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	201.4500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.0169 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	4.0169 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	27107.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1716.9 k



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Element Dimensions (without Section Losses):**

Top Angles:

$A_1 = l_w = 8.0000$  in  
 $C_1 = t_f = 0.7500$  in  
 $B_1 = l_v = 8.0000$  in

Bottom Angles:

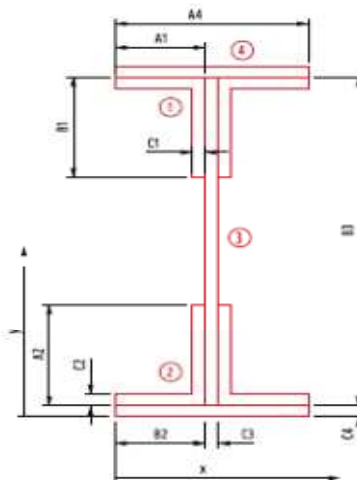
$B_2 = l_h = 8.0000$  in  
 $C_2 = t_f = 0.7500$  in  
 $A_2 = l_v = 8.0000$  in

Web Plate:

$C_3 = 0.6250$  in  
 $B_3 = 142.08$  in

Cover Plate:

$C_4 = 0.7500$  in  
 $A_4 = 22.0000$  in



Section 34

**X-Axis Section Properties:**

Gross Section (without Losses)			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,gross</sub>
Element	Description		(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	Horizontal Leg		12.0000	142.4550	1709.4600	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	138.4550	1505.6981	47.6348	66.6650	48330.9167	48378.5515
2	Horizontal Leg		12.0000	1.1250	13.5000	0.5625	70.6650	59922.5067	59923.0692
	Vertical Leg		10.8750	5.1250	55.7344	47.6348	66.6650	48330.9167	48378.5515
3	Web Plate		88.8000	71.7900	6374.9520	149381.7754	0.0000	0.0000	149381.7754
4	Cover Plate Top		16.5000	143.2050	2362.8825	0.7734	71.4150	84151.6867	84152.4602
	Cover Plate Bottom		16.5000	0.3750	6.1875	0.7734	71.4150	84151.6867	84152.4602
<b>Total</b>			<b>167.55</b>		<b>12028.41</b>	<b>149479.72</b>		<b>384810.22</b>	<b>534289.94</b>
Section Losses			A	y	Ay	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>x,loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>			y-bar = 71.7900 in	S <sub>top</sub> = 7442.40 in <sup>3</sup>		
I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>			I <sub>x</sub> = 534289.94 in <sup>4</sup>	S <sub>bottom</sub> = 7442.40 in <sup>3</sup>		
C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>			C <sub>top</sub> = 71.7900 in	A = 167.5500 in <sup>2</sup>		
C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in			C <sub>bottom</sub> = 71.7900 in	r <sub>x</sub> = 56.4698 in		



Made By RAH  
Checked By DBH

Date 2/27/2012  
Date 3/6/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Y-Axis Section Properties:**

Gross Section (without Losses)		A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, gross</sub>	
Element	Description	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )	
1 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
1 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
2 (Left)	Horizontal Leg	6.0000	6.6875	40.1250	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	10.3125	56.0742	0.2549	0.6875	2.5701	2.8250	
2 (Right)	Horizontal Leg	6.0000	15.3125	91.8750	32.0000	4.3125	111.5859	143.5859	
	Vertical Leg	5.4375	11.6875	63.5508	0.2549	0.6875	2.5701	2.8250	
3	Web Plate	88.8000	11.0000	976.8000	2.8906	0.0000	0.0000	2.8906	
4	Cover Plate	33.0000	11.0000	363.0000	1331.0000	0.0000	0.0000	1331.0000	
<b>Total</b>		<b>167.55</b>		<b>1843.05</b>	<b>1462.91</b>		<b>456.62</b>	<b>1919.53</b>	
Section Losses			A	x	Ax	I <sub>o</sub>	d	Ad <sup>2</sup>	I <sub>y, loss</sub>
Loss #	b (in)	h (in)	(in <sup>2</sup> )	(in)	(in <sup>3</sup> )	(in <sup>4</sup> )	(in)	(in <sup>4</sup> )	(in <sup>4</sup> )
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>			<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

As-Built Section Properties				As-Inspected Section Properties			
x-bar =	11.0000 in	S <sub>right</sub> =	174.50 in <sup>3</sup>	x-bar =	11.0000 in	S <sub>right</sub> =	174.50 in <sup>3</sup>
I <sub>y</sub> =	1919.53 in <sup>4</sup>	S <sub>left</sub> =	174.50 in <sup>3</sup>	I <sub>y</sub> =	1919.53 in <sup>4</sup>	S <sub>left</sub> =	174.50 in <sup>3</sup>
C <sub>right</sub> =	11.0000 in	A =	167.5500 in <sup>2</sup>	C <sub>right</sub> =	11.0000 in	A =	167.5500 in <sup>2</sup>
C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3847 in	C <sub>left</sub> =	11.0000 in	r <sub>y</sub> =	3.3847 in

Capacity: About Y-Y Axis			Capacity: About Y-Y Axis		
F <sub>y</sub> =	33.0 ksi		F <sub>y</sub> =	33.0 ksi	
C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft	C <sub>M</sub> =	F <sub>y</sub> *S <sub>x</sub> =	20466.6 k-ft
C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k	C <sub>M</sub> =	0.58*A <sub>eff</sub> *F <sub>y</sub> =	1699.6 k

Id            Dead Loads (Self Wt) Unfactored  
Type        Static

Factors        1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	13.257	0	-13.257
	13.793	125.869	4.995	-0.03	
	27.586	137.781	-3.267	-0.06	
	41.379	35.735	-11.529	-0.09	
	55.172	-180.27	-19.791	-0.12	
	68.965	-510.232	-28.053	-0.15	
	82.758	-954.152	-36.315	-0.17	
	93.379	-1373.63	-42.677	-0.17	
	96.551	-1512.54	-44.905	-0.17	
	109.93	-2177.26	-54.52	-0.14	
	110.344	-2199.89	-54.871	-0.14	
	120.965	-2830.8	-63.965	-0.09	
	124.137	-3038.69	-67.099	-0.08	
	2	137.93	-4060.25	-81.143	0
0		-4060.25	104.404	0	
8.396		-3220.06	95.79	0.06	
16.521		-2470.66	88.73	0.13	
25.458		-1707.86	82.027	0.21	
27.083		-1575.36	81.053	0.23	
54.166		400.128	64.831	0.54	
72.041		1463.267	54.124	0.74	
81.249		1931.124	47.494	0.83	
84.499		2081.673	45.154	0.86	
102.374		2754.431	30.121	0.98	
108.332		2917.179	24.508	1.01	
135.415		3235.463	-1.004	1.07	
162.498		2862.801	-26.516	1	
167.373		2722.344	-31.108	0.98	
189.581		1825.098	-49.294	0.81	
197.977		1385.866	-55.339	0.74	
216.664		246.484	-66.639	0.53	
235.622	-1127.25	-78.321	0.32		
243.747	-1788.32	-84.428	0.23		
246.997	-2066.73	-86.909	0.2		
256.476	-2930.79	-95.436	0.11		
3	270.83	-4410.07	-110.751	0	-198.93
	0	-4410.07	88.179	0	
	12.438	-3399.41	74.411	-0.08	
	23.467	-2638.27	63.66	-0.13	
	27.926	-2363.94	59.403	-0.15	
	42.945	-1560.47	47.628	-0.19	
	46.934	-1375.39	45.158	-0.2	

	66.412	-611.76	33.313	-0.21	
	70.401	-483.629	30.923	-0.2	
	93.868	77.111	16.866	-0.18	
	117.335	307.982	2.81	-0.16	
	140.802	208.983	-11.247	-0.16	
	164.269	-219.884	-25.304	-0.16	
	177.88	-619.774	-33.457	-0.16	
	187.736	-978.956	-39.462	-0.16	
	205.571	-1783.29	-50.847	-0.12	
	211.203	-2083.62	-55.793	-0.11	
	222.702	-2782.49	-65.725	-0.06	
4	234.67	-3640.38	-77.705	0	-179.662
	0	-3640.38	101.957	0	
	9.075	-2755.01	93.209	0.06	
	21.606	-1650.01	83.198	0.15	
	22.038	-1614.13	82.858	0.16	
	43.212	-6.373	69.118	0.35	
	64.818	1341.835	55.8	0.54	
	65.466	1377.878	55.411	0.55	
	77.566	1995.616	46.7	0.64	
	86.424	2376.307	39.25	0.69	
	93.554	2634.78	33.253	0.73	
	108.03	3017.457	19.617	0.77	
	129.636	3221.431	-0.736	0.77	
	151.242	2985.661	-21.089	0.7	
	155.563	2885.738	-25.159	0.67	
	171.984	2359.228	-38.969	0.55	
	172.848	2325.28	-39.591	0.54	
	185.163	1783.097	-48.458	0.41	
	194.454	1307.041	-54.023	0.3	
	216.06	0	-66.965	0	-66.965

Id	Dead Loads (Superstructure) Unfactored				
Type	Static				
Factors	1				
Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	102.178	0	-102.178
	13.793	1103.043	57.765	-0.01	
	27.586	1593.492	13.351	-0.04	
	41.379	1471.346	-31.062	-0.11	
	55.172	736.605	-75.476	-0.2	
	68.965	-610.731	-119.889	-0.31	
	82.758	-2570.66	-164.303	-0.41	
	93.379	-4497.26	-198.501	-0.45	
	96.551	-5143.19	-208.716	-0.45	
	109.93	-8223.84	-251.797	-0.4	
	110.344	-8328.31	-253.13	-0.4	
	120.965	-11198.3	-287.328	-0.29	
	124.137	-12126	-297.543	-0.24	
2	0	-16536.3	-341.957	0	-765.979
		-16536.3	424.023	0	
	8.396	-13089.8	396.988	0.2	
	16.521	-9970.63	370.826	0.42	
	25.458	-6785.01	342.048	0.71	
	27.083	-6233.44	336.815	0.77	
	54.166	1707.612	249.608	1.88	
	72.041	5654.896	192.051	2.57	
	81.249	7286.833	162.401	2.87	
	84.499	7797.624	151.936	2.96	
	102.374	9999.039	94.379	3.37	
	108.332	10504.22	75.194	3.46	
	135.415	11359.77	-12.014	3.62	
	162.498	9853.489	-99.221	3.34	
	167.373	9331.534	-114.918	3.24	
	189.581	5985.375	-186.428	2.64	
	197.977	4306.69	-213.462	2.35	
	216.664	-244.574	-273.635	1.63	
	235.622	-6010.83	-334.68	0.91	
	243.747	-8836.35	-360.843	0.65	
	246.997	-10026.1	-371.307	0.55	
	256.476	-13690.4	-401.83	0.3	
3	0	-19790	-448.05	0	-836.224
	0	-19790	388.174	0	
	12.438	-15211.1	348.125	-0.17	
	23.467	-11567.3	312.61	-0.25	
	27.926	-10205.5	298.253	-0.26	
	42.945	-6089.23	249.892	-0.24	
	46.934	-5117.93	237.046	-0.21	



	66.412	-1111.63	174.328	0	
	70.401	-441.792	161.483	0.05	
	93.868	2461.093	85.919	0.34	
	117.335	3590.724	10.355	0.49	
	140.802	2947.101	-65.209	0.43	
	164.269	530.227	-140.772	0.2	
	177.88	-1684.07	-184.599	0.04	
	187.736	-3659.91	-216.336	-0.06	
	205.571	-8030.36	-273.764	-0.16	
	211.203	-9623.29	-291.9	-0.16	
	222.702	-13192.7	-328.926	-0.12	
4	0	-17359.9	-367.464	0	-803.23
	0	-17359.9	435.766	0	
	9.075	-13541	405.911	0.14	
	21.606	-8712.68	364.683	0.41	
	22.038	-8555.4	363.261	0.42	
	43.212	-1601.26	293.599	1.05	
	64.818	3974.321	222.515	1.74	
	65.466	4117.86	220.383	1.76	
	77.566	6543.53	180.576	2.09	
	86.424	8014.067	151.431	2.29	
	93.554	9010.144	127.974	2.43	
	108.03	10517.98	80.348	2.61	
	129.636	11486.05	9.264	2.66	
	151.242	10918.29	-61.82	2.43	
	155.563	10620.44	-76.037	2.35	
	171.984	8928.327	-130.06	1.93	
	172.848	8814.695	-132.904	1.9	
	185.163	6928.437	-173.421	1.47	
	194.454	5175.267	-203.987	1.07	
	216.06	0	-275.071	0	-275.071

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	65.837	-15.096	65.837	0	0	0
	13.793	786.558	57.026	0	57.026	786.558	0	0.1
	27.586	1333.149	48.327	0	48.327	1333.149	0	0.19
	41.379	1656.323	34.735	0	39.95	1653.11	0	0.26
	55.172	1799.03	26.638	-5.362	32.017	1766.42	0	0.3
	68.965	1767.97	0.132	-31.868	24.645	1699.653	0	0.31
	82.758	1600.352	0	-39.249	17.939	1484.585	0	0.28
	93.379	1374.403	0	-44.484	13.249	1237.18	0	0.24
	96.551	1293.233	0	-45.966	11.928	1151.69	0	0.22
	109.93	891.407	0	-51.816	6.684	734.752	0	0.15
	110.344	877.618	0	-51.986	6.53	720.507	0	0.15
	120.965	504.008	4.167	0	4.167	504.008	0	0.09
	124.137	517.226	4.167	0	4.167	517.226	0	0.08
2	0	574.695	4.167	-8.698	70.678	0	-417.955	0
	0	574.695	4.167	-8.698	70.678	0	-417.955	0
	8.396	501.666	0	-8.698	69.488	0	-172.702	0.06
	16.521	430.991	0	-8.698	68.165	61.259	0	0.12
	25.458	432.302	37.008	0	66.513	332.967	0	0.2
	27.083	475.265	36.744	0	66.189	383.888	0	0.21
	54.166	1299.031	52.941	0	59.693	1282.725	0	0.45
	72.041	1861.444	47.895	0	54.494	1853.677	0	0.6
	81.249	2122.061	45.091	0	51.636	2113.375	0	0.66
	84.499	2207.106	44.077	0	50.607	2197.319	0	0.68
	102.374	2595.343	38.347	0	44.822	2574.868	0	0.77
	108.332	2691.617	36.395	0	42.859	2666.547	0	0.79
	135.415	2901.018	27.406	-4.594	33.854	2852.521	0	0.85
	162.498	2770.641	0	-34.484	24.938	2659.082	0	0.82
	167.373	2708.174	0	-36.088	23.37	2586.185	0	0.8
	189.581	2282.646	0	-43.23	16.503	2131.636	0	0.7
	197.977	2069.609	0	-45.818	14.08	1918.835	0	0.64
	216.664	1524.095	0	-51.22	9.161	1398.25	0	0.49
	235.622	917.531	0	-56.02	4.912	836.041	0	0.32
	243.747	651.084	0	-57.847	4.345	162.152	0	0.24
	246.997	543.744	0	-58.542	4.345	176.272	0	0.21
	256.476	490.228	2.575	0	4.345	217.455	0	0.12
3	0	527.184	2.575	-8.637	69.849	0	-317.724	0
	0	527.184	2.575	-8.637	69.849	0	-317.724	0
	12.438	419.757	0	-8.637	66.991	131.134	0	0.11
	23.467	536.559	57.414	0	64.207	494.996	0	0.21
	27.926	675.165	56.266	0	63.02	634.888	0	0.26

	42.945	1112.63	52.11	0	58.722	1077.089	0	0.41
	46.934	1220.701	50.926	0	57.5	1186.388	0	0.44
	66.412	1690.571	44.668	0	51.066	1659.765	0	0.63
	70.401	1772.661	43.297	0	49.664	1741.752	0	0.66
	93.868	2132.017	34.771	0	41.015	2095.462	0	0.81
	117.335	2243.401	5.41	-26.59	32.066	2194.557	0	0.86
	140.802	2109.929	0	-35.505	23.363	2031.422	0	0.81
	164.269	1732.164	0	-43.955	15.441	1648.095	0	0.65
	177.88	1425.742	0	-48.437	11.358	1350.387	0	0.53
	187.736	1173.683	0	-51.442	10.295	158.634	0	0.44
	205.571	665.897	0	-56.349	10.295	342.246	0	0.26
	211.203	497.174	0	-35.955	10.295	400.229	0	0.21
	222.702	518.61	10.295	0	10.295	518.61	0	0.1
4	0	641.823	10.295	-2.971	70.209	0	-300.551	0
	0	641.823	10.295	-2.971	70.209	0	-300.551	0
	9.075	614.867	0	-2.971	68.478	56.962	0	0.07
	21.606	577.641	0	-2.971	65.792	535.197	0	0.17
	22.038	576.357	0	-2.971	65.694	551.52	0	0.17
	43.212	1340.759	53.651	0	60.408	1331.629	0	0.34
	64.818	2042.806	47.531	0	54.096	2035.87	0	0.5
	65.466	2061.856	47.334	0	53.893	2054.783	0	0.51
	77.566	2389.114	43.515	0	49.983	2377.229	0	0.57
	86.424	2588.987	40.573	0	46.984	2570.983	0	0.61
	93.554	2721.175	38.13	0	44.502	2696.701	0	0.63
	108.03	2901.185	32.998	0	39.3	2860.554	0	0.65
	129.636	2956.885	4.49	-27.51	31.196	2854.419	0	0.64
	151.242	2723.101	0	-35.739	22.761	2519.585	0	0.56
	155.563	2638.022	0	-43.606	21.04	2410.917	0	0.54
	171.984	2206.652	0	-50.064	14.408	1866.452	0	0.43
	172.848	2178.262	0	-50.409	14.055	1831.926	0	0.42
	185.163	1710.458	0	-55.361	8.988	1274.848	0	0.32
	194.454	1277.982	0	-59.149	8.663	0	-187.165	0.23
	216.06	0	8.663	-68.01	8.663	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	65.837	-15.096	-15.096	0	0	0
	13.793	-208.226	0	-15.096	-15.096	0	-208.226	-0.07
	27.586	-416.452	0	-15.096	-15.096	0	-416.452	-0.13
	41.379	-624.678	0	-15.096	-20.636	1453.386	0	-0.18
	55.172	-832.904	0	-15.096	-29.14	1692.654	0	-0.22
	68.965	-1041.13	0	-15.096	-37.244	1724.922	0	-0.24
	82.758	-1249.36	0	-15.096	-44.828	1576.714	0	-0.24
	93.379	-1409.69	0	-15.096	-50.237	1360.235	0	-0.22
	96.551	-1457.58	0	-15.096	-51.773	1280.983	0	-0.21
	109.93	-1659.56	0	-15.096	-57.842	884.398	0	-0.16
	110.344	-1665.81	0	-15.096	-58.019	870.725	0	-0.16
	120.965	-1826.14	0	-15.096	-62.38	491.693	0	-0.11
	124.137	-1874.03	0	-15.096	-63.614	369.028	0	-0.09

2	0	-2082.26	51.925	-15.096	-68.653	0	-220.269	0
	0	-2082.26	51.925	-15.096	-68.653	0	-220.269	0
	8.396	-1656.86	49.37	0	-8.698	501.666	0	-0.04
	16.521	-1273.24	44.822	0	-8.698	430.991	0	-0.08
	25.458	-892.694	39.763	0	-8.698	353.25	0	-0.12
	27.083	-829.367	38.518	0	-8.698	339.115	0	-0.13
	54.166	-661.502	4.345	0	-8.698	103.535	0	-0.21
	72.041	-583.843	4.345	0	-12.098	1703.335	0	-0.23
	81.249	-543.837	4.345	0	-14.692	1958.345	0	-0.24
	84.499	-529.717	4.345	0	-15.646	2044.173	0	-0.24
	102.374	-452.058	4.345	0	-21.145	2455.164	0	-0.29
	108.332	-426.172	4.345	0	-23.048	2563.722	0	-0.31
	135.415	-603.205	0	-8.698	-31.932	2841.153	0	-0.37
	162.498	-838.786	0	-8.698	-40.943	2740.041	0	-0.41
	167.373	-881.19	0	-8.698	-42.555	2681.434	0	-0.42
	189.581	-1074.37	0	-8.698	-49.763	2269.094	0	-0.42
	197.977	-1147.4	0	-8.698	-52.394	2057.907	0	-0.41
	216.664	-1309.95	0	-8.698	-57.931	1508.494	0	-0.36
	235.622	-1474.85	0	-8.698	-62.909	888.014	0	-0.27
	243.747	-1545.53	0	-8.698	-64.811	614.964	0	-0.21
	246.997	-1573.8	0	-8.698	-65.533	505.141	0	-0.19
	256.476	-1656.25	0	-8.698	-67.529	182.09	0	-0.12
3	0	-1781.11	46.246	-8.698	-70.242	0	-331.179	0
	0	-1781.11	46.246	-8.698	-70.242	0	-331.179	0
	12.438	-1646.08	10.295	0	-8.637	419.757	0	-0.1
	23.467	-1532.53	10.295	0	-8.637	324.492	0	-0.18
	27.926	-1486.62	10.295	0	-8.637	285.981	0	-0.21
	42.945	-1332	10.295	0	-8.637	156.259	0	-0.3
	46.934	-1290.93	10.295	0	-9.067	1146.944	0	-0.32
	66.412	-1090.41	10.295	0	-14.755	1604.631	0	-0.39
	70.401	-1049.34	10.295	0	-16.019	1685.904	0	-0.4
	93.868	-807.744	10.295	0	-24.06	2055.825	0	-0.42
	117.335	-566.149	10.295	0	-32.815	2197.006	0	-0.39
	140.802	-688.965	0	-8.637	-41.758	2074.34	0	-0.36
	164.269	-891.656	0	-8.637	-50.343	1700.86	0	-0.35
	177.88	-1009.22	0	-8.637	-54.944	1392.51	0	-0.31
	187.736	-1094.35	0	-8.637	-58.045	1137.491	0	-0.28
	205.571	-1248.39	0	-8.637	-63.129	622.362	0	-0.19
	211.203	-1297.04	0	-8.637	-64.593	447.946	0	-0.16
	222.702	-1396.36	0	-8.637	-67.382	76.982	0	-0.08
4	0	-1871.65	8.663	-46.957	-69.982	0	-337.932	0
	0	-1871.65	8.663	-46.957	-69.982	0	-337.932	0
	9.075	-1793.04	8.663	0	-2.971	614.867	0	-0.07
	21.606	-1684.49	8.663	0	-2.971	577.641	0	-0.16
	22.038	-1680.74	8.663	0	-2.971	576.357	0	-0.16
	43.212	-1497.32	8.663	0	-6.882	1189.525	0	-0.28
	64.818	-1310.16	8.663	0	-12.399	1875.196	0	-0.34
	65.466	-1304.54	8.663	0	-12.579	1894.253	0	-0.34
	77.566	-1199.73	8.663	0	-16.09	2228.321	0	-0.36

86.424	-1122.99	8.663	0	-18.832	2441.282	0	-0.36
93.554	-1061.23	8.663	0	-21.136	2589.323	0	-0.36
108.03	-935.826	8.663	0	-26.035	2812.544	0	-0.35
129.636	-748.661	8.663	0	-33.781	2919.484	0	-0.31
151.242	-561.496	8.663	0	-41.935	2718.12	0	-0.25
155.563	-524.063	8.663	0	-43.606	2638.022	0	-0.24
171.984	-381.817	8.663	0	-50.064	2206.652	0	-0.18
172.848	-374.33	8.663	0	-50.409	2178.262	0	-0.18
185.163	-267.646	8.663	0	-55.361	1710.458	0	-0.13
194.454	-187.165	8.663	0	-59.149	1277.982	0	-0.09
216.06	0	8.663	-68.01	-68.01	0	0	0

Support	Reac. Pos	Reac. Negative
1	15.096	-65.927
2	12.865	-76.402
3	11.212	-72.216
4	13.266	-71.957
5	8.663	-68.1

Id	HS20 Lane Load	
Type	Lane Load	
Factors:	Moment	1
	Shear	1
	Deflection	1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	70.19	-29.36	70.19	0	0	0
	13.793	766.335	51.146	0	58.698	809.627	0	0.13
	27.586	1349.697	40.099	0	48.315	1332.805	0	0.24
	41.379	1752.576	29.113	0	39.092	1617.605	0	0.33
	55.172	1979.127	18.217	0	31.039	1712.459	0	0.38
	68.965	2035.161	7.441	-10.559	24.145	1665.145	0	0.4
	82.758	1928.152	0	-21.184	18.388	1521.765	0	0.37
	93.379	1740.336	0	-29.244	14.707	1373.339	0	0.33
	96.551	1667.115	0	-31.63	13.729	1325.565	0	0.31
	109.93	1273.438	0	-41.594	10.17	1118.038	0	0.22
	110.344	1259.175	0	-41.347	10.075	1111.672	0	0.22
	120.965	966.211	0	-30.603	7.867	951.663	0	0.13
	124.137	903.426	0	-26.416	7.299	906.08	0	0.11
2	0	872.108	6.323	-13.2	126.473	0	-3286.61	0
	0	872.108	6.323	-13.2	126.473	0	-3286.61	0
	8.396	771.78	0	-8.16	115.487	0	-3240.35	0.11
	16.521	703.358	0	-6.887	109.992	0	-2553.91	0.22
	25.458	723.96	22.408	0	103.996	0	-1863.78	0.36
	27.083	742.819	21.299	0	102.911	0	-1745.59	0.38
	54.166	1355.146	46.511	0	85.077	444.29	-107.084	0.83
	72.041	2175.691	59.98	0	73.793	1390.572	0	1.1
	81.249	2634.986	53.394	0	68.212	1772.182	0	1.21
	84.499	2782.539	51.063	0	66.287	1889.609	0	1.25
	102.374	3453.915	38.201	0	56.168	2379.619	0	1.41
	108.332	3624.201	33.902	0	52.982	2487.497	0	1.46
	135.415	4054.919	14.323	-3.677	39.755	2674.533	0	1.57
	162.498	3920.629	0	-23.26	28.692	2472.308	0	1.52
	167.373	3836.598	0	-26.78	26.937	2406.402	0	1.5
	189.581	3226.988	0	-42.767	19.878	2037.972	0	1.33
	197.977	2901.949	0	-48.779	17.613	1882.92	0	1.23
	216.664	2063.129	0	-52.787	13.379	1542.843	0	0.97
	235.622	1339.957	0	-34.721	10.187	1243.313	0	0.64
	243.747	1152.046	0	-24.812	9.131	1136.828	0	0.49
	246.997	1096.41	0	-27.057	8.754	1098.066	0	0.43
	256.476	973.869	0	-0.205	8.446	899.075	0	0.25
3	0	1017.699	7.346	-14.312	122.201	0	-3950.78	0
	0	1017.699	7.346	-14.312	122.201	0	-3950.78	0
	12.438	891.93	11.693	-6.307	106.722	0	-3792.61	0.18
	23.467	966.567	17.252	-0.748	99.116	0	-2989.23	0.35
	27.926	1009.478	24.065	0	96.097	0	-2694.84	0.42

	42.945	1249.312	25.544	0	86.166	0	-1825.56	0.65
	46.934	1339	31.073	0	83.593	0	-1625.1	0.71
	66.412	1908.093	44.339	0	71.452	0	-816.879	0.98
	70.401	2046.2	41.45	0	69.065	45.251	-684.078	1.03
	93.868	2623.406	24.326	0	55.837	763.03	-98.521	1.25
	117.335	2787.114	7.073	-10.927	44.242	1122.962	0	1.32
	140.802	2531.6	0	-28.173	34.529	1214.53	0	1.23
	164.269	1863.944	0	-45.276	26.831	1144.995	0	1
	177.88	1405.072	0	-33.348	23.303	1075.073	0	0.82
	187.736	1197.5	0	-28.898	21.155	1023.582	0	0.68
	205.571	961.398	2.115	-15.885	19.494	736.9	0	0.41
	211.203	923.623	3.381	-14.619	19.208	803.624	0	0.32
	222.702	924.344	10.701	0	18.827	962.758	0	0.16
4	0	1094.083	17.549	-5.064	130.189	0	-3412.16	0
	0	1094.083	17.549	-5.064	130.189	0	-3412.16	0
	9.075	1077.043	2.574	0	108.904	0	-3572.58	0.14
	21.606	1206.151	24.857	0	100.313	0	-2638.16	0.33
	22.038	1216.347	36.092	0	100.021	0	-2608.56	0.34
	43.212	2022.987	59.84	0	85.94	0	-1365.44	0.65
	64.818	3039.311	46.302	0	72.266	322.371	-496.084	0.91
	65.466	3064.732	45.839	0	71.869	349.555	-475.807	0.92
	77.566	3483.859	37.163	0	64.609	790.742	-154.842	1.02
	86.424	3722.271	30.77	0	59.496	1035.414	0	1.07
	93.554	3870.826	25.605	0	55.521	1185.964	0	1.1
	108.03	4050.831	15.072	-2.928	47.864	1372.58	0	1.13
	129.636	4009.814	0	-18.741	37.547	1392.13	0	1.08
	151.242	3590.152	0	-34.646	28.661	1171.957	0	0.94
	155.563	3460.138	0	-37.836	27.064	1106.79	0	0.9
	171.984	2824.745	0	-49.983	21.559	817.397	-38.616	0.72
	172.848	2785.077	0	-50.624	21.294	800.852	-43.82	0.71
	185.163	2151.824	0	-59.759	17.801	558.771	-101.117	0.54
	194.454	1589.71	0	-66.663	15.514	375.938	-115.426	0.39
	216.06	0	14.544	-90.714	14.544	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	70.19	-29.36	-29.36	0	0	0
	13.793	-385.996	0	-27.985	-29.912	0	-351.706	-0.12
	27.586	-771.993	0	-27.985	-32.535	63.225	-475.969	-0.23
	41.379	-1157.99	0	-27.985	-38.377	35.738	-644.019	-0.33
	55.172	-1543.99	0	-27.985	-45.127	0	-822.707	-0.4
	68.965	-1929.98	0	-27.985	-52.689	0	-1051.41	-0.44
	82.758	-2315.98	0	-27.985	-60.953	0	-1365.45	-0.44
	93.379	-2613.2	0	-27.985	-67.717	0	-1684.62	-0.41
	96.551	-2701.98	0	-27.985	-69.796	0	-1795.03	-0.39
	109.93	-3076.39	0	-27.985	-78.848	0	-2345.71	-0.3
	110.344	-3088.02	0	-28.537	-79.135	0	-2365.06	-0.3
	120.965	-3525.32	0	-55.471	-86.637	0	-2912.98	-0.19
	124.137	-3717.5	0	-61.977	-88.932	0	-3096.55	-0.16

2	0	-4759.24	109.707	-87.642	-110.194	0	-3283.36	0
	0	-4759.24	109.707	-87.642	-110.194	0	-3283.36	0
	8.396	-3876.69	97.871	0	-14.215	825.446	0	-0.07
	16.521	-3101.84	90.912	0	-14.335	732.66	0	-0.13
	25.458	-2326.33	72.934	0	-14.567	646.747	0	-0.2
	27.083	-2207.81	72.934	0	-14.622	632.918	0	-0.21
	54.166	-827.162	23.871	0	-16.572	998.693	0	-0.4
	72.041	-692.185	0	-8.636	-20.272	1237.115	0	-0.49
	81.249	-771.705	0	-8.636	-22.583	1370.313	0	-0.54
	84.499	-799.771	0	-8.636	-23.463	1417.021	0	-0.55
	102.374	-954.135	0	-8.636	-28.893	1653.065	0	-0.63
	108.332	-1005.59	0	-8.636	-30.923	1718.465	0	-0.65
	135.415	-1239.47	0	-8.636	-41.517	1868.168	0	-0.73
	162.498	-1473.36	0	-8.636	-54.288	1661.594	0	-0.76
	167.373	-1515.46	0	-8.636	-56.809	1575.157	0	-0.76
	189.581	-1707.24	0	-8.636	-69.086	957.932	0	-0.74
	197.977	-1779.74	0	-8.636	-74.04	622.443	-206.878	-0.71
	216.664	-2028.28	0	-21.44	-85.576	0	-968.707	-0.61
	235.622	-2722.56	0	-56.87	-97.847	0	-2029.8	-0.44
	243.747	-3240.17	0	-74.659	-103.244	0	-2578.07	-0.35
	246.997	-3482.81	0	-74.659	-105.425	0	-2813.54	-0.31
	256.476	-4281.73	0	-92.286	-111.862	0	-3554.12	-0.2
3	0	-5727.11	103.247	-110.88	-133.938	0	-3951.37	0
	0	-5727.11	103.247	-110.88	-133.938	0	-3951.37	0
	12.438	-4540.82	88.773	0	-15.429	910.685	0	-0.21
	23.467	-3668.52	73.269	0	-15.825	799.441	0	-0.39
	27.926	-3354.24	63.325	0	-16.059	762.756	0	-0.45
	42.945	-2519.69	49.008	0	-17.813	1104.047	0	-0.66
	46.934	-2360.16	38.557	0	-18.615	1135.819	0	-0.72
	66.412	-1928.74	4.533	0	-23.334	1296.932	0	-0.92
	70.401	-1910.66	4.533	0	-24.469	1327.807	0	-0.95
	93.868	-1804.28	4.533	0	-32.342	1456.972	0	-1.07
	117.335	-1697.91	4.533	0	-42.222	1415.166	0	-1.09
	140.802	-1591.54	4.533	0	-53.962	1096.379	0	-1.02
	164.269	-1485.16	4.533	0	-67.303	413.792	-300.745	-0.88
	177.88	-1559.45	0	-22.677	-75.632	0	-777.097	-0.75
	187.736	-1866.93	0	-36.018	-81.888	0	-1205.47	-0.64
	205.571	-2781.91	0	-65.967	-93.632	0	-2174.86	-0.42
	211.203	-3164.95	0	-71.175	-97.437	0	-2535.84	-0.34
	222.702	-4066.86	0	-86.757	-105.347	0	-3358.79	-0.18
4	0	-5192.69	103.973	-101.266	-118.067	0	-3412.7	0
	0	-5192.69	103.973	-101.266	-118.067	0	-3412.7	0
	9.075	-4308.15	89.925	0	-5.461	1130.251	0	-0.11
	21.606	-3291.04	74.09	0	-6.179	1201.6	0	-0.25
	22.038	-3262	62.557	0	-6.227	1208.255	0	-0.26
	43.212	-2367.25	15.463	0	-9.218	1593.291	0	-0.43
	64.818	-2070.71	13.691	0	-13.653	2064.908	0	-0.54
	65.466	-2061.84	13.691	0	-13.809	2079.559	0	-0.54
	77.566	-1896.18	13.691	0	-16.986	2352.497	0	-0.56



86.424	-1774.9	13.691	0	-19.633	2545.138	0	-0.57
93.554	-1677.28	13.691	0	-21.96	2690.28	0	-0.57
108.03	-1479.08	13.691	0	-27.231	2941.757	0	-0.55
129.636	-1183.26	13.691	0	-36.479	3152.658	0	-0.49
151.242	-887.447	13.691	0	-47.421	3073.749	0	-0.4
155.563	-828.284	13.691	0	-49.816	3013.697	0	-0.37
171.984	-603.464	13.691	0	-59.552	2624.807	0	-0.29
172.848	-591.631	13.691	0	-60.092	2596.695	0	-0.28
185.163	-423.016	13.691	0	-68.102	2104.126	0	-0.21
194.454	-295.816	13.691	0	-74.529	1610.266	0	-0.15
216.06	0	14.544	-90.714	-90.714	0	0	0

Support	Reac. Pos	Reac. Negative
1	29.36	-70.223
2	20.965	-195.979
3	22.914	-211.462
4	24.093	-203.035
5	14.544	-90.714

Id Ohio 2F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	29.056	-6.319	29.056	0	0	0
	13.793	349.721	25.355	0	25.355	349.721	0	0.04
	27.586	598.041	21.679	0	21.679	598.041	0	0.08
	41.379	749.613	18.116	-1.884	18.116	749.613	0	0.11
	55.172	811.858	14.715	-5.285	14.715	811.858	0	0.13
	68.965	799.148	3.038	-16.962	11.527	794.967	0	0.13
	82.758	725.877	0	-20.021	8.602	711.897	0	0.12
	93.379	630.105	0	-22.181	6.554	611.982	0	0.1
	96.551	596	0	-22.791	5.977	577.066	0	0.1
	109.93	428.242	0	-25.195	3.702	406.955	0	0.07
	110.344	422.512	0	-25.265	3.636	401.161	0	0.06
	120.965	264.096	0	-26.99	1.987	240.343	0	0.04
	124.137	217.12	1.749	0	1.749	217.12	0	0.03
2	0	241.245	1.749	-3.651	29.804	0	-67.625	0
	0	241.245	1.749	-3.651	29.804	0	-67.625	0
	8.396	210.589	0	-3.651	29.348	29.304	0	0.02
	16.521	180.921	0	-3.651	28.847	119.524	0	0.05
	25.458	236.392	18.698	-1.302	28.225	223.142	0	0.08
	27.083	254.207	18.588	-1.412	28.103	242.634	0	0.09
	54.166	597.1	25.572	0	25.572	597.1	0	0.19
	72.041	832.048	23.478	0	23.478	832.048	0	0.25
	81.249	941.927	22.309	0	22.309	941.927	0	0.28
	84.499	977.791	21.887	0	21.887	977.791	0	0.29
	102.374	1141.736	19.5	-0.5	19.5	1141.736	0	0.32
	108.332	1182.588	18.686	-1.314	18.686	1182.588	0	0.33
	135.415	1272.838	14.938	-5.062	14.938	1272.838	0	0.36
	162.498	1216.192	2.11	-17.89	11.197	1203.924	0	0.34
	167.373	1189.554	1.441	-18.559	10.534	1175.091	0	0.34
	189.581	1009.514	0	-21.534	7.607	988.395	0	0.29
	197.977	919.797	0	-22.612	6.561	898.512	0	0.27
	216.664	691.939	0	-24.854	4.413	675.33	0	0.21
	235.622	440.928	0	-26.833	2.55	434.288	0	0.13
	243.747	331.719	0	-27.58	1.846	328.683	0	0.1
	246.997	287.762	0	-27.863	1.842	74.721	0	0.09
	256.476	205.526	1.079	0	1.842	92.179	0	0.05
3	0	221.019	1.079	-3.621	29.674	0	-50.929	0
	0	221.019	1.079	-3.621	29.674	0	-50.929	0
	12.438	175.981	0	-3.621	28.529	135.404	0	0.05
	23.467	285.49	27.418	0	27.418	285.49	0	0.09
	27.926	342.915	26.946	0	26.946	342.915	0	0.11

	42.945	523.579	25.237	0	25.237	523.579	0	0.17
	46.934	568.296	24.75	0	24.75	568.296	0	0.19
	66.412	763.876	22.159	0	22.159	763.876	0	0.26
	70.401	798.117	21.591	0	21.591	798.117	0	0.28
	93.868	949.167	18.042	-1.958	18.042	949.167	0	0.34
	117.335	997.008	5.375	-14.625	14.31	996.636	0	0.36
	140.802	939.789	1.652	-18.348	10.623	933.262	0	0.34
	164.269	781.008	0	-21.864	7.207	773.11	0	0.27
	177.88	653.653	0	-23.719	5.433	647.94	0	0.22
	187.736	549.45	0	-24.958	4.311	66.43	0	0.18
	205.571	338.626	2.335	-17.665	4.311	143.319	0	0.11
	211.203	268.895	1.787	-18.213	4.311	167.6	0	0.09
	222.702	217.174	4.311	0	4.311	217.174	0	0.04
4	0	268.771	4.311	-1.244	29.732	0	-48.633	0
	0	268.771	4.311	-1.244	29.732	0	-48.633	0
	9.075	257.482	0	-1.244	29.048	97.105	0	0.03
	21.606	290.37	27.992	0	27.992	290.37	0	0.07
	22.038	296.965	27.954	0	27.954	296.965	0	0.07
	43.212	615.478	25.861	0	25.861	615.478	0	0.14
	64.818	908.418	23.332	0	23.332	908.418	0	0.21
	65.466	916.384	23.251	0	23.251	916.384	0	0.21
	77.566	1054.039	21.667	0	21.667	1054.039	0	0.24
	86.424	1138.706	20.445	0	20.445	1138.706	0	0.26
	93.554	1194.953	19.429	-0.571	19.429	1194.953	0	0.26
	108.03	1272.396	17.296	-2.704	17.296	1272.396	0	0.27
	129.636	1295.696	5.008	-14.992	13.961	1286.12	0	0.27
	151.242	1194.757	1.568	-18.432	10.48	1165.257	0	0.23
	155.563	1157.677	0.864	-19.136	9.769	1123.917	0	0.22
	171.984	963.173	0	-21.852	7.027	912.571	0	0.18
	172.848	950.54	0	-21.997	6.881	899.024	0	0.18
	185.163	743.91	0	-24.077	4.783	679.118	0	0.13
	194.454	554.584	0	-25.668	3.636	0	-78.566	0.1
	216.06	0	3.636	-29.381	3.636	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	29.056	-6.319	-6.319	0	0	0
	13.793	-87.162	0	-6.319	-6.319	0	-87.162	-0.03
	27.586	-174.324	0	-6.319	-6.556	546.737	0	-0.05
	41.379	-261.486	0	-6.319	-10.18	720.148	0	-0.08
	55.172	-348.648	0	-6.319	-13.665	801.223	0	-0.09
	68.965	-435.81	0	-6.319	-16.962	799.148	0	-0.1
	82.758	-522.973	0	-6.319	-20.021	725.877	0	-0.1
	93.379	-590.087	0	-6.319	-22.181	630.105	0	-0.09
	96.551	-610.135	0	-6.319	-22.791	596	0	-0.09
	109.93	-694.682	0	-6.319	-25.195	428.242	0	-0.07
	110.344	-697.297	0	-6.319	-25.265	422.512	0	-0.07
	120.965	-764.411	0	-6.319	-26.99	264.096	0	-0.04
	124.137	-784.459	0	-6.319	-27.481	212.68	0	-0.04

2	0	-871.621	21.887	-6.319	-29.501	0	-35.314	0
	0	-871.621	21.887	-6.319	-29.501	0	-35.314	0
	8.396	-693.578	20.4	0	-3.651	210.589	0	-0.02
	16.521	-533.078	19.045	0	-3.651	180.921	0	-0.04
	25.458	-374.059	16.328	0	-3.651	148.287	0	-0.05
	27.083	-347.527	16.328	0	-3.651	142.353	0	-0.06
	54.166	-280.41	1.842	0	-3.726	582.322	0	-0.09
	72.041	-247.49	1.842	0	-5.71	808.646	0	-0.1
	81.249	-230.532	1.842	0	-6.84	917.941	0	-0.1
	84.499	-224.546	1.842	0	-7.253	954.245	0	-0.1
	102.374	-191.627	1.842	0	-9.6	1123.615	0	-0.12
	108.332	-180.654	1.842	0	-10.404	1167.068	0	-0.13
	135.415	-253.213	0	-3.651	-14.135	1271.143	0	-0.16
	162.498	-352.105	0	-3.651	-17.89	1216.192	0	-0.17
	167.373	-369.905	0	-3.651	-18.559	1189.554	0	-0.17
	189.581	-450.996	0	-3.651	-21.534	1009.514	0	-0.17
	197.977	-481.652	0	-3.651	-22.612	919.797	0	-0.17
	216.664	-549.888	0	-3.651	-24.854	691.939	0	-0.15
	235.622	-619.112	0	-3.651	-26.833	440.928	0	-0.11
	243.747	-648.779	0	-3.651	-27.58	331.719	0	-0.09
	246.997	-660.646	0	-3.651	-27.863	287.762	0	-0.08
	256.476	-695.258	0	-3.651	-28.651	157.169	0	-0.05
3	0	-747.671	19.078	-3.651	-29.733	0	-53.394	0
	0	-747.671	19.078	-3.651	-29.733	0	-53.394	0
	12.438	-689.313	4.311	0	-3.621	175.981	0	-0.04
	23.467	-641.763	4.311	0	-3.621	136.042	0	-0.08
	27.926	-622.541	4.311	0	-3.621	119.896	0	-0.09
	42.945	-557.792	4.311	0	-3.98	519.108	0	-0.13
	46.934	-540.593	4.311	0	-4.443	563.008	0	-0.13
	66.412	-456.621	4.311	0	-6.918	755.764	0	-0.16
	70.401	-439.422	4.311	0	-7.466	789.862	0	-0.17
	93.868	-338.252	4.311	0	-10.922	943.142	0	-0.18
	117.335	-237.081	4.311	0	-14.625	997.008	0	-0.16
	140.802	-288.845	0	-3.621	-18.348	939.789	0	-0.15
	164.269	-373.822	0	-3.621	-21.864	781.008	0	-0.14
	177.88	-423.109	0	-3.621	-23.719	653.653	0	-0.13
	187.736	-458.8	0	-3.621	-24.958	549.45	0	-0.12
	205.571	-523.383	0	-3.621	-26.982	338.625	0	-0.08
	211.203	-543.777	0	-3.621	-27.561	267.593	0	-0.07
	222.702	-585.416	0	-3.621	-28.665	116.095	0	-0.04
4	0	-785.662	3.636	-19.377	-29.697	0	-54.357	0
	0	-785.662	3.636	-19.377	-29.697	0	-54.357	0
	9.075	-752.664	3.636	0	-1.244	257.482	0	-0.03
	21.606	-707.096	3.636	0	-1.431	278.309	0	-0.07
	22.038	-705.524	3.636	0	-1.467	284.709	0	-0.07
	43.212	-628.53	3.636	0	-3.437	594.118	0	-0.12
	64.818	-549.963	3.636	0	-5.847	884.372	0	-0.14
	65.466	-547.606	3.636	0	-5.926	892.346	0	-0.14
	77.566	-503.609	3.636	0	-7.447	1031.357	0	-0.15

86.424	-471.397	3.636	0	-8.631	1118.9	0	-0.15
93.554	-445.47	3.636	0	-9.621	1178.592	0	-0.15
108.03	-392.831	3.636	0	-11.71	1265.083	0	-0.15
129.636	-314.265	3.636	0	-14.992	1295.696	0	-0.13
151.242	-235.699	3.636	0	-18.432	1194.757	0	-0.11
155.563	-219.985	3.636	0	-19.136	1157.677	0	-0.1
171.984	-160.275	3.636	0	-21.852	963.173	0	-0.08
172.848	-157.132	3.636	0	-21.997	950.54	0	-0.08
185.163	-112.35	3.636	0	-24.077	743.91	0	-0.06
194.454	-78.566	3.636	0	-25.668	554.584	0	-0.04
216.06	0	3.636	-29.381	-29.381	0	0	0

Support	Reac. Pos	Reac. Negative
1	6.319	-29.093
2	5.4	-31.923
3	4.701	-30.126
4	5.555	-30.023
5	3.636	-29.418

Id Ohio 3F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	43.803	-9.683	43.803	0	0	0
	13.793	526.05	38.139	0	38.139	526.05	0	0.07
	27.586	897.163	32.522	0	32.522	897.163	0	0.12
	41.379	1120.892	27.088	0	27.088	1120.892	0	0.17
	55.172	1222.101	6.383	-10.617	21.914	1209.031	0	0.2
	68.965	1205.774	7.224	-9.776	17.076	1177.617	0	0.2
	82.758	1088.411	2.602	-14.398	12.65	1046.859	0	0.18
	93.379	939.574	0	-17.653	9.555	892.224	0	0.16
	96.551	886.805	0	-18.572	8.683	838.383	0	0.15
	109.93	628.571	0	-22.19	5.242	576.297	0	0.1
	110.344	619.737	0	-22.296	5.142	567.344	0	0.1
	120.965	375.605	0	-24.903	2.678	323.966	0	0.06
	124.137	332.462	2.678	0	2.678	332.462	0	0.05
2	0	369.402	2.678	-5.591	45.546	0	-154.609	0
	0	369.402	2.678	-5.591	45.546	0	-154.609	0
	8.396	322.46	0	-5.591	44.831	0	-4.232	0.04
	16.521	277.032	0	-5.591	44.044	136.817	0	0.08
	25.458	337.847	31.767	0	43.062	299.601	0	0.13
	27.083	366.119	31.591	0	42.869	330.343	0	0.13
	54.166	890.483	22.568	0	38.902	884.093	0	0.29
	72.041	1246.793	35.652	0	35.652	1246.793	0	0.38
	81.249	1414.81	33.848	0	33.848	1414.81	0	0.42
	84.499	1469.809	16.997	-0.003	33.197	1469.494	0	0.44
	102.374	1724.021	13.357	-3.643	29.523	1718.113	0	0.5
	108.332	1788.016	12.114	-4.886	28.274	1779.563	0	0.51
	135.415	1933.431	6.374	-10.626	22.522	1912.133	0	0.54
	162.498	1841.182	6.106	-10.894	16.795	1800.875	0	0.52
	167.373	1799.199	5.083	-11.917	15.782	1755.833	0	0.51
	189.581	1519.724	0.545	-16.455	11.32	1467.658	0	0.45
	197.977	1382.018	0	-18.092	9.73	1330.116	0	0.41
	216.664	1035.021	0	-21.482	6.48	990.49	0	0.32
	235.622	655.445	0	-24.456	3.67	624.757	0	0.2
	243.747	489.77	0	-25.58	2.815	105.076	0	0.15
	246.997	422.874	0	-26.007	2.815	114.226	0	0.13
	256.476	314.868	1.654	0	2.815	140.913	0	0.08
3	0	338.604	1.654	-5.548	45.247	0	-116.935	0
	0	338.604	1.654	-5.548	45.247	0	-116.935	0
	12.438	269.605	0	-5.548	43.471	168.837	0	0.07
	23.467	419.309	25.387	0	41.747	399.415	0	0.14
	27.926	507.31	24.672	0	41.014	487.638	0	0.17

	42.945	783.245	22.094	0	38.358	766.231	0	0.26
	46.934	851.437	21.358	0	37.599	835.121	0	0.29
	66.412	1149.737	17.446	0	33.584	1136.087	0	0.4
	70.401	1202.247	16.584	-0.416	32.702	1188.509	0	0.43
	93.868	1434.865	11.19	-5.81	27.23	1418.768	0	0.52
	117.335	1511.105	11.035	-5.965	21.503	1488.777	0	0.56
	140.802	1420.227	5.344	-11.656	15.871	1389.277	0	0.52
	164.269	1176.025	0.003	-16.997	10.682	1143.713	0	0.42
	177.88	982.058	0	-19.799	7.997	952.49	0	0.34
	187.736	822.85	0	-21.671	6.606	101.793	0	0.28
	205.571	501.945	0	-24.718	6.606	219.614	0	0.17
	211.203	394.11	0	-30.931	6.606	256.821	0	0.13
	222.702	332.785	6.606	0	6.606	332.785	0	0.07
4	0	411.849	6.606	-1.906	45.378	0	-111.584	0
	0	411.849	6.606	-1.906	45.378	0	-111.584	0
	9.075	394.551	0	-1.906	44.314	112.932	0	0.04
	21.606	421.811	26.214	0	42.669	411.767	0	0.11
	22.038	431.84	26.156	0	42.609	421.984	0	0.11
	43.212	915.396	23.01	0	39.347	913.887	0	0.22
	64.818	1363.705	35.423	0	35.423	1363.705	0	0.32
	65.466	1375.902	35.296	0	35.296	1375.902	0	0.33
	77.566	1587.163	16.673	-0.327	32.845	1585.934	0	0.37
	86.424	1718.547	14.818	-2.182	30.957	1714.135	0	0.39
	93.554	1806.521	13.274	-3.726	29.39	1798.769	0	0.41
	108.03	1929.911	10.025	-6.975	26.103	1913.474	0	0.42
	129.636	1964.53	10.482	-6.518	20.969	1927.253	0	0.41
	151.242	1803.13	0	-27.818	15.615	1733.497	0	0.36
	155.563	1748.007	0	-28.894	14.522	1668.316	0	0.34
	171.984	1456.633	0	-33.048	10.307	1337.197	0	0.28
	172.848	1437.636	0	-33.269	10.083	1316.045	0	0.27
	185.163	1126.231	0	-36.452	6.859	973.307	0	0.21
	194.454	840.152	0	-38.885	5.569	0	-120.319	0.15
	216.06	0	5.569	-44.57	5.569	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	43.803	-9.683	-9.683	0	0	0
	13.793	-133.558	0	-9.683	-9.683	0	-133.558	-0.04
	27.586	-267.116	0	-9.683	-9.683	0	-267.116	-0.08
	41.379	-400.673	0	-9.683	-14.891	1051.265	0	-0.12
	55.172	-534.231	0	-9.683	-20.266	1183.81	0	-0.14
	68.965	-667.789	0	-9.683	-25.362	1187.332	0	-0.15
	82.758	-801.347	0	-9.683	-30.101	1079.745	0	-0.15
	93.379	-904.186	0	-9.683	-33.46	934.977	0	-0.14
	96.551	-934.905	0	-9.683	-34.409	883.097	0	-0.14
	109.93	-1064.46	0	-9.683	-38.152	626.767	0	-0.1
	110.344	-1068.46	0	-9.683	-38.261	617.99	0	-0.1
	120.965	-1171.3	0	-9.683	-40.944	375.569	0	-0.07
	124.137	-1202.02	0	-9.683	-41.707	296.967	0	-0.06

2	0	-1335.58	33.197	-9.683	-44.835	0	-81.684	0
	0	-1335.58	33.197	-9.683	-44.835	0	-81.684	0
	8.396	-1062.87	31.193	0	-5.591	322.46	0	-0.03
	16.521	-816.943	29.114	0	-5.591	277.032	0	-0.05
	25.458	-573.299	25.504	0	-5.591	227.062	0	-0.08
	27.083	-532.547	24.708	0	-5.591	217.976	0	-0.08
	54.166	-428.659	2.815	0	-5.591	66.55	0	-0.14
	72.041	-378.336	2.815	0	-8.434	1191.865	0	-0.15
	81.249	-352.411	2.815	0	-10.148	1358.588	0	-0.15
	84.499	-343.262	2.815	0	-10.774	1414.108	0	-0.16
	102.374	-292.938	2.815	0	-14.352	1675.43	0	-0.19
	108.332	-276.163	2.815	0	-15.581	1743.038	0	-0.2
	135.415	-387.728	0	-5.591	-21.292	1908.133	0	-0.24
	162.498	-539.154	0	-5.591	-27.051	1829.733	0	-0.26
	167.373	-566.411	0	-5.591	-28.078	1789.887	0	-0.27
	189.581	-690.58	0	-5.591	-32.657	1517.207	0	-0.27
	197.977	-737.522	0	-5.591	-34.319	1380.184	0	-0.26
	216.664	-842.006	0	-5.591	-37.791	1029.588	0	-0.23
	235.622	-948.004	0	-5.591	-40.872	640.716	0	-0.17
	243.747	-993.432	0	-5.591	-42.037	471.468	0	-0.14
	246.997	-1011.6	0	-5.591	-42.48	403.23	0	-0.12
	256.476	-1064.6	0	-5.591	-43.705	201.687	0	-0.08
3	0	-1144.86	28.728	-5.591	-45.384	0	-122.2	0
	0	-1144.86	28.728	-5.591	-45.384	0	-122.2	0
	12.438	-1056.26	6.606	0	-5.548	269.605	0	-0.06
	23.467	-983.4	6.606	0	-5.548	208.418	0	-0.12
	27.926	-953.945	6.606	0	-5.548	183.682	0	-0.13
	42.945	-854.727	6.606	0	-5.795	755.393	0	-0.19
	46.934	-828.373	6.606	0	-6.497	822.561	0	-0.21
	66.412	-699.7	6.606	0	-10.241	1116.806	0	-0.25
	70.401	-673.345	6.606	0	-11.073	1169.136	0	-0.26
	93.868	-518.317	6.606	0	-16.327	1404.595	0	-0.27
	117.335	-363.29	6.606	0	-21.985	1489.651	0	-0.25
	140.802	-442.514	0	-5.548	-27.701	1404.631	0	-0.23
	164.269	-572.7	0	-5.548	-33.127	1162.256	0	-0.22
	177.88	-648.208	0	-5.548	-36.003	966.125	0	-0.2
	187.736	-702.887	0	-5.548	-37.927	805.582	0	-0.18
	205.571	-801.828	0	-5.548	-41.074	480.514	0	-0.12
	211.203	-833.073	0	-5.548	-41.975	371.01	0	-0.1
	222.702	-896.864	0	-5.548	-43.694	137.452	0	-0.05
4	0	-1203.19	5.569	-29.19	-45.297	0	-124.743	0
	0	-1203.19	5.569	-29.19	-45.297	0	-124.743	0
	9.075	-1152.65	5.569	0	-1.906	394.551	0	-0.05
	21.606	-1082.87	5.569	0	-1.97	383.095	0	-0.1
	22.038	-1080.46	5.569	0	-2.025	392.861	0	-0.11
	43.212	-962.549	5.569	0	-4.996	863.577	0	-0.18
	64.818	-842.231	5.569	0	-8.642	1306.984	0	-0.22
	65.466	-838.621	5.569	0	-8.76	1319.21	0	-0.22
	77.566	-771.243	5.569	0	-11.066	1532.58	0	-0.23



86.424	-721.912	5.569	0	-12.864	1667.636	0	-0.23
93.554	-682.207	5.569	0	-14.369	1760.265	0	-0.23
108.03	-601.593	5.569	0	-17.553	1896.264	0	-0.22
129.636	-481.275	5.569	0	-22.562	1949.891	0	-0.2
151.242	-360.956	5.569	0	-27.818	1803.13	0	-0.16
155.563	-336.892	5.569	0	-28.894	1748.007	0	-0.15
171.984	-245.45	5.569	0	-33.048	1456.633	0	-0.12
172.848	-240.637	5.569	0	-33.269	1437.636	0	-0.12
185.163	-172.056	5.569	0	-36.452	1126.231	0	-0.09
194.454	-120.319	5.569	0	-38.885	840.152	0	-0.06
216.06	0	5.569	-44.57	-44.57	0	0	0

Support	Reac. Pos	Reac. Negative
1	9.683	-43.861
2	8.269	-48.956
3	7.201	-46.186
4	8.512	-46.027
5	5.569	-44.628

Id Ohio 4F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	50.454	-11.359	50.454	0	0	0
	13.793	604.404	43.82	0	43.82	604.404	0	0.08
	27.586	1027.698	37.254	0	37.254	1027.698	0	0.15
	41.379	1298.151	18.726	0	30.916	1279.281	0	0.2
	55.172	1411.771	12.604	-1.396	24.896	1373.536	0	0.23
	68.965	1389.613	0	-16.602	19.283	1329.829	0	0.23
	82.758	1257.78	0	-22.095	14.163	1172.133	0	0.21
	93.379	1085.617	0	-25.975	10.59	988.881	0	0.18
	96.551	1024.207	0	-27.072	9.582	925.135	0	0.17
	109.93	722.204	0	-31.393	5.6	615.585	0	0.12
	110.344	711.859	0	-31.519	5.483	604.994	0	0.12
	120.965	426.057	0	-34.626	3.141	379.966	0	0.07
	124.137	389.931	3.141	0	3.141	389.931	0	0.06
2	0	433.257	3.141	-6.558	53.263	0	-246.296	0
	0	433.257	3.141	-6.558	53.263	0	-246.296	0
	8.396	378.201	0	-6.558	52.404	0	-67.202	0.04
	16.521	324.92	0	-6.558	51.45	102.51	0	0.09
	25.458	377.664	25.613	0	50.26	298.973	0	0.15
	27.083	410.174	25.412	0	50.025	336.129	0	0.16
	54.166	1027.306	32.055	0	45.259	998.875	0	0.34
	72.041	1448.516	28.299	0	41.398	1427.033	0	0.45
	81.249	1645.73	26.201	0	39.265	1623.553	0	0.5
	84.499	1710.168	25.442	0	38.497	1687.276	0	0.51
	102.374	2005.17	21.15	0	34.17	1975.363	0	0.58
	108.332	2078.787	19.688	0	32.7	2045.942	0	0.6
	135.415	2241.997	12.944	-1.056	25.944	2194.017	0	0.64
	162.498	2139.451	0	-18.255	19.234	2056.28	0	0.61
	167.373	2091.432	0	-19.457	18.05	2002.398	0	0.6
	189.581	1767.522	0	-24.807	12.847	1662.065	0	0.52
	197.977	1606.436	0	-26.742	11.002	1501.139	0	0.48
	216.664	1197.288	0	-30.767	7.244	1106.058	0	0.37
	235.622	746.456	0	-34.32	4.003	681.139	0	0.24
	243.747	549.747	0	-35.664	3.298	123.093	0	0.18
	246.997	470.277	0	-36.175	3.298	133.812	0	0.16
	256.476	369.174	1.939	0	3.298	165.075	0	0.09
3	0	397.005	1.939	-6.504	52.782	0	-186.603	0
	0	397.005	1.939	-6.504	52.782	0	-186.603	0
	12.438	316.105	0	-6.504	50.672	148.996	0	0.08
	23.467	465.801	35.381	0	48.62	420.309	0	0.16
	27.926	569.276	34.532	0	47.747	524.345	0	0.19

	42.945	894.953	31.459	0	44.581	853.448	0	0.31
	46.934	975.448	30.581	0	43.676	934.817	0	0.34
	66.412	1327.05	25.93	0	38.907	1289.29	0	0.47
	70.401	1388.654	24.907	0	37.862	1350.814	0	0.5
	93.868	1660.162	18.532	0	31.401	1619.162	0	0.61
	117.335	1746.503	1.61	-12.39	24.677	1697.709	0	0.65
	140.802	1643.282	0	-19.083	18.098	1578.02	0	0.61
	164.269	1357.857	0	-25.399	12.072	1289.836	0	0.49
	177.88	1129.005	0	-28.73	8.963	1066.184	0	0.4
	187.736	941.202	0	-30.958	7.749	119.395	0	0.33
	205.571	562.131	0	-34.593	7.749	257.589	0	0.2
	211.203	435.865	0	-24.732	7.749	301.229	0	0.16
	222.702	390.328	7.749	0	7.749	390.328	0	0.08
4	0	483.063	7.749	-2.236	52.992	0	-177.804	0
	0	483.063	7.749	-2.236	52.992	0	-177.804	0
	9.075	462.774	0	-2.236	51.722	87.509	0	0.05
	21.606	474.776	36.406	0	49.754	441.626	0	0.13
	22.038	486.668	36.337	0	49.682	453.749	0	0.13
	43.212	1058.985	32.577	0	45.788	1035.426	0	0.26
	64.818	1585.746	28.034	0	41.12	1564.028	0	0.38
	65.466	1600.075	27.887	0	40.97	1578.304	0	0.38
	77.566	1847.355	25.044	0	38.062	1823.281	0	0.43
	86.424	1999.61	22.847	0	35.829	1971.568	0	0.46
	93.554	2100.866	21.022	0	33.979	2068.719	0	0.48
	108.03	2240.572	17.186	0	30.099	2198.039	0	0.49
	129.636	2282.178	0.945	-13.055	24.047	2204.685	0	0.48
	151.242	2099.079	0	-19.248	17.741	1966.232	0	0.42
	155.563	2032.051	0	-20.515	16.454	1887.389	0	0.4
	171.984	1683.873	0	-38.204	11.494	1489.521	0	0.32
	172.848	1662.053	0	-38.463	11.23	1464.196	0	0.32
	185.163	1303.478	0	-42.188	7.437	1054.633	0	0.24
	194.454	973.093	0	-45.038	6.531	0	-141.104	0.17
	216.06	0	6.531	-51.701	6.531	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	50.454	-11.359	-11.359	0	0	0
	13.793	-156.672	0	-11.359	-11.359	0	-156.672	-0.05
	27.586	-313.345	0	-11.359	-11.359	0	-313.345	-0.1
	41.379	-470.017	0	-11.359	-16.546	1165.79	0	-0.14
	55.172	-626.69	0	-11.359	-22.893	1332.234	0	-0.17
	68.965	-783.362	0	-11.359	-28.925	1345.302	0	-0.18
	82.758	-940.035	0	-11.359	-34.552	1225.49	0	-0.18
	93.379	-1060.67	0	-11.359	-38.552	1058.533	0	-0.17
	96.551	-1096.71	0	-11.359	-39.684	998.181	0	-0.16
	109.93	-1248.68	0	-11.359	-44.152	698.556	0	-0.12
	110.344	-1253.38	0	-11.359	-44.283	688.262	0	-0.12
	120.965	-1374.02	0	-11.359	-47.483	404.328	0	-0.08
	124.137	-1410.05	0	-11.359	-48.392	312.147	0	-0.07

2	0	-1566.73	39.265	-11.359	-52.109	0	-130.619	0
	0	-1566.73	39.265	-11.359	-52.109	0	-130.619	0
	8.396	-1246.74	37.102	0	-6.558	378.201	0	-0.03
	16.521	-958.206	34.17	0	-6.558	324.92	0	-0.06
	25.458	-672.159	29.499	0	-6.558	266.312	0	-0.09
	27.083	-624.296	28.5	0	-6.558	255.656	0	-0.1
	54.166	-502.16	3.298	0	-6.558	78.054	0	-0.16
	72.041	-443.208	3.298	0	-9.494	1338.549	0	-0.18
	81.249	-412.839	3.298	0	-11.478	1532.839	0	-0.18
	84.499	-402.12	3.298	0	-12.205	1597.814	0	-0.18
	102.374	-343.167	3.298	0	-16.375	1906.129	0	-0.22
	108.332	-323.517	3.298	0	-17.812	1986.671	0	-0.23
	135.415	-454.75	0	-6.558	-24.501	2187.511	0	-0.28
	162.498	-632.352	0	-6.558	-31.263	2103.075	0	-0.31
	167.373	-664.32	0	-6.558	-32.471	2057.605	0	-0.31
	189.581	-809.953	0	-6.558	-37.864	1742.165	0	-0.31
	197.977	-865.01	0	-6.558	-39.828	1582.088	0	-0.31
	216.664	-987.555	0	-6.558	-43.944	1169.455	0	-0.27
	235.622	-1111.88	0	-6.558	-47.62	708.095	0	-0.2
	243.747	-1165.16	0	-6.558	-49.014	506.84	0	-0.16
	246.997	-1186.47	0	-6.558	-49.544	425.842	0	-0.14
	256.476	-1248.63	0	-6.558	-51.007	187.069	0	-0.09
3	0	-1342.76	34.27	-6.558	-53.005	0	-194.738	0
	0	-1342.76	34.27	-6.558	-53.005	0	-194.738	0
	12.438	-1238.91	7.749	0	-6.504	316.105	0	-0.07
	23.467	-1153.44	7.749	0	-6.504	244.364	0	-0.14
	27.926	-1118.9	7.749	0	-6.504	215.363	0	-0.16
	42.945	-1002.52	7.749	0	-6.504	117.673	0	-0.23
	46.934	-971.61	7.749	0	-7.224	913.976	0	-0.24
	66.412	-820.688	7.749	0	-11.556	1257.871	0	-0.29
	70.401	-789.776	7.749	0	-12.521	1319.208	0	-0.3
	93.868	-607.942	7.749	0	-18.627	1596.198	0	-0.32
	117.335	-426.107	7.749	0	-25.241	1699.126	0	-0.29
	140.802	-518.836	0	-6.504	-31.957	1602.894	0	-0.27
	164.269	-671.476	0	-6.504	-38.366	1320.002	0	-0.26
	177.88	-760.008	0	-6.504	-41.782	1088.867	0	-0.23
	187.736	-824.116	0	-6.504	-44.072	899.347	0	-0.21
	205.571	-940.123	0	-6.504	-47.824	515.401	0	-0.14
	211.203	-976.756	0	-6.504	-48.899	385.855	0	-0.12
	222.702	-1051.55	0	-6.504	-50.951	109.971	0	-0.06
4	0	-1411.04	6.531	-34.809	-52.862	0	-198.895	0
	0	-1411.04	6.531	-34.809	-52.862	0	-198.895	0
	9.075	-1351.78	6.531	0	-2.236	462.774	0	-0.05
	21.606	-1269.94	6.531	0	-2.236	434.757	0	-0.12
	22.038	-1267.12	6.531	0	-2.236	433.791	0	-0.12
	43.212	-1128.84	6.531	0	-5.518	953.784	0	-0.21
	64.818	-987.731	6.531	0	-9.732	1471.859	0	-0.26
	65.466	-983.498	6.531	0	-9.869	1486.201	0	-0.26
	77.566	-904.479	6.531	0	-12.541	1736.859	0	-0.27

86.424	-846.626	6.531	0	-14.628	1896.334	0	-0.27
93.554	-800.062	6.531	0	-16.378	2006.344	0	-0.27
108.03	-705.522	6.531	0	-20.089	2170.163	0	-0.26
129.636	-564.417	6.531	0	-25.937	2241.602	0	-0.23
151.242	-423.313	6.531	0	-32.083	2079.571	0	-0.19
155.563	-395.092	6.531	0	-33.342	2017.086	0	-0.18
171.984	-287.853	6.531	0	-38.204	1683.873	0	-0.14
172.848	-282.209	6.531	0	-38.463	1662.053	0	-0.14
185.163	-201.779	6.531	0	-42.188	1303.478	0	-0.1
194.454	-141.104	6.531	0	-45.038	973.093	0	-0.07
216.06	0	6.531	-51.701	-51.701	0	0	0

Support	Reac. Pos	Reac. Negative
1	11.359	-50.522
2	9.699	-57.44
3	8.443	-54.209
4	9.984	-54.017
5	6.531	-51.769

Id Ohio 5C1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	62.661	-16.405	62.661	0	0	0
	13.793	734.101	53.223	0	53.223	734.101	0	0.1
	27.586	1243.755	38.306	0	44.056	1215.336	0	0.2
	41.379	1564.285	29.284	0	35.392	1464.501	0	0.26
	55.172	1682.088	6.201	-10.799	27.351	1509.008	0	0.3
	68.965	1635.138	5.979	-11.021	19.993	1378.827	0	0.31
	82.758	1492.343	0	-19.41	13.301	1100.752	0	0.28
	93.379	1269.449	0	-40.205	8.563	799.561	0	0.24
	96.551	1187.579	0	-41.966	7.212	696.333	0	0.23
	109.93	762.744	0	-48.999	4.478	492.257	0	0.16
	110.344	747.744	0	-49.207	4.478	494.11	0	0.16
	120.965	541.668	4.478	0	4.478	541.668	0	0.1
	124.137	555.874	4.478	0	4.478	555.874	0	0.08
2	0	617.637	4.478	-9.348	75.594	0	-1038.83	0
	0	617.637	4.478	-9.348	75.594	0	-1038.83	0
	8.396	539.151	0	-9.348	73.903	0	-709.522	0.06
	16.521	463.196	0	-9.348	72.05	0	-392.685	0.13
	25.458	379.645	0	-9.348	69.819	0	-37.242	0.21
	27.083	364.454	0	-9.348	69.391	28.05	0	0.23
	54.166	1199.398	52.319	0	61.298	1102.989	0	0.49
	72.041	1814.641	46.51	0	55.236	1721.031	0	0.65
	81.249	2091.025	43.33	0	51.973	1989.642	0	0.72
	84.499	2180.09	42.186	0	50.806	2074.724	0	0.74
	102.374	2583.216	20.214	0	44.301	2442.765	0	0.84
	108.332	2682.146	18.047	0	42.113	2526.133	0	0.86
	135.415	2879.107	8.107	-8.893	32.19	2648.426	0	0.92
	162.498	2761.581	1.075	-15.925	22.622	2373.914	0	0.88
	167.373	2698.81	0	-17.704	20.98	2288.265	0	0.87
	189.581	2256.84	0	-41.246	13.982	1792.478	0	0.76
	197.977	2032.802	0	-44.173	11.579	1570.189	0	0.7
	216.664	1439.714	0	-50.369	6.723	1025.672	0	0.53
	235.622	754.985	0	-40.148	4.45	129.921	0	0.34
	243.747	493.168	2.776	0	4.45	166.074	0	0.26
	246.997	502.189	2.776	0	4.45	180.535	0	0.23
	256.476	528.499	2.776	0	4.45	222.714	0	0.13
3	0	568.341	2.776	-9.312	73.431	0	-817.121	0
	0	568.341	2.776	-9.312	73.431	0	-817.121	0
	12.438	452.528	0	-9.312	69.879	0	-300.275	0.12
	23.467	349.825	0	-9.312	66.402	125.695	0	0.23
	27.926	454.76	40.244	0	64.927	289.384	0	0.28

	42.945	952.559	35.402	0	59.664	801.303	0	0.44
	46.934	1074.227	34.038	0	58.187	925.636	0	0.48
	66.412	1595.407	26.916	0	50.61	1449.865	0	0.67
	70.401	1684.868	25.372	0	48.992	1537.104	0	0.71
	93.868	2066.857	15.888	-1.112	39.267	1894.342	0	0.87
	117.335	2174.396	10.077	-6.923	29.593	1963.768	0	0.92
	140.802	2044.371	0.303	-16.697	20.562	1762.137	0	0.86
	164.269	1641.421	0	-26.112	12.575	1335.888	0	0.7
	177.88	1304.131	0	-31.19	11.172	62.036	0	0.57
	187.736	1020.401	0	-34.645	11.172	172.153	0	0.47
	205.571	442.002	0	-40.358	11.172	371.412	0	0.28
	211.203	434.336	11.172	0	11.172	434.336	0	0.22
	222.702	562.805	11.172	0	11.172	562.805	0	0.11
4	0	696.518	11.172	-3.224	74.376	0	-740.095	0
	0	696.518	11.172	-3.224	74.376	0	-740.095	0
	9.075	667.265	0	-3.224	72.155	0	-314.106	0.07
	21.606	626.867	0	-3.224	68.747	250.162	0	0.18
	22.038	625.474	0	-3.224	68.624	269.219	0	0.18
	43.212	1246.195	53.119	0	62.075	1160.244	0	0.37
	64.818	2012.933	45.923	0	54.504	1918.055	0	0.54
	65.466	2033.087	45.694	0	54.265	1937.497	0	0.54
	77.566	2373.153	41.29	0	49.688	2260.064	0	0.62
	86.424	2578.209	22.457	0	46.211	2442.326	0	0.65
	93.554	2711.75	19.706	0	43.345	2552.409	0	0.68
	108.03	2882.479	13.932	-3.068	37.374	2666.884	0	0.7
	129.636	2945.823	8.906	-8.094	28.134	2544.502	0	0.68
	151.242	2733.815	0	-32.398	18.563	2044.203	0	0.6
	155.563	2652.876	0	-34.232	16.616	1896.533	0	0.58
	171.984	2206.557	0	-41.329	9.621	1247.146	0	0.46
	172.848	2176.841	0	-41.708	9.316	0	-402.543	0.45
	185.163	1698.295	0	-54.967	9.316	0	-287.818	0.34
	194.454	1276.672	0	-59.089	9.316	0	-201.272	0.25
	216.06	0	9.316	-68.758	9.316	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	62.661	-16.405	-16.405	0	0	0
	13.793	-226.268	0	-16.405	-16.405	0	-226.268	-0.07
	27.586	-452.535	0	-16.405	-16.405	0	-452.535	-0.14
	41.379	-678.803	0	-16.405	-16.405	0	-678.803	-0.2
	55.172	-905.071	0	-16.405	-21.911	1266.909	0	-0.24
	68.965	-1131.34	0	-16.405	-31.283	1421.783	0	-0.26
	82.758	-1357.61	0	-16.405	-40.221	1354.029	0	-0.26
	93.379	-1531.83	0	-16.405	-46.724	1169.309	0	-0.24
	96.551	-1583.87	0	-16.405	-48.593	1094.411	0	-0.23
	109.93	-1803.35	0	-16.405	-56.094	690.022	0	-0.18
	110.344	-1810.14	0	-16.405	-56.315	675.459	0	-0.18
	120.965	-1984.37	0	-16.405	-61.799	263.663	0	-0.12
	124.137	-2036.41	0	-16.405	-63.362	127.448	0	-0.1

2	0	-2262.68	56.724	-16.405	-69.706	0	-529.181	0
	0	-2262.68	56.724	-16.405	-69.706	0	-529.181	0
	8.396	-1799.66	54.186	0	-9.348	539.151	0	-0.04
	16.521	-1381.96	49.214	0	-9.348	463.196	0	-0.09
	25.458	-965.687	43.37	0	-9.348	379.645	0	-0.13
	27.083	-895.492	42.113	0	-9.348	364.454	0	-0.13
	54.166	-677.5	4.45	0	-9.348	111.271	0	-0.22
	72.041	-597.963	4.45	0	-9.685	1355.252	0	-0.24
	81.249	-556.99	4.45	0	-12.164	1606.695	0	-0.24
	84.499	-542.529	4.45	0	-13.09	1693.121	0	-0.25
	102.374	-462.991	4.45	0	-18.603	2127.092	0	-0.31
	108.332	-436.479	4.45	0	-20.575	2250.719	0	-0.33
	135.415	-648.278	0	-9.348	-30.077	2615.806	0	-0.4
	162.498	-901.461	0	-9.348	-39.983	2587.639	0	-0.44
	167.373	-947.034	0	-9.348	-41.775	2537.827	0	-0.45
	189.581	-1154.64	0	-9.348	-49.869	2143.9	0	-0.45
	197.977	-1233.13	0	-9.348	-52.864	1928.403	0	-0.44
	216.664	-1407.83	0	-9.348	-59.285	1339.795	0	-0.39
	235.622	-1585.06	0	-9.348	-65.291	628.689	0	-0.29
	243.747	-1661.01	0	-9.348	-67.661	302.941	0	-0.23
	246.997	-1691.39	0	-9.348	-68.574	169.998	0	-0.2
	256.476	-1780.01	0	-9.348	-71.122	0	-224.655	-0.13
3	0	-1925.31	11.172	-53.246	-74.604	0	-841.962	0
	0	-1925.31	11.172	-53.246	-74.604	0	-841.962	0
	12.438	-1786.35	11.172	0	-9.312	452.528	0	-0.11
	23.467	-1663.13	11.172	0	-9.312	349.825	0	-0.19
	27.926	-1613.31	11.172	0	-9.312	308.307	0	-0.23
	42.945	-1445.52	11.172	0	-9.312	168.458	0	-0.33
	46.934	-1400.94	11.172	0	-9.312	131.31	0	-0.35
	66.412	-1183.33	11.172	0	-11.838	1283.219	0	-0.42
	70.401	-1138.76	11.172	0	-13.11	1373.494	0	-0.44
	93.868	-876.578	11.172	0	-21.24	1787.899	0	-0.46
	117.335	-614.395	11.172	0	-30.378	1970.207	0	-0.43
	140.802	-742.752	0	-9.312	-40.085	1875.352	0	-0.39
	164.269	-961.267	0	-9.312	-49.78	1494.043	0	-0.37
	177.88	-1088.01	0	-9.312	-55.159	1156.733	0	-0.34
	187.736	-1179.78	0	-9.312	-58.871	868.205	0	-0.3
	205.571	-1345.85	0	-9.312	-65.12	267.419	0	-0.2
	211.203	-1398.3	0	-9.312	-66.943	62.814	0	-0.17
	222.702	-1505.37	0	-9.312	-70.447	0	-373.762	-0.09
4	0	-2012.72	9.316	-50.407	-73.734	0	-860.274	0
	0	-2012.72	9.316	-50.407	-73.734	0	-860.274	0
	9.075	-1928.18	9.316	0	-3.224	667.265	0	-0.08
	21.606	-1811.44	9.316	0	-3.224	626.867	0	-0.17
	22.038	-1807.42	9.316	0	-3.224	625.474	0	-0.18
	43.212	-1610.17	9.316	0	-4.347	751.323	0	-0.3
	64.818	-1408.9	9.316	0	-9.784	1479.813	0	-0.37
	65.466	-1402.86	9.316	0	-9.962	1500.24	0	-0.37
	77.566	-1290.15	9.316	0	-13.453	1863.186	0	-0.39



86.424	-1207.63	9.316	0	-16.214	2101.968	0	-0.39
93.554	-1141.21	9.316	0	-18.55	2272.527	0	-0.39
108.03	-1006.36	9.316	0	-23.577	2547.029	0	-0.38
129.636	-805.086	9.316	0	-31.717	2741.124	0	-0.33
151.242	-603.815	9.316	0	-40.44	2621.241	0	-0.27
155.563	-563.56	9.316	0	-42.239	2555.321	0	-0.26
171.984	-410.594	9.316	0	-49.218	2169.349	0	-0.2
172.848	-402.543	9.316	0	-49.591	2142.938	0	-0.19
185.163	-287.818	9.316	0	-54.967	1698.295	0	-0.14
194.454	-201.272	9.316	0	-59.089	1276.672	0	-0.1
216.06	0	9.316	-68.758	-68.758	0	0	0

Support	Reac. Pos	Reac. Negative
1	16.405	-62.758
2	13.826	-83.592
3	12.087	-79.762
4	14.396	-79.425
5	9.316	-68.857

id            Dead Loads (Self Wt) Unfactored  
Type        Static

Factors        1

Span	Location (ft)	Moment (kft)	Shear ( K)	Deflect (in)	Reaction ( K)
1	0	0	23.246	0	-23.246
	16.623	303.652	13.288	0	
	33.246	441.786	3.331	-0.02	
	49.869	414.402	-6.626	-0.04	
	66.492	221.5	-16.583	-0.08	
	83.115	-136.921	-26.54	-0.13	
	99.738	-660.86	-36.498	-0.17	
	116.361	-1350.32	-46.455	-0.19	
	127.166	-1887.22	-52.927	-0.18	
	132.984	-2207.08	-57.037	-0.17	
	138.303	-2520.62	-60.862	-0.15	
	149.607	-3264.36	-70.803	-0.1	
	152.267	-3455.86	-73.206	-0.09	
	2	166.23	-4581.36	-88.084	0
0		-4581.36	114.049	0	
8.937		-3604.85	104.526	0.07	
17.604		-2732.72	96.774	0.15	
26.541		-1896.94	90.321	0.24	
27.083		-1848.11	89.996	0.25	
54.166		369.588	73.774	0.59	
72.582		1626.659	62.742	0.82	
81.249		2143.38	56.502	0.91	
83.686		2278.963	54.747	0.93	
97.77		2966.58	42.903	1.05	
108.332		3366.08	32.742	1.11	
116.728		3607.072	24.666	1.15	
135.415		3885.894	5.175	1.18	
162.498		3643.532	-23.073	1.12	
170.081		3438.578	-30.982	1.09	
189.581		2651.542	-49.741	0.94	
190.123		2624.459	-50.262	0.94	
204.206		1833.214	-62.106	0.79	
215.581		1080.191	-70.296	0.66	
216.664		1003.687	-70.945	0.65	
243.747	-1137.38	-87.167	0.29		
249.434	-1642.83	-90.574	0.22		
258.913	-2536.29	-98.058	0.12		
3	270.83	-3775.78	-110.04	0	-184.196
	0	-3775.78	74.156	0	
	16.514	-2688.01	57.741	-0.14	
	20.388	-2470.35	54.644	-0.16	
	32.417	-1869.42	45.353	-0.24	

	40.776	-1511.24	40.346	-0.27	
	61.164	-813.166	28.133	-0.32	
	81.552	-364.082	15.921	-0.33	
	94.193	-210.691	8.349	-0.32	
	101.94	-163.985	3.708	-0.32	
	122.328	-212.874	-8.504	-0.3	
	142.716	-510.75	-20.717	-0.27	
	156.172	-843.743	-28.777	-0.24	
	163.104	-1057.75	-32.988	-0.22	
	183.492	-1861.8	-46.057	-0.13	
	185.939	-1976.48	-47.693	-0.12	
4	203.88	-2973.64	-63.527	0	-162.051
	0	-2973.64	98.524		
	12.536	-1808.11	87.467	0.1	
	21.248	-1071.45	81.674	0.19	
	42.496	517.982	68.054	0.4	
	58.007	1499.522	58.57	0.56	
	63.744	1823.689	54.44	0.61	
	69.056	2102.714	50.615	0.65	
	83.505	2746.246	38.464	0.74	
	84.992	2802.392	37.033	0.75	
	106.24	3372.104	16.592	0.82	
	127.488	3507.496	-3.848	0.81	
	148.736	3208.566	-24.289	0.72	
	160.422	2859.025	-35.531	0.63	
	169.984	2480.846	-43.573	0.55	
	174.446	2278.05	-47.325	0.5	
	185.92	1687.651	-55.586	0.37	
	191.232	1383.925	-58.768	0.3	
	212.48	0	-71.496	0	-71.496

Id	Dead Loads (Superstructure) Unfactored				
Type	Static				
Factors	1				
Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	127.079	0	-127.079
	16.623	1750.445	83.526	0.18	
	33.246	2776.921	39.974	0.31	
	49.869	3079.428	-3.578	0.36	
	66.492	2657.966	-47.13	0.31	
	83.115	1512.534	-90.683	0.18	
	99.738	-356.867	-134.235	0.01	
	116.361	-2950.24	-177.787	-0.15	
	127.166	-5024.16	-206.096	-0.21	
	132.984	-6267.58	-221.339	-0.22	
	138.303	-7482.03	-235.276	-0.22	
	149.607	-10308.9	-264.892	-0.17	
	152.267	-11022.7	-271.86	-0.15	
2	0	-15074.2	-308.444	0	-671.521
		-15074.2	363.077	0	
	8.937	-11933.8	339.661	0.14	
	17.604	-9088.54	316.955	0.31	
	26.541	-6360.43	293.539	0.52	
	27.083	-6201.81	292.12	0.54	
	54.166	748.8	221.162	1.41	
	72.582	4377.517	172.911	2	
	81.249	5777.671	150.205	2.23	
	83.686	6136.007	143.819	2.29	
	97.77	7901.61	106.921	2.59	
	108.332	8884.8	79.247	2.75	
	116.728	9457.8	57.251	2.84	
	135.415	10070.19	8.29	2.92	
	162.498	9333.836	-62.667	2.76	
	170.081	8783.281	-82.536	2.65	
	189.581	6675.743	-133.625	2.27	
	190.123	6602.98	-135.044	2.25	
	204.206	4441.313	-171.942	1.88	
	215.581	2316	-201.744	1.54	
	216.664	2095.91	-204.582	1.5	
	243.747	-4405.66	-275.54	0.63	
	249.434	-6015.15	-290.441	0.47	
	258.913	-8885.96	-315.276	0.24	
3	0	-12829	-346.497	0	-620.741
		-12829	274.244	0	
	16.514	-8657.31	230.976	-0.24	
	20.388	-7782.23	220.827	-0.28	
	32.417	-5315.47	189.311	-0.37	

	40.776	-3824.54	167.411	-0.39	
	61.164	-955.898	113.994	-0.34	
	81.552	823.682	60.577	-0.25	
	94.193	1380.098	27.459	-0.2	
	101.94	1514.206	7.161	-0.19	
	122.328	1115.673	-46.256	-0.19	
	142.716	-371.917	-99.672	-0.24	
	156.172	-1950.31	-134.927	-0.27	
	163.104	-2948.56	-153.089	-0.28	
	183.492	-6614.27	-206.505	-0.22	
	185.939	-7127.34	-212.915	-0.2	
4	0	-11369	-259.922	0	-591.777
	0	-11369	331.855	0	
	12.536	-7414.66	299.01	0.23	
	21.248	-4909.21	276.185	0.42	
	42.496	367.747	220.516	0.98	
	58.007	3472.997	179.877	1.39	
	63.744	4461.827	164.846	1.53	
	69.056	5300.524	150.928	1.65	
	83.505	7207.754	113.073	1.92	
	84.992	7373.036	109.176	1.94	
	106.24	9101.375	53.506	2.15	
	127.488	9646.842	-2.163	2.16	
	148.736	9009.438	-57.833	1.93	
	160.422	8154.667	-88.452	1.72	
	169.984	7189.164	-113.503	1.5	
	174.446	6656.622	-125.194	1.38	
	185.92	5047.697	-155.255	1.02	
	191.232	4186.018	-169.173	0.84	
	212.48	0	-224.842	0	-224.842

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	66.713	-11.309	66.713	0	0	0
	16.623	957.884	57.624	0	57.624	957.884	0	0.17
	33.246	1617.503	48.653	0	48.653	1617.503	0	0.33
	49.869	2002.486	34.401	0	40.025	1996.023	0	0.44
	66.492	2155.658	26.104	-5.896	31.877	2119.543	0	0.51
	83.115	2098.926	0	-33.357	24.341	2023.097	0	0.52
	99.738	1867.585	0	-40.783	17.553	1750.653	0	0.47
	116.361	1478.675	0	-47.442	11.619	1351.96	0	0.38
	127.166	1165.914	0	-51.309	8.206	1043.489	0	0.3
	132.984	982.83	0	-53.241	6.488	862.769	0	0.26
	138.303	807.506	0	-54.922	4.978	688.435	0	0.21
	149.607	410.111	0	-58.264	2.408	360.198	0	0.13
	152.267	366.602	2.408	0	2.408	366.602	0	0.11
2	0	400.22	2.408	-6.592	70.512	0	-377.806	0
	0	400.22	2.408	-6.592	70.512	0	-377.806	0
	8.937	341.309	0	-6.592	69.101	0	-86.044	0.07
	17.604	284.182	0	-6.592	67.559	189.546	0	0.15
	26.541	538.487	36.478	0	65.79	482.357	0	0.23
	27.083	554.302	36.383	0	65.676	500.347	0	0.23
	54.166	1438.69	52.316	0	59.058	1428.329	0	0.48
	72.582	2025.69	47.101	0	53.703	2022.095	0	0.63
	81.249	2272.313	44.475	0	51.033	2267.128	0	0.68
	83.686	2336.927	43.722	0	50.27	2330.802	0	0.69
	97.77	2661.048	39.284	0	45.791	2646.415	0	0.76
	108.332	2843.364	35.887	0	42.376	2820.179	0	0.79
	116.728	2948.092	33.161	0	39.642	2917.357	0	0.81
	135.415	3048.234	27.059	-4.941	33.537	2999.728	0	0.82
	162.498	2908.695	0	-34.72	24.777	2791.268	0	0.77
	170.081	2802.631	0	-37.168	22.374	2666.141	0	0.74
	189.581	2399.403	0	-43.348	16.377	2224.699	0	0.65
	190.123	2385.665	0	-43.516	16.216	2210.221	0	0.64
	204.206	1986.663	0	-47.809	12.155	1802.631	0	0.55
	215.581	1615.138	0	-51.111	9.135	1443.958	0	0.47
	216.664	1578.01	0	-51.415	8.862	1409.147	0	0.46
	243.747	623.943	0	-58.192	6.017	200.45	0	0.22
	249.434	429.067	0	-59.378	6.017	234.67	0	0.17
	258.913	417.523	2.107	0	6.017	291.704	0	0.09
3	0	442.626	2.107	-9.242	69.386	0	-289.388	0
	0	442.626	2.107	-9.242	69.386	0	-289.388	0
	16.514	356.223	58.073	0	64.661	325.692	0	0.13

	20.388	487.055	56.914	0	63.461	457.441	0	0.16
	32.417	871.024	53.074	0	59.483	845.014	0	0.26
	40.776	1115.896	50.183	0	56.495	1092.074	0	0.33
	61.164	1618.148	42.406	0	48.517	1594.258	0	0.49
	81.552	1933.527	33.916	0	39.927	1899.959	0	0.59
	94.193	2015.531	28.494	-3.506	34.496	1973.752	0	0.62
	101.94	2021.249	5.183	-26.817	31.186	1973.822	0	0.62
	122.328	1899.434	0	-35.51	22.754	1817.967	0	0.58
	142.716	1562.607	0	-43.752	15.074	1469.99	0	0.47
	156.172	1247.001	0	-48.734	10.958	48.806	0	0.37
	163.104	1061.636	0	-51.128	10.958	124.769	0	0.32
	183.492	441.555	0	-57.475	10.958	348.189	0	0.15
	185.939	375	10.958	0	10.958	375	0	0.13
4	0	571.61	10.958	-2.69	70.205	0	-305.982	0
	0	571.61	10.958	-2.69	70.205	0	-305.982	0
	12.536	537.885	0	-2.69	67.72	183.67	0	0.09
	21.248	539.649	58.835	0	65.768	519.72	0	0.15
	42.496	1321.974	53.587	0	60.306	1315.729	0	0.31
	58.007	1845.15	49.155	0	55.73	1841.2	0	0.42
	63.744	2021.763	47.395	0	53.922	2016.777	0	0.45
	69.056	2175.24	45.71	0	52.196	2168.398	0	0.48
	83.505	2531.067	40.902	0	47.291	2514.861	0	0.54
	84.992	2561.927	40.39	0	46.771	2544.414	0	0.55
	106.24	2865.371	32.812	0	39.088	2824.581	0	0.59
	127.488	2916.384	4.369	-27.631	30.994	2813.188	0	0.58
	148.736	2682.856	0	-35.845	22.577	2478.394	0	0.5
	160.422	2427.34	0	-46.628	17.837	2147.589	0	0.44
	169.984	2144.525	0	-50.464	13.907	1796.73	0	0.38
	174.446	1988.088	0	-52.271	12.058	1607.826	0	0.35
	185.92	1513.036	0	-56.967	7.333	1057.072	0	0.25
	191.232	1257.08	0	-59.162	7.261	0	-154.274	0.21
	212.48	0	7.261	-67.97	7.261	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	66.713	-11.309	-11.309	0	0	0
	16.623	-187.996	0	-11.309	-11.309	0	-187.996	-0.09
	33.246	-375.992	0	-11.309	-13.26	1280.877	0	-0.17
	49.869	-563.989	0	-11.309	-22.264	1808.271	0	-0.24
	66.492	-751.985	0	-11.309	-30.941	2058.09	0	-0.3
	83.115	-939.981	0	-11.309	-39.156	2057.844	0	-0.33
	99.738	-1127.98	0	-11.309	-46.774	1843.977	0	-0.33
	116.361	-1315.97	0	-11.309	-53.662	1461.868	0	-0.3
	127.166	-1438.17	0	-11.309	-57.683	1148.635	0	-0.25
	132.984	-1503.97	0	-11.309	-59.694	964.521	0	-0.23
	138.303	-1564.13	0	-11.309	-61.443	788.06	0	-0.19
	149.607	-1691.97	0	-11.309	-64.91	388.722	0	-0.12
	152.267	-1722.05	0	-11.309	-65.683	289.909	0	-0.1
2	0	-1879.96	51.319	-11.309	-69.49	0	-266.77	0

	0	-1879.96	51.319	-11.309	-69.49	0	-266.77	0
	8.937	-1429.79	48.679	0	-6.592	341.309	0	-0.06
	17.604	-1160.21	6.017	0	-6.592	284.182	0	-0.12
	26.541	-1106.43	6.017	0	-6.592	225.271	0	-0.18
	27.083	-1103.18	6.017	0	-6.592	221.701	0	-0.18
	54.166	-940.222	6.017	0	-8.19	1304.768	0	-0.29
	72.582	-829.414	6.017	0	-12.879	1852.27	0	-0.33
	81.249	-777.269	6.017	0	-15.329	2095.891	0	-0.33
	83.686	-762.603	6.017	0	-16.041	2161.373	0	-0.33
	97.77	-677.867	6.017	0	-20.304	2502.835	0	-0.33
	108.332	-614.316	6.017	0	-23.621	2707.394	0	-0.32
	116.728	-563.8	6.017	0	-26.305	2833.236	0	-0.31
	135.415	-492.378	0	-6.592	-32.367	2985.484	0	-0.29
	162.498	-670.898	0	-6.592	-41.207	2878.826	0	-0.31
	170.081	-720.884	0	-6.592	-43.665	2779.505	0	-0.32
	189.581	-849.418	0	-6.592	-49.891	2391.124	0	-0.32
	190.123	-852.988	0	-6.592	-50.061	2377.722	0	-0.32
	204.206	-945.818	0	-6.592	-54.411	1984.87	0	-0.31
	215.581	-1020.8	0	-6.592	-57.785	1613.048	0	-0.29
	216.664	-1027.94	0	-6.592	-58.098	1575.576	0	-0.29
	243.747	-1206.46	0	-6.592	-65.156	594.789	0	-0.18
	249.434	-1243.95	0	-6.592	-66.407	391.965	0	-0.15
	258.913	-1306.43	0	-6.592	-68.312	62.013	0	-0.09
3	0	-1662.6	10.958	-50.179	-70.391	0	-352.901	0
	0	-1662.6	10.958	-50.179	-70.391	0	-352.901	0
	16.514	-1481.63	10.958	0	-9.242	290.005	0	-0.12
	20.388	-1439.18	10.958	0	-9.242	254.205	0	-0.14
	32.417	-1307.36	10.958	0	-9.242	143.036	0	-0.21
	40.776	-1215.76	10.958	0	-9.242	65.783	0	-0.25
	61.164	-992.334	10.958	0	-16.151	1511.445	0	-0.31
	81.552	-768.913	10.958	0	-24.199	1848.951	0	-0.32
	94.193	-630.393	10.958	0	-29.505	1954.267	0	-0.31
	101.94	-545.493	10.958	0	-32.819	1974.864	0	-0.3
	122.328	-687.903	0	-9.242	-41.551	1865.571	0	-0.28
	142.716	-876.325	0	-9.242	-49.937	1534.937	0	-0.26
	156.172	-1000.68	0	-9.242	-55.057	1218.856	0	-0.23
	163.104	-1064.75	0	-9.242	-57.529	1032.24	0	-0.21
	183.492	-1253.17	0	-9.242	-64.113	405.371	0	-0.12
	185.939	-1275.78	0	-9.242	-64.832	323.734	0	-0.11
4	0	-1542.74	7.261	-46.163	-69.625	0	-315.529	0
	0	-1542.74	7.261	-46.163	-69.625	0	-315.529	0
	12.536	-1451.72	7.261	0	-2.69	537.885	0	-0.08
	21.248	-1388.46	7.261	0	-2.69	514.449	0	-0.13
	42.496	-1234.19	7.261	0	-6.845	1163.536	0	-0.22
	58.007	-1121.57	7.261	0	-10.822	1671.726	0	-0.26
	63.744	-1079.92	7.261	0	-12.421	1847.496	0	-0.27
	69.056	-1041.35	7.261	0	-13.964	2002.762	0	-0.27
	83.505	-936.442	7.261	0	-18.435	2377.633	0	-0.28
	84.992	-925.643	7.261	0	-18.917	2411.64	0	-0.28



106.24	-771.369	7.261	0	-26.139	2777.037	0	-0.27
127.488	-617.095	7.261	0	-33.877	2879.234	0	-0.24
148.736	-462.821	7.261	0	-42.014	2678.16	0	-0.19
160.422	-377.971	7.261	0	-46.628	2427.34	0	-0.16
169.984	-308.548	7.261	0	-50.464	2144.525	0	-0.14
174.446	-276.15	7.261	0	-52.271	1988.088	0	-0.12
185.92	-192.842	7.261	0	-56.967	1513.036	0	-0.09
191.232	-154.274	7.261	0	-59.162	1257.08	0	-0.07
212.48	0	7.261	-67.97	-67.97	0	0	0

Support    Reac. Pos    Reac. Negative

1	11.309	-66.805
2	8.999	-73.591
3	11.348	-73.314
4	13.649	-72.196
5	7.261	-68.059

Id	HS20 Lane Load	
Type	Lane Load	
Factors:	Moment	1
	Shear	1
	Deflection	1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	74.555	-21.657	74.555	0	0	0
	16.623	979.99	53.635	0	61.29	1018.832	0	0.23
	33.246	1707.274	40.714	0	49.401	1642.391	0	0.43
	49.869	2185.203	27.861	0	38.939	1941.863	0	0.58
	66.492	2419.36	15.108	-2.892	29.904	1988.358	0	0.67
	83.115	2417.563	2.49	-15.51	22.274	1851.266	0	0.69
	99.738	2189.864	0	-27.96	16.008	1596.596	0	0.64
	116.361	1748.55	0	-40.209	11.046	1285.339	0	0.52
	127.166	1353.928	0	-48.046	8.483	1078.729	0	0.42
	132.984	1123.841	0	-41.465	7.3	970.791	0	0.36
	138.303	950.379	0	-39.402	6.327	875.028	0	0.3
	149.607	676.53	0	-26.763	4.569	683.527	0	0.18
	152.267	626.638	0	-25.444	4.213	641.484	0	0.15
2	0	545.859	3.284	-8.99	124.678	0	-3686.31	0
	0	545.859	3.284	-8.99	124.678	0	-3686.31	0
	8.937	483.19	0	-3.651	115.869	0	-3304.95	0.13
	17.604	515.022	15.561	-2.439	109.979	0	-2575.84	0.26
	26.541	618.215	25.053	0	103.974	0	-1892.95	0.41
	27.083	626.53	24.681	0	103.612	0	-1853.8	0.42
	54.166	1527.498	57.214	0	85.843	381.167	-218.796	0.87
	72.582	2509.887	57.949	0	74.324	1351.724	0	1.13
	81.249	2928.294	51.753	0	69.129	1708.286	0	1.23
	83.686	3036.208	50.007	0	67.698	1797.016	0	1.26
	97.77	3573.389	39.891	0	59.72	2212.795	0	1.37
	108.332	3878.107	32.285	0	54.075	2421.793	0	1.44
	116.728	4059.469	26.232	0	49.805	2530.07	0	1.47
	135.415	4268.083	12.746	-5.254	41.016	2608.471	0	1.51
	162.498	4091.209	0	-24.795	30.086	2407.102	0	1.44
	170.081	3940.345	0	-30.258	27.416	2302.129	0	1.4
	189.581	3351.334	0	-44.274	21.344	1973.426	0	1.24
	190.123	3330.873	0	-44.663	21.192	1963.488	0	1.24
	204.206	2723.042	0	-54.738	17.547	1700.22	0	1.08
	215.581	2164.835	0	-54.843	15.047	1491.615	0	0.92
	216.664	2113.182	0	-53.507	14.83	1472.477	0	0.91
	243.747	1103.209	0	-29.91	11.093	842.182	0	0.46
	249.434	1005.735	0	-27.287	10.884	865.548	0	0.36
	258.913	939.275	3.162	0	10.651	922.528	0	0.2
3	0	1007.785	8.895	-16.079	115.082	0	-3136.19	0
	0	1007.785	8.895	-16.079	115.082	0	-3136.19	0
	16.514	915.629	16.574	-1.426	94.872	0	-2827.78	0.2

	20.388	942.165	13.816	-4.184	92.163	0	-2582.36	0.25
	32.417	1094.677	24.125	0	83.932	0	-1903.48	0.4
	40.776	1258.386	30.834	0	78.373	0	-1502.16	0.5
	61.164	1869.584	35.976	0	65.439	0	-745.01	0.71
	81.552	2284.854	20.824	0	53.665	531.434	-257.336	0.85
	94.193	2380.768	11.377	-6.623	47.072	760.684	-60.845	0.89
	101.94	2377.683	5.581	-12.419	43.326	854.146	0	0.89
	122.328	2145.387	0	-27.637	34.611	964.778	0	0.82
	142.716	1594.647	0	-42.715	27.626	945.889	0	0.67
	156.172	1160.462	0	-28.889	23.979	904.267	0	0.53
	163.104	1032.562	0	-23.709	22.385	881.696	0	0.45
	183.492	822.917	6.559	-11.441	20.83	708.557	0	0.22
	185.939	814.133	4.828	-13.172	20.726	745.158	0	0.19
4	0	999.486	19.161	-4.704	127.498	0	-2779.89	0
	0	999.486	19.161	-4.704	127.498	0	-2779.89	0
	12.536	989.869	0.503	0	102.372	0	-2641.93	0.17
	21.248	1131.184	33.349	0	96.403	0	-2040.32	0.29
	42.496	1952.878	60.906	0	82.208	0	-865.923	0.58
	58.007	2706.822	49.908	0	72.277	487.286	-258.435	0.75
	63.744	2942.884	45.81	0	68.713	726.188	-83.615	0.8
	69.056	3140.618	41.998	0	65.469	921.681	0	0.85
	83.505	3572.991	31.569	0	56.963	1329.613	0	0.94
	84.992	3608.547	30.491	0	56.116	1361.605	0	0.94
	106.24	3928.225	15.022	-2.978	44.661	1629.295	0	0.99
	127.488	3889.036	0	-18.56	34.5	1589.113	0	0.95
	148.736	3482.364	0	-34.232	25.743	1316.617	0	0.83
	160.422	3099.549	0	-42.882	21.559	1098.365	0	0.73
	169.984	2701.558	0	-49.973	18.48	897.434	0	0.62
	174.446	2489.598	0	-53.286	17.151	799.444	0	0.57
	185.92	1867.601	0	-61.817	14.052	543.05	-40.218	0.42
	191.232	1541.989	0	-65.772	12.775	425.459	-58.184	0.34
	212.48	0	11.343	-89.58	11.343	0	0	0

Minimums table:

Span	Location	Moment(r)	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	74.555	-21.657	-21.657	0	0	0
	16.623	-342.201	0	-20.586	-22.342	0	-282.968	-0.16
	33.246	-684.403	0	-20.586	-26.917	323.207	-320.428	-0.31
	49.869	-1026.61	0	-20.586	-33.491	422.225	-383.707	-0.44
	66.492	-1368.81	0	-20.586	-41.201	404.035	-467.525	-0.54
	83.115	-1711.01	0	-20.586	-49.928	221.836	-629.977	-0.59
	99.738	-2053.21	0	-20.586	-59.534	0	-922.556	-0.6
	116.361	-2395.41	0	-20.586	-69.861	0	-1388.51	-0.54
	127.166	-2617.84	0	-20.586	-76.878	0	-1800.59	-0.46
	132.984	-2754.05	0	-31.348	-80.742	0	-2061.21	-0.41
	138.303	-2954.1	0	-43.834	-84.328	0	-2324.35	-0.35
	149.607	-3595.72	0	-66.624	-92.124	0	-2966.02	-0.22
	152.267	-3778.33	0	-71.805	-93.993	0	-3133.95	-0.19
2	0	-4918.57	110.831	-93.583	-111.331	0	-3684.04	0

	0	-4918.57	110.831	-93.583	-111.331	0	-3684.04	0
	8.937	-3976.95	98.669	0	-9.782	514.319	0	-0.09
	17.604	-3154.55	92.053	0	-9.937	459.405	0	-0.18
	26.541	-2419.98	74.246	0	-10.213	421.436	0	-0.27
	27.083	-2379.77	74.246	0	-10.233	419.722	0	-0.27
	54.166	-1172.91	16.534	0	-13.305	1001.669	0	-0.48
	72.582	-1108.17	0	-1.725	-17.245	1337.739	0	-0.57
	81.249	-1123.12	0	-1.725	-19.473	1504.454	0	-0.6
	83.686	-1127.32	0	-1.725	-20.142	1551.053	0	-0.6
	97.77	-1151.62	0	-1.725	-24.361	1808.423	0	-0.64
	108.332	-1169.84	0	-1.725	-27.921	1978.037	0	-0.65
	116.728	-1184.32	0	-1.725	-30.989	2091.126	0	-0.66
	135.415	-1216.56	0	-1.725	-38.568	2247.848	0	-0.66
	162.498	-1263.28	0	-1.725	-51.347	2154.847	0	-0.65
	170.081	-1276.36	0	-1.725	-55.293	2043.536	0	-0.65
	189.581	-1310	0	-1.725	-66.14	1554.411	0	-0.61
	190.123	-1310.94	0	-1.725	-66.455	1536.353	0	-0.6
	204.206	-1335.23	0	-1.725	-74.892	977.03	0	-0.56
	215.581	-1404.39	0	-12.316	-82.02	395.444	-265.218	-0.51
	216.664	-1418.79	0	-14.42	-82.711	333.938	-313.282	-0.5
	243.747	-2398.56	0	-63.212	-100.514	0	-1845.54	-0.3
	249.434	-2798.45	0	-71.276	-104.34	0	-2249.63	-0.24
	258.913	-3611.06	0	-92.37	-110.779	0	-2987.15	-0.14
3	0	-4796.09	94.468	-107.876	-132.736	0	-3137.63	0
	0	-4796.09	94.468	-107.876	-132.736	0	-3137.63	0
	16.514	-3429.1	68.26	0	-17.439	818.667	0	-0.26
	20.388	-3164.67	68.26	0	-17.613	773.971	0	-0.31
	32.417	-2499.79	47.164	0	-18.406	657.158	0	-0.48
	40.776	-2176.1	31.175	0	-20.182	1056.711	0	-0.58
	61.164	-1918.12	5.372	0	-25.781	1182.323	0	-0.75
	81.552	-1808.59	5.372	0	-33.133	1247.316	0	-0.84
	94.193	-1740.68	5.372	0	-38.551	1219.501	0	-0.86
	101.94	-1699.06	5.372	0	-42.181	1166.235	0	-0.85
	122.328	-1589.53	5.372	0	-52.782	860.481	0	-0.79
	142.716	-1480	5.372	0	-64.711	266.799	-384.969	-0.68
	156.172	-1525.54	0	-24.03	-73.165	0	-841.912	-0.56
	163.104	-1730.17	0	-36.121	-77.671	0	-1128.98	-0.49
	183.492	-2760.9	0	-67.266	-91.466	0	-2198.3	-0.26
	185.939	-2925.47	0	-67.266	-93.167	0	-2350.54	-0.23
4	0	-4387.58	99.569	-93.619	-109.923	0	-2779.84	0
	0	-4387.58	99.569	-93.619	-109.923	0	-2779.84	0
	12.536	-3248.99	84.342	0	-5.128	1025.285	0	-0.12
	21.248	-2614.08	61.599	0	-5.859	1120.464	0	-0.19
	42.496	-1814.5	10.675	0	-8.903	1513.434	0	-0.31
	58.007	-1648.92	10.675	0	-11.993	1852.519	0	-0.37
	63.744	-1587.68	10.675	0	-13.335	1983.327	0	-0.38
	69.056	-1530.98	10.675	0	-14.68	2105.418	0	-0.39
	83.505	-1376.75	10.675	0	-18.835	2429.226	0	-0.4
	84.992	-1360.87	10.675	0	-19.304	2461.022	0	-0.4

## SECTION I

## CENTER GIRDER

106.24	-1134.06	10.675	0	-26.852	2852.721	0	-0.39
127.488	-907.248	10.675	0	-36.019	3061.355	0	-0.34
148.736	-680.436	10.675	0	-46.851	2986.469	0	-0.28
160.422	-555.689	10.675	0	-53.528	2786.548	0	-0.24
169.984	-453.624	10.675	0	-59.376	2523.223	0	-0.2
174.446	-405.993	10.675	0	-62.224	2366.606	0	-0.18
185.92	-283.515	10.675	0	-69.898	1856.499	0	-0.13
191.232	-226.812	10.675	0	-73.624	1564.354	0	-0.1
212.48	0	11.343	-89.58	-89.58	0	0	0

Support    Reac. Pos    Reac. Negative

1	21.657	-74.589
2	13.284	-200.699
3	26.245	-200.319
4	25.384	-191.149
5	11.343	-89.58

Id	Ohio 2F1
Type	Truck
Factors:	Moment 1
	Shear 1
	Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	29.186	-4.737	29.186	0	0	0
	16.623	421.81	25.375	0	25.375	421.81	0	0.07
	33.246	717.861	21.592	0	21.592	717.861	0	0.14
	49.869	894.297	17.933	-2.067	17.933	894.297	0	0.19
	66.492	960.985	14.453	-5.547	14.453	960.985	0	0.22
	83.115	937.014	2.477	-17.523	11.208	931.515	0	0.22
	99.738	837.481	0	-20.601	8.254	823.199	0	0.2
	116.361	673.419	0	-23.353	5.647	657.074	0	0.16
	127.166	543.219	0	-24.942	4.156	528.498	0	0.13
	132.984	467.649	0	-25.731	3.412	453.77	0	0.11
	138.303	395.435	0	-26.418	2.76	381.733	0	0.09
	149.607	230.785	0	-27.789	1.447	216.498	0	0.05
	152.267	189.778	0	-28.097	1.151	175.199	0	0.04
2	0	168.272	1.012	-2.771	29.776	0	-61.034	0
	0	168.272	1.012	-2.771	29.776	0	-61.034	0
	8.937	143.503	0	-2.771	29.224	56.421	0	0.03
	17.604	175.334	19.092	-0.908	28.629	164.997	0	0.06
	26.541	283.165	18.465	-1.535	27.951	278.827	0	0.1
	27.083	289.706	18.425	-1.575	27.908	285.821	0	0.1
	54.166	654.956	25.309	0	25.309	654.956	0	0.2
	72.582	900.255	23.144	0	23.144	900.255	0	0.26
	81.249	1004.27	22.049	0	22.049	1004.27	0	0.29
	83.686	1031.523	21.736	0	21.736	1031.523	0	0.29
	97.77	1168.456	19.886	-0.114	19.886	1168.456	0	0.32
	108.332	1245.759	18.471	-1.529	18.471	1245.759	0	0.33
	116.728	1290.462	17.334	-2.666	17.334	1290.462	0	0.34
	135.415	1334.452	14.79	-5.21	14.79	1334.452	0	0.34
	162.498	1273.967	2.016	-17.984	11.119	1260.819	0	0.32
	170.081	1228.823	0.996	-19.004	10.107	1211.772	0	0.31
	189.581	1058.438	0	-21.578	7.565	1033.218	0	0.27
	190.123	1052.648	0	-21.648	7.496	1027.255	0	0.27
	204.206	884.618	0	-23.436	5.749	856.56	0	0.23
	215.581	728.297	0	-24.811	4.425	701.962	0	0.2
	216.664	712.696	0	-24.938	4.305	686.781	0	0.19
	243.747	316.798	0	-27.736	2.536	84.492	0	0.09
	249.434	238.184	1.26	-18.74	2.536	98.917	0	0.07
	258.913	175.047	0.883	0	2.536	122.957	0	0.04
3	0	185.571	0.883	-3.875	29.607	0	-46.411	0
	0	185.571	0.883	-3.875	29.607	0	-46.411	0
	16.514	209.106	27.719	0	27.719	209.106	0	0.05

	20.388	263.391	27.242	0	27.242	263.391	0	0.07
	32.417	421.326	25.669	0	25.669	421.326	0	0.11
	40.776	522.502	24.48	0	24.48	522.502	0	0.14
	61.164	732.797	21.252	0	21.252	732.797	0	0.2
	81.552	866.06	17.713	-2.287	17.713	866.06	0	0.25
	94.193	901.374	15.446	-4.554	15.446	901.374	0	0.26
	101.94	904.299	5.251	-14.749	14.054	904.112	0	0.26
	122.328	851.655	1.621	-18.379	10.468	844.39	0	0.24
	142.716	709.644	0	-21.809	7.146	699.947	0	0.2
	156.172	578.381	0	-23.87	5.181	570.196	0	0.16
	163.104	501.816	0	-24.855	4.585	52.199	0	0.13
	183.492	243.844	0	-27.474	4.585	145.67	0	0.06
	185.939	210.412	0	-27.758	4.585	156.886	0	0.06
4	0	239.141	4.585	-1.125	29.735	0	-49.997	0
	0	239.141	4.585	-1.125	29.735	0	-49.997	0
	12.536	225.031	0	-1.125	28.767	146.617	0	0.04
	21.248	281.99	28.002	0	28.002	281.99	0	0.06
	42.496	607.378	25.839	0	25.839	607.378	0	0.13
	58.007	825.355	24.01	0	24.01	825.355	0	0.18
	63.744	899.342	23.281	0	23.281	899.342	0	0.19
	69.056	963.901	22.582	0	22.582	963.901	0	0.2
	83.505	1114.456	20.584	0	20.584	1114.456	0	0.23
	84.992	1127.559	20.371	0	20.371	1127.559	0	0.23
	106.24	1257.49	17.222	-2.778	17.222	1257.49	0	0.25
	127.488	1278.79	4.954	-15.046	13.892	1269.069	0	0.24
	148.736	1177.971	1.52	-18.48	10.417	1148.309	0	0.21
	160.422	1063.078	0	-20.421	8.457	1021.478	0	0.18
	169.984	936.327	0	-22.033	6.831	884.592	0	0.16
	174.446	866.884	0	-22.792	6.066	810.319	0	0.15
	185.92	657.718	0	-24.763	4.079	588.451	0	0.11
	191.232	545.752	0	-25.685	3.152	470.469	0	0.09
	212.48	0	3.052	-29.375	3.052	0	0	0

## Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	29.186	-4.737	-4.737	0	0	0
	16.623	-78.746	0	-4.737	-4.737	0	-78.746	-0.04
	33.246	-157.491	0	-4.737	-6.903	667.899	0	-0.07
	49.869	-236.237	0	-4.737	-10.618	866.555	0	-0.1
	66.492	-314.983	0	-4.737	-14.177	952.103	0	-0.12
	83.115	-393.728	0	-4.737	-17.523	937.014	0	-0.14
	99.738	-472.474	0	-4.737	-20.601	837.481	0	-0.14
	116.361	-551.219	0	-4.737	-23.353	673.419	0	-0.12
	127.166	-602.404	0	-4.737	-24.942	543.219	0	-0.11
	132.984	-629.965	0	-4.737	-25.731	467.649	0	-0.09
	138.303	-655.164	0	-4.737	-26.418	395.435	0	-0.08
	149.607	-708.711	0	-4.737	-27.789	230.785	0	-0.05
	152.267	-721.31	0	-4.737	-28.097	189.778	0	-0.04
2	0	-787.456	21.736	-4.737	-29.624	0	-42.477	0

	0	-787.456	21.736	-4.737	-29.624	0	-42.477	0
	8.937	-598.193	20.768	0	-2.771	143.503	0	-0.03
	17.604	-489.043	2.536	0	-2.771	119.484	0	-0.05
	26.541	-466.376	2.536	0	-2.771	94.715	0	-0.07
	27.083	-465.002	2.536	0	-2.771	93.214	0	-0.08
	54.166	-396.315	2.536	0	-3.98	636.173	0	-0.12
	72.582	-349.608	2.536	0	-6.043	873.988	0	-0.14
	81.249	-327.629	2.536	0	-7.105	977.863	0	-0.14
	83.686	-321.447	2.536	0	-7.412	1005.504	0	-0.14
	97.77	-285.73	2.536	0	-9.232	1146.695	0	-0.14
	108.332	-258.942	2.536	0	-10.634	1228.756	0	-0.13
	116.728	-237.649	2.536	0	-11.763	1277.793	0	-0.13
	135.415	-207.019	0	-2.771	-14.302	1332.321	0	-0.12
	162.498	-282.078	0	-2.771	-17.984	1273.967	0	-0.13
	170.081	-303.094	0	-2.771	-19.004	1228.823	0	-0.13
	189.581	-357.136	0	-2.771	-21.578	1058.438	0	-0.13
	190.123	-358.637	0	-2.771	-21.648	1052.648	0	-0.13
	204.206	-397.667	0	-2.771	-23.436	884.618	0	-0.13
	215.581	-429.192	0	-2.771	-24.811	728.297	0	-0.12
	216.664	-432.194	0	-2.771	-24.938	712.696	0	-0.12
	243.747	-507.252	0	-2.771	-27.736	316.798	0	-0.08
	249.434	-523.015	0	-2.771	-28.218	237.553	0	-0.06
	258.913	-549.285	0	-2.771	-28.947	108.946	0	-0.04
3	0	-695.569	4.585	-21.144	-29.758	0	-57.215	0
	0	-695.569	4.585	-21.144	-29.758	0	-57.215	0
	16.514	-619.857	4.585	0	-3.875	121.585	0	-0.05
	20.388	-602.098	4.585	0	-3.875	106.576	0	-0.06
	32.417	-546.95	4.585	0	-3.875	59.968	0	-0.09
	40.776	-508.627	4.585	0	-4.565	511.828	0	-0.11
	61.164	-415.156	4.585	0	-7.65	720.207	0	-0.13
	81.552	-321.685	4.585	0	-11.108	858.352	0	-0.14
	94.193	-263.733	4.585	0	-13.356	898.449	0	-0.13
	101.94	-228.214	4.585	0	-14.749	904.299	0	-0.13
	122.328	-288.404	0	-3.875	-18.379	851.655	0	-0.12
	142.716	-367.4	0	-3.875	-21.809	709.644	0	-0.11
	156.172	-419.537	0	-3.875	-23.87	578.381	0	-0.1
	163.104	-446.396	0	-3.875	-24.855	501.816	0	-0.09
	183.492	-525.392	0	-3.875	-27.474	243.844	0	-0.05
	185.939	-534.871	0	-3.875	-27.758	210.412	0	-0.04
4	0	-648.455	3.052	-19.532	-29.647	0	-51.103	0
	0	-648.455	3.052	-19.532	-29.647	0	-51.103	0
	12.536	-610.197	3.052	0	-1.125	225.031	0	-0.03
	21.248	-583.61	3.052	0	-1.406	268.885	0	-0.05
	42.496	-518.764	3.052	0	-3.439	584.526	0	-0.09
	58.007	-471.427	3.052	0	-5.179	800.015	0	-0.11
	63.744	-453.919	3.052	0	-5.875	873.788	0	-0.11
	69.056	-437.707	3.052	0	-6.545	938.691	0	-0.11
	83.505	-393.612	3.052	0	-8.479	1093.549	0	-0.12
	84.992	-389.073	3.052	0	-8.686	1107.342	0	-0.12



## SECTION I

## CENTER GIRDER

106.24	-324.228	3.052	0	-11.768	1250.274	0	-0.11
127.488	-259.382	3.052	0	-15.046	1278.79	0	-0.1
148.736	-194.537	3.052	0	-18.48	1177.971	0	-0.08
160.422	-158.872	3.052	0	-20.421	1063.078	0	-0.07
169.984	-129.691	3.052	0	-22.033	936.327	0	-0.06
174.446	-116.074	3.052	0	-22.792	866.884	0	-0.05
185.92	-81.057	3.052	0	-24.763	657.718	0	-0.04
191.232	-64.846	3.052	0	-25.685	545.752	0	-0.03
212.48	0	3.052	-29.375	-29.375	0	0	0

Support	Reac. Pos	Reac. Negative
1	4.737	-29.225
2	3.784	-30.737
3	4.758	-30.631
4	5.71	-30.143
5	3.052	-29.412

Id Ohio 3F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (max	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	44.112	-7.259	44.112	0	0	0
	16.623	636.276	38.277	0	38.277	636.276	0	0.11
	33.246	1080.306	32.494	0	32.494	1080.306	0	0.21
	49.869	1341.975	26.91	0	26.91	1341.975	0	0.29
	66.492	1451.648	5.855	-11.145	21.61	1436.875	0	0.33
	83.115	1416.517	6.487	-10.513	16.679	1386.306	0	0.34
	99.738	1259.406	1.83	-15.17	12.205	1217.277	0	0.31
	116.361	1006.748	0	-19.317	8.271	962.378	0	0.24
	127.166	808.172	0	-21.701	6.021	765.714	0	0.19
	132.984	692.66	0	-22.889	4.895	650.957	0	0.17
	138.303	582.104	0	-23.923	3.908	540.469	0	0.14
	149.607	329.297	0	-25.997	1.915	286.468	0	0.08
	152.267	266.268	0	-26.463	1.55	235.988	0	0.07
2	0	257.629	1.55	-4.243	45.483	0	-139.564	0
	0	257.629	1.55	-4.243	45.483	0	-139.564	0
	8.937	219.706	0	-4.243	44.623	41.784	0	0.05
	17.604	245.974	32.374	0	43.691	210.517	0	0.09
	26.541	414.106	31.388	0	42.628	388.29	0	0.15
	27.083	424.403	31.325	0	42.559	399.264	0	0.15
	54.166	977.183	22.169	0	38.497	974.24	0	0.31
	72.582	1352.384	35.141	0	35.141	1352.384	0	0.4
	81.249	1511.306	33.453	0	33.453	1511.306	0	0.44
	83.686	1552.834	32.969	0	32.969	1552.834	0	0.45
	97.77	1763.142	13.94	-3.06	30.124	1760.554	0	0.49
	108.332	1884.148	11.776	-5.224	27.949	1876.914	0	0.51
	116.728	1954.874	10.037	-6.963	26.205	1943.593	0	0.52
	135.415	2027.696	6.138	-10.862	22.302	2006.615	0	0.53
	162.498	1929.359	5.97	-11.03	16.681	1887.513	0	0.49
	170.081	1858.132	4.41	-12.59	15.133	1810.775	0	0.48
	189.581	1593.434	0	-32.727	11.253	1534.025	0	0.41
	190.123	1584.644	0	-32.835	11.148	1524.83	0	0.41
	204.206	1328.687	0	-35.589	8.49	1262.722	0	0.35
	215.581	1089.165	0	-37.715	6.486	1027.373	0	0.3
	216.664	1065.193	0	-37.911	6.304	1004.374	0	0.29
	243.747	466.145	0	-25.814	3.884	129.383	0	0.14
	249.434	347.495	0	-26.531	3.884	151.471	0	0.11
	258.913	268.354	1.354	0	3.884	188.284	0	0.06
3	0	284.489	1.354	-5.94	45.087	0	-106.816	0
	0	284.489	1.354	-5.94	45.087	0	-106.816	0
	16.514	299.35	25.904	0	42.16	284.66	0	0.08

	20.388	382.634	25.183	0	41.419	368.035	0	0.1
	32.417	624.44	22.81	0	38.97	611.406	0	0.17
	40.776	778.213	21.022	0	37.119	767.651	0	0.21
	61.164	1099.731	16.144	-0.856	32.118	1090.16	0	0.31
	81.552	1306.581	10.758	-6.242	26.667	1292.066	0	0.38
	94.193	1363.167	7.292	-9.708	23.189	1344.152	0	0.4
	101.94	1369.038	10.778	-6.222	21.058	1347.077	0	0.4
	122.328	1284.703	5.233	-11.767	15.587	1252.848	0	0.37
	142.716	1065.673	0.028	-16.972	10.545	1030.971	0	0.3
	156.172	865.435	0	-20.081	7.572	832.345	0	0.24
	163.104	748.13	0	-21.569	7.026	79.997	0	0.2
	183.492	354.505	0	-25.512	7.026	223.244	0	0.1
	185.939	303.542	0	-25.94	7.026	240.434	0	0.08
4	0	366.492	7.026	-1.725	45.383	0	-114.725	0
	0	366.492	7.026	-1.725	45.383	0	-114.725	0
	12.536	344.869	0	-1.725	43.87	189.869	0	0.06
	21.248	408.198	26.238	0	42.675	399.817	0	0.1
	42.496	902.222	22.986	0	39.305	902.073	0	0.2
	58.007	1237.073	36.464	0	36.464	1237.073	0	0.27
	63.744	1350.387	35.334	0	35.334	1350.387	0	0.29
	69.056	1449.019	34.251	0	34.251	1449.019	0	0.31
	83.505	1680.764	15.038	-1.962	31.165	1677.401	0	0.35
	84.992	1701.201	14.715	-2.285	30.837	1697.15	0	0.35
	106.24	1907.104	9.92	-7.08	25.983	1890.58	0	0.38
	127.488	1938.534	10.391	-6.609	20.856	1901.05	0	0.37
	148.736	1777.453	0	-27.884	15.512	1707.425	0	0.32
	160.422	1606.135	0	-30.853	12.5	1507.943	0	0.28
	169.984	1415.918	0	-33.319	10.001	1293.818	0	0.24
	174.446	1311.417	0	-34.48	8.825	1177.912	0	0.22
	185.92	995.893	0	-37.496	5.774	832.409	0	0.16
	191.232	826.67	0	-38.906	4.677	0	-99.377	0.13
	212.48	0	4.677	-44.556	4.677	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	44.112	-7.259	-7.259	0	0	0
	16.623	-120.668	0	-7.259	-7.259	0	-120.668	-0.06
	33.246	-241.336	0	-7.259	-9.955	962.35	0	-0.11
	49.869	-362.003	0	-7.259	-15.672	1276.433	0	-0.16
	66.492	-482.671	0	-7.259	-21.158	1415.82	0	-0.19
	83.115	-603.339	0	-7.259	-26.326	1399.167	0	-0.21
	99.738	-724.007	0	-7.259	-31.093	1250.841	0	-0.21
	116.361	-844.675	0	-7.259	-35.37	1000.917	0	-0.19
	127.166	-923.109	0	-7.259	-37.848	800.697	0	-0.16
	132.984	-965.342	0	-7.259	-39.079	684.415	0	-0.14
	138.303	-1003.96	0	-7.259	-40.15	573.079	0	-0.13
	149.607	-1086.01	0	-7.259	-42.281	320.368	0	-0.08
	152.267	-1105.32	0	-7.259	-42.759	257.48	0	-0.07
2	0	-1206.68	33.453	-7.259	-45.125	0	-98.127	0

	0	-1206.68	33.453	-7.259	-45.125	0	-98.127	0
	8.937	-917.309	30.94	0	-4.243	219.706	0	-0.04
	17.604	-748.871	3.884	0	-4.243	182.933	0	-0.08
	26.541	-714.162	3.884	0	-4.243	145.011	0	-0.11
	27.083	-712.058	3.884	0	-4.243	142.712	0	-0.12
	54.166	-606.878	3.884	0	-5.826	930.024	0	-0.19
	72.582	-535.356	3.884	0	-8.942	1290.701	0	-0.21
	81.249	-501.698	3.884	0	-10.556	1449.367	0	-0.21
	83.686	-492.232	3.884	0	-11.022	1491.652	0	-0.21
	97.77	-437.538	3.884	0	-13.796	1709.29	0	-0.21
	108.332	-396.518	3.884	0	-15.938	1836.874	0	-0.21
	116.728	-363.912	3.884	0	-17.666	1913.734	0	-0.2
	135.415	-316.952	0	-4.243	-21.554	2001.586	0	-0.18
	162.498	-431.869	0	-4.243	-27.202	1918.484	0	-0.2
	170.081	-464.045	0	-4.243	-28.769	1850.963	0	-0.21
	189.581	-546.785	0	-4.243	-32.727	1593.434	0	-0.21
	190.123	-549.083	0	-4.243	-32.835	1584.644	0	-0.21
	204.206	-608.84	0	-4.243	-35.589	1328.687	0	-0.2
	215.581	-657.104	0	-4.243	-37.715	1089.165	0	-0.19
	216.664	-661.701	0	-4.243	-37.911	1065.193	0	-0.19
	243.747	-776.617	0	-4.243	-42.275	450.632	0	-0.12
	249.434	-800.75	0	-4.243	-43.033	326.504	0	-0.1
	258.913	-840.97	0	-4.243	-44.177	126.016	0	-0.06
3	0	-1065.99	7.026	-32.086	-45.441	0	-130.879	0
	0	-1065.99	7.026	-32.086	-45.441	0	-130.879	0
	16.514	-949.956	7.026	0	-5.94	186.395	0	-0.08
	20.388	-922.738	7.026	0	-5.94	163.385	0	-0.09
	32.417	-838.222	7.026	0	-5.94	91.934	0	-0.14
	40.776	-779.491	7.026	0	-6.625	742.091	0	-0.16
	61.164	-636.243	7.026	0	-11.292	1060.542	0	-0.2
	81.552	-492.995	7.026	0	-16.553	1273.917	0	-0.21
	94.193	-404.181	7.026	0	-19.987	1337.259	0	-0.2
	101.94	-349.747	7.026	0	-22.119	1347.507	0	-0.19
	122.328	-442.136	0	-5.94	-27.696	1269.929	0	-0.18
	142.716	-563.24	0	-5.94	-32.991	1053.743	0	-0.17
	156.172	-643.169	0	-5.94	-36.189	851.871	0	-0.15
	163.104	-684.344	0	-5.94	-37.719	734.161	0	-0.13
	183.492	-805.448	0	-5.94	-41.792	337.159	0	-0.08
	185.939	-819.981	0	-5.94	-42.236	285.55	0	-0.07
4	0	-993.775	4.677	-29.365	-45.18	0	-117.442	0
	0	-993.775	4.677	-29.365	-45.18	0	-117.442	0
	12.536	-935.142	4.677	0	-1.725	344.869	0	-0.05
	21.248	-894.397	4.677	0	-1.928	368.661	0	-0.08
	42.496	-795.02	4.677	0	-4.99	848.241	0	-0.14
	58.007	-722.474	4.677	0	-7.622	1177.317	0	-0.16
	63.744	-695.642	4.677	0	-8.674	1290.208	0	-0.17
	69.056	-670.798	4.677	0	-9.689	1389.695	0	-0.17
	83.505	-603.221	4.677	0	-12.624	1628.189	0	-0.18
	84.992	-596.265	4.677	0	-12.939	1649.568	0	-0.18

## SECTION I

## CENTER GIRDER

106.24	-496.887	4.677	0	-17.636	1873.597	0	-0.17
127.488	-397.51	4.677	0	-22.638	1924.028	0	-0.15
148.736	-298.132	4.677	0	-27.884	1777.453	0	-0.12
160.422	-243.475	4.677	0	-30.853	1606.135	0	-0.11
169.984	-198.755	4.677	0	-33.319	1415.918	0	-0.09
174.446	-177.886	4.677	0	-34.48	1311.417	0	-0.08
185.92	-124.222	4.677	0	-37.496	995.893	0	-0.06
191.232	-99.377	4.677	0	-38.906	826.67	0	-0.05
212.48	0	4.677	-44.556	-44.556	0	0	0

Support	Reac. Pos	Reac. Negative
1	7.259	-44.172
2	5.793	-47.114
3	7.294	-46.955
4	8.751	-46.208
5	4.677	-44.613

Id Ohio 4F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	50.957	-8.514	50.957	0	0	0
	16.623	733.392	44.119	0	44.119	733.392	0	0.13
	33.246	1241.921	37.355	0	37.355	1241.921	0	0.25
	49.869	1558.63	18.377	0	30.837	1537.786	0	0.34
	66.492	1680.211	12.112	-1.888	24.663	1639.892	0	0.39
	83.115	1637.608	0	-17.602	18.936	1573.843	0	0.39
	99.738	1458.521	0	-23.131	13.755	1371.943	0	0.36
	116.361	1163.798	0	-28.073	9.217	1072.539	0	0.29
	127.166	929.869	0	-30.926	6.621	842.007	0	0.23
	132.984	793.779	0	-32.347	5.318	707.234	0	0.19
	138.303	663.362	0	-33.584	4.173	577.191	0	0.16
	149.607	366.419	0	-36.054	1.859	278.182	0	0.1
	152.267	292.467	0	-36.608	1.817	276.65	0	0.08
	2	0	302.02	1.817	-4.974	53.163	0	-222.383
0		302.02	1.817	-4.974	53.163	0	-222.383	0
8.937		257.563	0	-4.974	52.135	0	-7.591	0.05
17.604		266.892	26.328	0	51.015	193.98	0	0.11
26.541		462.08	25.192	0	49.732	407.183	0	0.17
27.083		473.998	25.12	0	49.649	420.376	0	0.17
54.166		1131.008	31.584	0	44.782	1106.454	0	0.36
72.582		1570.964	27.7	0	40.801	1552.228	0	0.47
81.249		1757.707	25.734	0	38.806	1737.935	0	0.51
83.686		1806.677	25.17	0	38.236	1786.266	0	0.52
97.77		2053.01	21.845	0	34.885	2027.066	0	0.57
108.332		2192.304	19.299	0	32.327	2160.798	0	0.6
116.728		2272.944	17.255	0	30.277	2236.613	0	0.61
135.415		2352.718	12.676	-1.324	25.695	2304.857	0	0.62
162.498		2243.23	0	-18.423	19.108	2157.086	0	0.58
170.081		2161.792	0	-20.258	17.297	2065.083	0	0.56
189.581		1854.889	0	-24.887	12.764	1736.66	0	0.49
190.123		1844.474	0	-25.013	12.642	1725.823	0	0.48
204.206		1542.351	0	-28.226	9.552	1418.186	0	0.42
215.581	1261.79	0	-30.695	7.236	1144.436	0	0.35	
216.664	1233.869	0	-30.922	7.026	1117.818	0	0.34	
243.747	524.171	0	-35.939	4.55	151.587	0	0.17	
249.434	381.647	0	-36.804	4.55	177.465	0	0.13	
258.913	314.676	1.588	0	4.55	220.596	0	0.07	
3	0	333.596	1.588	-6.965	52.522	0	-170.64	0
	0	333.596	1.588	-6.965	52.522	0	-170.64	0
	16.514	328.018	35.928	0	49.041	288.864	0	0.1

	20.388	425.887	35.069	0	48.156	387.324	0	0.12
	32.417	711.041	32.237	0	45.234	674.674	0	0.2
	40.776	892.955	30.101	0	43.025	859.344	0	0.25
	61.164	1270.695	24.307	0	37.093	1237.68	0	0.37
	81.552	1510.499	17.95	0	30.666	1471.383	0	0.45
	94.193	1574.284	13.876	-0.124	26.583	1529.834	0	0.47
	101.94	1579.714	1.38	-12.62	24.087	1531.637	0	0.47
	122.328	1484.713	0	-19.145	17.702	1417.735	0	0.44
	142.716	1229.443	0	-25.304	11.854	1156.792	0	0.35
	156.172	993.551	0	-29.004	8.414	923.924	0	0.28
	163.104	855.516	0	-30.775	8.242	93.843	0	0.24
	183.492	391.501	0	-35.48	8.242	261.886	0	0.11
	185.939	331.281	0	-35.991	8.242	282.051	0	0.1
4	0	429.929	8.242	-2.023	52.997	0	-182.303	0
	0	429.929	8.242	-2.023	52.997	0	-182.303	0
	12.536	404.563	0	-2.023	51.182	179.366	0	0.06
	21.248	459.839	36.424	0	49.75	428.754	0	0.11
	42.496	1044.305	32.539	0	45.726	1022.365	0	0.23
	58.007	1436.359	29.251	0	42.345	1416.413	0	0.31
	63.744	1569.227	27.944	0	41.002	1549.223	0	0.34
	69.056	1685.17	26.689	0	39.719	1664.305	0	0.36
	83.505	1955.848	23.099	0	36.067	1928.976	0	0.41
	84.992	1979.42	22.717	0	35.679	1951.705	0	0.41
	106.24	2213.749	17.054	0	29.95	2171.114	0	0.45
	127.488	2251.739	0.848	-13.152	23.905	2173.849	0	0.43
	148.736	2068.856	0	-19.334	17.612	1935.52	0	0.38
	160.422	1861.246	0	-22.829	14.067	1694.834	0	0.33
	169.984	1636.649	0	-38.513	11.126	1437.962	0	0.29
	174.446	1516.523	0	-39.873	9.743	1299.283	0	0.26
	185.92	1152.823	0	-43.404	6.154	886.794	0	0.19
	191.232	957.346	0	-45.056	5.483	0	-116.497	0.16
	212.48	0	5.483	-51.677	5.483	0	0	0

## Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	50.957	-8.514	-8.514	0	0	0
	16.623	-141.53	0	-8.514	-8.514	0	-141.53	-0.07
	33.246	-283.059	0	-8.514	-10.87	1049.889	0	-0.13
	49.869	-424.589	0	-8.514	-17.605	1430.989	0	-0.18
	66.492	-566.118	0	-8.514	-24.08	1605.429	0	-0.22
	83.115	-707.648	0	-8.514	-30.195	1594.514	0	-0.25
	99.738	-849.178	0	-8.514	-35.85	1426.248	0	-0.25
	116.361	-990.707	0	-8.514	-40.943	1135.338	0	-0.22
	127.166	-1082.7	0	-8.514	-43.904	899.815	0	-0.19
	132.984	-1132.24	0	-8.514	-45.378	762.563	0	-0.17
	138.303	-1177.53	0	-8.514	-46.659	631.334	0	-0.15
	149.607	-1273.77	0	-8.514	-49.201	333.959	0	-0.09
	152.267	-1296.41	0	-8.514	-49.77	260.029	0	-0.08
2	0	-1415.3	39.17	-8.514	-52.58	0	-156.974	0

	0	-1415.3	39.17	-8.514	-52.58	0	-156.974	0
	8.937	-1076.05	36.665	0	-4.974	257.563	0	-0.05
	17.604	-877.388	4.55	0	-4.974	214.454	0	-0.09
	26.541	-836.722	4.55	0	-4.974	169.997	0	-0.13
	27.083	-834.257	4.55	0	-4.974	167.303	0	-0.14
	54.166	-711.027	4.55	0	-6.492	1034.752	0	-0.22
	72.582	-627.23	4.55	0	-10.087	1452.73	0	-0.25
	81.249	-587.796	4.55	0	-11.958	1637.901	0	-0.25
	83.686	-576.705	4.55	0	-12.5	1687.447	0	-0.25
	97.77	-512.625	4.55	0	-15.733	1943.964	0	-0.25
	108.332	-464.566	4.55	0	-18.237	2095.845	0	-0.24
	116.728	-426.364	4.55	0	-20.259	2188.137	0	-0.24
	135.415	-371.565	0	-4.974	-24.817	2296.674	0	-0.22
	162.498	-506.283	0	-4.974	-31.45	2207.386	0	-0.24
	170.081	-544.003	0	-4.974	-33.292	2130.34	0	-0.24
	189.581	-641	0	-4.974	-37.951	1832.979	0	-0.24
	190.123	-643.694	0	-4.974	-38.078	1822.778	0	-0.24
	204.206	-713.747	0	-4.974	-41.328	1524.67	0	-0.23
	215.581	-770.328	0	-4.974	-43.843	1243.959	0	-0.22
	216.664	-775.717	0	-4.974	-44.076	1215.789	0	-0.22
	243.747	-910.434	0	-4.974	-49.289	485.67	0	-0.14
	249.434	-938.724	0	-4.974	-50.202	336.69	0	-0.11
	258.913	-985.875	0	-4.974	-51.581	96.654	0	-0.07
3	0	-1250.5	8.242	-37.951	-53.095	0	-208.349	0
	0	-1250.5	8.242	-37.951	-53.095	0	-208.349	0
	16.514	-1114.39	8.242	0	-6.965	218.569	0	-0.09
	20.388	-1082.46	8.242	0	-6.965	191.587	0	-0.11
	32.417	-983.312	8.242	0	-6.965	107.802	0	-0.16
	40.776	-914.414	8.242	0	-7.302	817.26	0	-0.19
	61.164	-746.371	8.242	0	-12.698	1189.696	0	-0.23
	81.552	-578.328	8.242	0	-18.816	1441.943	0	-0.24
	94.193	-474.142	8.242	0	-22.828	1518.638	0	-0.23
	101.94	-410.285	8.242	0	-25.326	1532.311	0	-0.23
	122.328	-518.454	0	-6.965	-31.882	1445.387	0	-0.21
	142.716	-660.462	0	-6.965	-38.141	1193.867	0	-0.2
	156.172	-754.188	0	-6.965	-41.941	956.356	0	-0.17
	163.104	-802.471	0	-6.965	-43.763	817.493	0	-0.16
	183.492	-944.479	0	-6.965	-48.619	349.691	0	-0.09
	185.939	-961.52	0	-6.965	-49.149	288.708	0	-0.08
4	0	-1164.97	5.483	-34.393	-52.669	0	-187.212	0
	0	-1164.97	5.483	-34.393	-52.669	0	-187.212	0
	12.536	-1096.23	5.483	0	-2.023	404.563	0	-0.06
	21.248	-1048.47	5.483	0	-2.023	386.936	0	-0.1
	42.496	-931.973	5.483	0	-5.5	934.962	0	-0.16
	58.007	-846.931	5.483	0	-8.541	1319.305	0	-0.19
	63.744	-815.476	5.483	0	-9.759	1451.57	0	-0.2
	69.056	-786.352	5.483	0	-10.934	1568.201	0	-0.2
	83.505	-707.135	5.483	0	-14.338	1849.29	0	-0.21
	84.992	-698.98	5.483	0	-14.704	1874.618	0	-0.21



106.24	-582.483	5.483	0	-20.177	2143.585	0	-0.2
127.488	-465.987	5.483	0	-26.018	2211.321	0	-0.18
148.736	-349.49	5.483	0	-32.152	2049.509	0	-0.15
160.422	-285.417	5.483	0	-35.626	1854.623	0	-0.12
169.984	-232.993	5.483	0	-38.513	1636.649	0	-0.1
174.446	-208.529	5.483	0	-39.873	1516.523	0	-0.09
185.92	-145.621	5.483	0	-43.404	1152.823	0	-0.07
191.232	-116.497	5.483	0	-45.056	957.346	0	-0.05
212.48	0	5.483	-51.677	-51.677	0	0	0

Support	Reac. Pos	Reac. Negative
1	8.514	-51.027
2	6.791	-55.291
3	8.553	-55.094
4	10.266	-54.23
5	5.483	-51.745

Id Ohio 5C1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	65.092	-12.279	65.092	0	0	0
	16.623	918.841	55.275	0	55.275	918.841	0	0.18
	33.246	1555.221	39.111	0	45.725	1520.157	0	0.34
	49.869	1938.742	29.764	0	36.69	1829.693	0	0.46
	66.492	2070.333	6.047	-10.953	28.321	1883.117	0	0.53
	83.115	2004.327	3.614	-13.386	20.761	1725.588	0	0.54
	99.738	1787.175	0	-21.832	14.07	1403.302	0	0.49
	116.361	1382.876	0	-44.72	8.139	947.073	0	0.4
	127.166	1044.304	0	-49.361	4.662	592.869	0	0.32
	132.984	840.853	0	-51.706	2.903	386.058	0	0.27
	138.303	642.69	0	-53.765	2.564	354.602	0	0.23
	149.607	383.584	2.564	0	2.564	383.584	0	0.13
	152.267	390.403	2.564	0	2.564	390.403	0	0.11
2	0	426.204	2.564	-7.02	75.22	0	-943.257	0
	0	426.204	2.564	-7.02	75.22	0	-943.257	0
	8.937	363.468	0	-7.02	73.306	0	-568.411	0.08
	17.604	302.633	0	-7.02	71.229	0	-210.198	0.16
	26.541	316.857	43.33	0	68.911	160.673	0	0.25
	27.083	337.246	43.202	0	68.764	183.166	0	0.25
	54.166	1364.275	51.641	0	60.623	1278.387	0	0.53
	72.582	2002.888	45.666	0	54.418	1915.853	0	0.68
	81.249	2263.023	42.698	0	51.382	2167.174	0	0.74
	83.686	2330.346	41.851	0	50.52	2231.208	0	0.75
	97.77	2663.13	21.301	0	45.487	2538.868	0	0.82
	108.332	2850.043	17.529	0	41.68	2696.576	0	0.86
	116.728	2954.03	14.508	-2.492	38.648	2775.817	0	0.87
	135.415	3038.696	7.763	-9.237	31.929	2803.86	0	0.89
	162.498	2911.739	0.767	-16.233	22.446	2495.212	0	0.83
	170.081	2804.833	0	-18.952	19.895	2342.074	0	0.8
	189.581	2389.473	0	-41.438	13.722	1848.521	0	0.7
	190.123	2375.298	0	-41.627	13.561	1833.242	0	0.7
	204.206	1957.069	0	-46.473	9.595	1416.957	0	0.6
	215.581	1558.66	0	-50.233	6.725	1061.845	0	0.51
	216.664	1518.448	0	-50.582	6.466	1027.348	0	0.5
	243.747	449.082	0	-42.587	6.336	211.076	0	0.24
	249.434	428.984	2.273	0	6.336	247.111	0	0.19
	258.913	450.531	2.273	0	6.336	307.167	0	0.1
3	0	477.619	2.273	-9.972	71.971	0	-723.896	0
	0	477.619	2.273	-9.972	71.971	0	-723.896	0
	16.514	341.015	0	-2.522	66.03	0	-7.243	0.14

	20.388	331.245	0	-2.522	64.527	147.356	0	0.17
	32.417	707.496	36.087	0	59.65	591.317	0	0.28
	40.776	979.598	32.772	0	56.074	866.092	0	0.35
	61.164	1523.089	24.02	0	46.849	1397.24	0	0.51
	81.552	1851.494	14.634	-2.366	37.318	1689.423	0	0.62
	94.193	1929.667	8.715	-8.285	31.48	1741.608	0	0.65
	101.94	1929.292	10.158	-6.842	27.993	1726.167	0	0.66
	122.328	1815.616	0.633	-16.367	19.346	1528.667	0	0.61
	142.716	1461.553	0	-25.542	11.933	0	-107.423	0.5
	156.172	1116.944	0	-31.188	11.933	53.145	0	0.39
	163.104	909.583	0	-33.942	11.933	135.862	0	0.33
	183.492	379.148	11.933	0	11.933	379.148	0	0.16
	185.939	408.343	11.933	0	11.933	408.343	0	0.14
4	0	622.434	11.933	-2.929	74.255	0	-734.363	0
	0	622.434	11.933	-2.929	74.255	0	-734.363	0
	12.536	585.71	0	-2.929	71.053	0	-149.129	0.09
	21.248	560.19	0	-2.929	68.579	245.986	0	0.16
	42.496	1233.238	52.944	0	61.815	1153.17	0	0.33
	58.007	1804.622	47.734	0	56.328	1718.75	0	0.45
	63.744	1991.988	45.692	0	54.195	1900.149	0	0.49
	69.056	2152.247	43.749	0	52.172	2053.205	0	0.52
	83.505	2516.061	22.793	0	46.473	2386.195	0	0.58
	84.992	2547.622	22.216	0	45.871	2412.984	0	0.59
	106.24	2842.448	13.684	-3.316	37.038	2626.298	0	0.63
	127.488	2901.238	8.805	-8.195	27.814	2497.359	0	0.62
	148.736	2689.757	0	-32.455	18.276	1996.528	0	0.54
	160.422	2433.781	0	-37.518	12.923	1553.886	0	0.47
	169.984	2139.529	0	-41.735	9.101	1176.971	0	0.41
	174.446	1975.429	0	-43.725	7.735	0	-294.206	0.37
	185.92	1504.099	0	-56.63	7.735	0	-205.451	0.27
	191.232	1254.106	0	-59.022	7.735	0	-164.361	0.22
	212.48	0	7.735	-68.64	7.735	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	65.092	-12.279	-12.279	0	0	0
	16.623	-204.111	0	-12.279	-12.279	0	-204.111	-0.1
	33.246	-408.222	0	-12.279	-12.279	0	-408.222	-0.19
	49.869	-612.333	0	-12.279	-15.759	1279.19	0	-0.26
	66.492	-816.445	0	-12.279	-25.546	1682.743	0	-0.32
	83.115	-1020.56	0	-12.279	-35.059	1797.298	0	-0.36
	99.738	-1224.67	0	-12.279	-44.042	1648.356	0	-0.36
	116.361	-1428.78	0	-12.279	-52.348	1279.668	0	-0.32
	127.166	-1561.45	0	-12.279	-57.312	947.198	0	-0.28
	132.984	-1632.89	0	-12.279	-59.831	744.151	0	-0.24
	138.303	-1698.21	0	-12.279	-62.046	545.052	0	-0.21
	149.607	-1837	0	-12.279	-66.484	84.123	0	-0.13
	152.267	-1869.66	0	-12.279	-67.476	0	-30.956	-0.11
2	0	-2041.11	56.078	-12.279	-72.333	0	-668.673	0

	0	-2041.11	56.078	-12.279	-72.333	0	-668.673	0
	8.937	-1551.49	53.538	0	-7.02	363.468	0	-0.07
	17.604	-1221.71	6.336	0	-7.02	302.633	0	-0.13
	26.541	-1165.09	6.336	0	-7.02	239.896	0	-0.19
	27.083	-1161.66	6.336	0	-7.02	236.094	0	-0.19
	54.166	-990.064	6.336	0	-7.02	45.984	0	-0.31
	72.582	-873.382	6.336	0	-10.435	1491.68	0	-0.34
	81.249	-818.472	6.336	0	-12.816	1736.936	0	-0.35
	83.686	-803.029	6.336	0	-13.516	1803.906	0	-0.35
	97.77	-713.802	6.336	0	-17.801	2164.313	0	-0.34
	108.332	-646.881	6.336	0	-21.243	2395.219	0	-0.34
	116.728	-593.688	6.336	0	-24.087	2547.721	0	-0.33
	135.415	-524.345	0	-7.02	-30.64	2765.293	0	-0.3
	162.498	-714.455	0	-7.02	-40.38	2736.5	0	-0.33
	170.081	-767.686	0	-7.02	-43.117	2651.88	0	-0.34
	189.581	-904.565	0	-7.02	-50.101	2282.931	0	-0.34
	190.123	-908.367	0	-7.02	-50.294	2269.656	0	-0.34
	204.206	-1007.22	0	-7.02	-55.233	1870.903	0	-0.33
	215.581	-1087.07	0	-7.02	-59.111	1479.784	0	-0.31
	216.664	-1094.68	0	-7.02	-59.474	1439.738	0	-0.31
	243.747	-1284.79	0	-7.02	-67.929	333.637	0	-0.2
	249.434	-1324.71	0	-7.02	-69.52	86.707	0	-0.16
	258.913	-1391.25	0	-7.02	-72.015	0	-327.985	-0.09
3	0	-1810.42	11.933	-54.832	-74.823	0	-860.123	0
	0	-1810.42	11.933	-54.832	-74.823	0	-860.123	0
	16.514	-1613.36	11.933	0	-9.972	312.932	0	-0.13
	20.388	-1567.14	11.933	0	-9.972	274.301	0	-0.15
	32.417	-1423.6	11.933	0	-9.972	154.344	0	-0.23
	40.776	-1323.85	11.933	0	-9.972	70.984	0	-0.27
	61.164	-1080.57	11.933	0	-12.539	1169.767	0	-0.34
	81.552	-837.28	11.933	0	-20.618	1552.621	0	-0.35
	94.193	-686.443	11.933	0	-26.098	1687.607	0	-0.34
	101.94	-593.995	11.933	0	-29.596	1726.365	0	-0.33
	122.328	-742.287	0	-9.972	-39.072	1653.966	0	-0.3
	142.716	-945.604	0	-9.972	-48.535	1328.061	0	-0.28
	156.172	-1079.79	0	-9.972	-54.525	989.003	0	-0.25
	163.104	-1148.92	0	-9.972	-57.482	781.597	0	-0.23
	183.492	-1352.24	0	-9.972	-65.592	59.269	0	-0.13
	185.939	-1376.64	0	-9.972	-66.493	0	-35.805	-0.12
4	0	-1643.61	7.735	-50.218	-72.538	0	-779.056	0
	0	-1643.61	7.735	-50.218	-72.538	0	-779.056	0
	12.536	-1546.63	7.735	0	-2.929	585.71	0	-0.09
	21.248	-1479.25	7.735	0	-2.929	560.19	0	-0.14
	42.496	-1314.89	7.735	0	-4.274	726.493	0	-0.23
	58.007	-1194.9	7.735	0	-8.137	1256.88	0	-0.27
	63.744	-1150.53	7.735	0	-9.705	1443.532	0	-0.28
	69.056	-1109.43	7.735	0	-11.23	1610.618	0	-0.29
	83.505	-997.669	7.735	0	-15.704	2025.49	0	-0.3
	84.992	-986.164	7.735	0	-16.19	2064.042	0	-0.3

## SECTION I

## CENTER GIRDER

106.24	-821.803	7.735	0	-23.582	2505.311	0	-0.28
127.488	-657.443	7.735	0	-31.734	2697.146	0	-0.25
148.736	-493.082	7.735	0	-40.44	2577.825	0	-0.21
160.422	-402.684	7.735	0	-45.412	2364.061	0	-0.17
169.984	-328.721	7.735	0	-49.564	2106.258	0	-0.15
174.446	-294.206	7.735	0	-51.525	1959.684	0	-0.13
185.92	-205.451	7.735	0	-56.63	1504.099	0	-0.09
191.232	-164.361	7.735	0	-59.022	1254.106	0	-0.08
212.48	0	7.735	-68.64	-68.64	0	0	0

Support	Reac. Pos	Reac. Negative
1	12.279	-65.193
2	9.583	-80.896
3	12.246	-80.544
4	14.862	-79.439
5	7.735	-68.739

Id            Dead Loads (Self Wt) Unfactored  
Type        Static

Factors        1

Span	Location (ft)	Moment (kft)	Shear ( K)	Deflect (in)	Reaction ( K)
1	0	0	35.772	0	-35.772
	19.586	585.734	24.04	0.07	
	39.172	941.685	12.308	0.12	
	43.481	989.158	9.727	0.13	
	58.758	1058.518	-0.646	0.14	
	78.344	915.62	-13.945	0.11	
	97.93	512.25	-27.244	0.06	
	98.518	496.125	-27.643	0.06	
	117.516	-137.283	-39.044	-0.01	
	137.102	-1017.44	-50.839	-0.08	
	151.596	-1817.72	-59.596	-0.11	
	156.688	-2130.64	-63.308	-0.11	
	161.585	-2449.42	-66.903	-0.11	
	172.944	-3265.11	-76.735	-0.09	
	176.274	-3526.34	-80.185	-0.08	
	187.438	-4487.32	-92.048	-0.04	
2	0	-5305.48	-102.272	0	-222.092
	0	-5305.48	119.82	0	
	6.506	-4551.68	111.932	0.04	
	18.976	-3238.99	98.683	0.13	
	27.108	-2465.57	91.546	0.19	
	29.548	-2244.8	89.432	0.22	
	37.951	-1519.32	83.251	0.3	
	54.216	-245.403	73.404	0.48	
	79.426	1413.766	58.242	0.77	
	81.324	1522.988	56.876	0.79	
	92.438	2110.649	48.873	0.89	
	108.432	2784.752	35.423	1	
	135.54	3391.528	9.345	1.1	
	162.648	3291.385	-16.733	1.06	
	181.081	2819.496	-34.466	0.97	
	189.756	2488.875	-41.761	0.9	
198.159	2108.239	-48.829	0.83		
211.442	1396.133	-58.392	0.69		
216.864	1070.729	-61.651	0.63		
243.972	-824.533	-78.27	0.29		
255.9	-1802.64	-85.756	0.15		
263.761	-2500.39	-91.821	0.07		
3	0	-3196.12	-98.32	0	-160.103
	0	-3196.12	61.783	0	
	11.046	-2570.29	51.61	-0.09	
	17.259	-2264.59	46.813	-0.14	

	28.477	-1786.77	38.432	-0.21	
	34.518	-1565.86	34.714	-0.24	
	51.777	-1057.75	24.191	-0.3	
	64.549	-797.989	16.5	-0.32	
	69.036	-729.977	13.812	-0.33	
	86.295	-580.801	3.474	-0.33	
	103.554	-610.051	-6.864	-0.32	
	120.813	-817.727	-17.202	-0.28	
	132.894	-1069.26	-24.439	-0.24	
	138.072	-1203.89	-27.572	-0.22	
	155.331	-1772.84	-38.477	-0.13	
	156.021	-1799.55	-38.928	-0.12	
4	0	-2556.54	-52.498	0	-146.59
		-2556.54	94.093	0	
	10.896	-1579.82	85.245	0.1	
	20.954	-754.784	78.828	0.2	
	41.908	759.52	65.781	0.43	
	55.319	1587.015	57.659	0.57	
	62.862	2001.475	52.227	0.63	
	66.843	2203.699	49.361	0.66	
	81.93	2852.689	36.673	0.76	
	83.816	2920.138	34.859	0.77	
	104.77	3439.372	14.701	0.83	
	125.724	3536.221	-5.457	0.82	
	146.678	3210.685	-25.615	0.72	
	156.945	2896.98	-35.492	0.65	
	167.632	2469.672	-44.479	0.55	
	171.404	2295.927	-47.651	0.51	
	182.3	1733.974	-55.497	0.39	
	188.586	1373.277	-59.262	0.3	
	209.54	0	-71.813	0	-71.813

Id	Dead Loads (Superstructure) Unfactored				
Type	Static				
Factors	1				
Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	200.908	0	-200.908
	19.586	3317.368	137.841	0.57	
	39.172	5399.506	74.774	1	
	43.481	5691.809	60.899	1.06	
	58.758	6246.416	11.707	1.21	
	78.344	5858.097	-51.36	1.22	
	97.93	4234.549	-114.427	1.02	
	98.518	4166.757	-116.319	1.01	
	117.516	1375.771	-177.494	0.67	
	137.102	-2718.23	-240.561	0.27	
	151.596	-6543.04	-287.23	0.03	
	156.688	-8047.47	-303.628	-0.03	
	161.585	-9572.78	-319.394	-0.08	
	172.944	-13408.8	-355.973	-0.12	
	176.274	-14611.9	-366.694	-0.12	
	187.438	-18906.4	-402.643	-0.08	
2	0	-22411.6	-429.761	0	-899.511
	0	-22411.6	469.75	0	
	6.506	-19423.6	448.801	0.09	
	18.976	-14077.6	408.648	0.32	
	27.108	-10860.7	382.462	0.52	
	29.548	-9937.23	374.606	0.59	
	37.951	-6902.93	347.547	0.85	
	54.216	-1676.06	295.174	1.46	
	79.426	4742.149	213.997	2.45	
	81.324	5142.424	207.887	2.52	
	92.438	7254.053	172.099	2.88	
	108.432	9594.714	120.599	3.28	
	135.54	11680.81	33.311	3.64	
	162.648	11400.71	-53.977	3.55	
	181.081	9858.665	-113.332	3.23	
	189.756	8754.407	-141.264	3.02	
	198.159	7453.597	-168.324	2.77	
	211.442	4933.707	-211.095	2.3	
	216.864	3741.908	-228.552	2.09	
	243.972	-3636.78	-315.84	0.94	
	255.9	-7633.02	-354.247	0.48	
	263.761	-10517.4	-379.56	0.22	
3	0	-13381.7	-403.128	0	-691.299
	0	-13381.7	288.171	0	
	11.046	-10395	252.604	-0.28	
	17.259	-8887.7	232.597	-0.41	



	28.477	-6480.97	196.474	-0.59	
	34.518	-5352.88	177.023	-0.66	
	51.777	-2777.22	121.449	-0.78	
	64.549	-1488.73	80.324	-0.81	
	69.036	-1160.7	65.875	-0.82	
	86.295	-503.342	10.301	-0.81	
	103.554	-805.13	-45.273	-0.79	
	120.813	-2066.07	-100.847	-0.73	
	132.894	-3519.42	-139.749	-0.65	
	138.072	-4286.16	-156.421	-0.61	
	155.331	-7465.4	-211.995	-0.38	
	156.021	-7612.52	-214.218	-0.36	
4	0	-11603.8	-267.569	0	-667.64
	0	-11603.8	400.071	0	
	10.896	-7439.9	364.223	0.32	
	20.954	-3942.98	331.132	0.67	
	41.908	2273.288	262.193	1.48	
	55.319	5493.606	218.073	1.97	
	62.862	7045.019	193.255	2.21	
	66.843	7788.343	180.156	2.32	
	81.93	10131.92	130.521	2.68	
	83.816	10372.21	124.316	2.71	
	104.77	12254.86	55.377	2.95	
	125.724	12692.97	-13.561	2.92	
	146.678	11686.54	-82.5	2.59	
	156.945	10666.06	-116.28	2.33	
	167.632	9235.563	-151.439	1.99	
	171.404	8640.979	-163.847	1.85	
	182.3	6660.384	-199.696	1.4	
	188.586	5340.055	-220.377	1.11	
	209.54	0	-289.316	0	-289.316

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	67.405	-9.707	67.405	0	0	0
	19.586	1138.56	58.131	0	58.131	1138.56	0	0.24
	39.172	1919.177	48.994	0	48.994	1919.177	0	0.45
	43.481	2044.763	47.027	0	47.027	2044.763	0	0.49
	58.758	2371.069	34.259	0	40.204	2362.335	0	0.61
	78.344	2536.776	25.81	-6.19	31.878	2497.417	0	0.7
	97.93	2451.452	0	-34.393	24.168	2366.762	0	0.72
	98.518	2445.618	0	-34.628	23.948	2359.315	0	0.72
	117.516	2150.327	0	-41.89	17.282	2030.909	0	0.66
	137.102	1676.31	0	-48.506	11.376	1559.739	0	0.53
	151.596	1255.982	0	-52.76	7.62	1155.169	0	0.4
	156.688	1098.56	0	-54.13	6.402	1003.127	0	0.35
	161.585	943.767	0	-55.387	5.276	852.579	0	0.31
	172.944	568.583	0	-58.122	2.8	484.206	0	0.2
	176.274	454.702	0	-58.879	2.106	371.258	0	0.17
	187.438	305.239	1.628	0	1.628	305.239	0	0.07
2.	0	318.954	1.628	-5.114	70.346	0	-348.927	0
	0	318.954	1.628	-5.114	70.346	0	-348.927	0
	6.506	285.68	0	-5.114	69.247	0	-119.357	0.06
	18.976	354.673	37.521	0	66.895	291.563	0	0.17
	27.108	604.097	36.029	0	65.226	555.213	0	0.25
	29.548	677.641	35.564	0	64.7	634.225	0	0.27
	37.951	940.481	55.873	0	62.791	906.65	0	0.35
	54.216	1449.945	51.89	0	58.646	1431.368	0	0.51
	79.426	2180.707	44.683	0	51.253	2170.373	0	0.71
	81.324	2229.497	44.102	0	50.662	2218.889	0	0.72
	92.438	2488.583	40.628	0	47.144	2474.038	0	0.78
	108.432	2769.028	35.482	0	41.963	2743.778	0	0.84
	135.54	2955.222	26.6	-5.4	33.072	2906.748	0	0.86
	162.648	2804.906	0	-35.202	24.3	2693.655	0	0.8
	181.081	2497.062	0	-41.103	18.563	2349.218	0	0.71
	189.756	2298.348	0	-43.808	15.975	2140.053	0	0.66
	198.159	2076.843	0	-46.366	13.564	1915.042	0	0.61
	211.442	1679.739	0	-50.234	9.998	1527.011	0	0.5
	216.864	1504.935	0	-51.736	8.643	1361.464	0	0.46
	243.972	586.8	0	-58.355	7.963	295.438	0	0.21
	255.9	390.417	7.963	0	7.963	390.417	0	0.11
	263.761	453.017	7.963	0	7.963	453.017	0	0.05
3	0	511.3	7.963	-3.817	68.803	0	-255.18	0
	0	511.3	7.963	-3.817	68.803	0	-255.18	0

	11.046	469.14	0	-3.817	64.984	194.624	0	0.07
	17.259	445.424	0	-3.817	62.666	425.67	0	0.11
	28.477	822.687	52.098	0	58.193	807.855	0	0.18
	34.518	1007.776	49.618	0	55.638	992.244	0	0.21
	51.777	1443.132	41.994	0	47.829	1421.939	0	0.31
	64.549	1658.184	35.961	0	41.712	1628.632	0	0.37
	69.036	1709.475	33.79	0	39.524	1676.442	0	0.38
	86.295	1785.884	5.928	-26.072	31.067	1735.979	0	0.41
	103.554	1689.739	0	-34.516	22.837	1600.873	0	0.39
	120.813	1405.894	0	-42.66	15.205	1294.503	0	0.32
	132.894	1112.079	0	-47.986	13.513	0	-14.375	0.25
	138.072	966.109	0	-50.147	13.513	55.591	0	0.21
	155.331	406.306	0	-56.769	13.513	288.811	0	0.1
	156.021	381.871	0	-57.014	13.513	298.139	0	0.1
4	0	522.03	13.513	-2.491	70.304	0	-331.641	0
	0	522.03	13.513	-2.491	70.304	0	-331.641	0
	10.896	494.885	0	-2.491	68.246	73.682	0	0.07
	20.954	476.784	59.096	0	66.038	452.271	0	0.14
	41.908	1246.222	53.893	0	60.586	1241.272	0	0.3
	55.319	1711.918	49.995	0	56.551	1710.633	0	0.39
	62.862	1952.819	47.632	0	54.121	1950.46	0	0.43
	66.843	2071.958	46.34	0	52.797	2068.16	0	0.45
	81.93	2459.241	41.218	0	47.573	2445.172	0	0.52
	83.816	2499.604	40.555	0	46.899	2483.793	0	0.52
	104.77	2807.941	32.923	0	39.164	2768.232	0	0.56
	125.724	2863.094	4.504	-27.496	31.03	2761.94	0	0.55
	146.678	2637.747	0	-35.743	22.583	2434.477	0	0.48
	156.945	2419.324	0	-46	18.35	2149.712	0	0.43
	167.632	2110.328	0	-50.356	13.886	1763.441	0	0.36
	171.404	1979.613	0	-51.909	12.298	1604.832	0	0.34
	182.3	1537.37	0	-56.438	7.71	1085.344	0	0.25
	188.586	1237.906	0	-59.077	5.439	0	-113.969	0.2
	209.54	0	5.439	-67.905	5.439	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	67.405	-9.707	-9.707	0	0	0
	19.586	-190.113	0	-9.707	-9.707	0	-190.113	-0.11
	39.172	-380.226	0	-9.707	-14.307	1587.969	0	-0.22
	43.481	-422.05	0	-9.707	-16.338	1748.226	0	-0.24
	58.758	-570.338	0	-9.707	-23.429	2181.939	0	-0.3
	78.344	-760.451	0	-9.707	-32.2	2446.08	0	-0.37
	97.93	-950.564	0	-9.707	-40.503	2412.478	0	-0.42
	98.518	-956.267	0	-9.707	-40.744	2407.292	0	-0.42
	117.516	-1140.68	0	-9.707	-48.18	2127.268	0	-0.42
	137.102	-1330.79	0	-9.707	-55.02	1655.923	0	-0.38
	151.596	-1471.47	0	-9.707	-59.446	1231.066	0	-0.32
	156.688	-1520.9	0	-9.707	-60.874	1071.373	0	-0.29
	161.585	-1568.43	0	-9.707	-62.183	914.287	0	-0.26

	172.944	-1678.7	0	-9.707	-65.022	534.735	0	-0.18
	176.274	-1711.02	0	-9.707	-65.805	419.936	0	-0.16
	187.438	-1819.38	0	-9.707	-68.307	20.272	0	-0.07
2	0	-1901.13	50.662	-9.707	-70.042	0	-302.53	0
	0	-1901.13	50.662	-9.707	-70.042	0	-302.53	0
	6.506	-1595.51	7.963	0	-5.114	285.68	0	-0.05
	18.976	-1496.22	7.963	0	-5.114	221.905	0	-0.15
	27.108	-1431.46	7.963	0	-5.114	180.313	0	-0.21
	29.548	-1412.03	7.963	0	-5.114	167.835	0	-0.23
	37.951	-1345.11	7.963	0	-5.159	875.562	0	-0.28
	54.216	-1215.6	7.963	0	-8.646	1338.586	0	-0.36
	79.426	-1014.85	7.963	0	-15.181	2025.458	0	-0.42
	81.324	-999.735	7.963	0	-15.724	2073.552	0	-0.42
	92.438	-911.232	7.963	0	-19.016	2336.59	0	-0.42
	108.432	-783.873	7.963	0	-24.006	2641.861	0	-0.41
	135.54	-568.011	7.963	0	-32.803	2894.873	0	-0.37
	162.648	-512.897	0	-5.114	-41.688	2773.892	0	-0.3
	181.081	-607.173	0	-5.114	-47.629	2479.732	0	-0.25
	189.756	-651.538	0	-5.114	-50.363	2285.861	0	-0.25
	198.159	-694.517	0	-5.114	-52.959	2067.36	0	-0.24
	211.442	-762.452	0	-5.114	-56.908	1670.604	0	-0.23
	216.864	-790.18	0	-5.114	-58.451	1494.226	0	-0.22
	243.972	-928.822	0	-5.114	-65.337	552.352	0	-0.14
	255.9	-1113.56	0	-41.978	-67.834	139.188	0	-0.08
	263.761	-1460.2	0	-46.213	-69.287	0	-123.604	-0.04
3	0	-1810.17	13.513	-49.103	-70.471	0	-371.688	0
	0	-1810.17	13.513	-49.103	-70.471	0	-371.688	0
	11.046	-1660.91	13.513	0	-10.877	292.529	0	-0.07
	17.259	-1576.95	13.513	0	-10.877	224.947	0	-0.11
	28.477	-1425.35	13.513	0	-10.877	102.925	0	-0.17
	34.518	-1343.73	13.513	0	-10.877	37.221	0	-0.19
	51.777	-1110.51	13.513	0	-15.764	1328.608	0	-0.24
	64.549	-937.925	13.513	0	-21.44	1565.195	0	-0.25
	69.036	-877.287	13.513	0	-23.52	1626.081	0	-0.25
	86.295	-644.068	13.513	0	-31.798	1741.385	0	-0.24
	103.554	-713.685	0	-10.877	-40.257	1659.113	0	-0.21
	120.813	-901.411	0	-10.877	-48.52	1384.875	0	-0.2
	132.894	-1032.82	0	-10.877	-53.979	1094.017	0	-0.18
	138.072	-1089.14	0	-10.877	-56.205	948.352	0	-0.16
	155.331	-1276.86	0	-10.877	-63.068	385.84	0	-0.09
	156.021	-1284.37	0	-10.877	-63.324	361.22	0	-0.09
4	0	-1464.59	50.975	-10.877	-68.969	0	-275.141	0
	0	-1464.59	50.975	-10.877	-68.969	0	-275.141	0
	10.896	-1080.43	5.439	0	-2.491	494.885	0	-0.06
	20.954	-1025.72	5.439	0	-2.491	469.827	0	-0.1
	41.908	-911.751	5.439	0	-6.504	1090.287	0	-0.17
	55.319	-838.811	5.439	0	-9.945	1533.763	0	-0.2
	62.862	-797.782	5.439	0	-12.076	1771.328	0	-0.2
	66.843	-776.128	5.439	0	-13.255	1891.435	0	-0.21

81.93	-694.07	5.439	0	-18.017	2299.173	0	-0.21
83.816	-683.813	5.439	0	-18.642	2343.777	0	-0.21
104.77	-569.844	5.439	0	-25.925	2716.157	0	-0.2
125.724	-455.875	5.439	0	-33.707	2825.22	0	-0.18
146.678	-341.906	5.439	0	-41.88	2632.635	0	-0.14
156.945	-286.062	5.439	0	-46	2419.324	0	-0.12
167.632	-227.938	5.439	0	-50.356	2110.328	0	-0.1
171.404	-207.423	5.439	0	-51.909	1979.613	0	-0.09
182.3	-148.16	5.439	0	-56.438	1537.37	0	-0.07
188.586	-113.969	5.439	0	-59.077	1237.906	0	-0.05
209.54	0	5.439	-67.905	-67.905	0	0	0

Support	Reac. Pos	Reac. Negative
1	9.707	-67.5
2	6.743	-72.158
3	12.854	-74.566
4	16.004	-73.221
5	5.439	-67.995

Id	HS20 Lane Load	
Type	Lane Load	
Factors:	Moment	1
	Shear	1
	Deflection	1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	80.791	-18.404	80.791	0	0	0
	19.586	1257.351	57.929	0	65.703	1286.855	0	0.35
	39.172	2178.302	43.074	0	52.272	2047.596	0	0.64
	43.481	2336.179	39.815	0	49.546	2154.318	0	0.7
	58.758	2767.304	28.294	0	40.541	2382.128	0	0.86
	78.344	3030.689	13.614	-4.386	30.485	2388.311	0	0.99
	97.93	2977.519	0	-18.933	22.069	2161.236	0	1.02
	98.518	2971.148	0	-19.367	21.842	2151.776	0	1.02
	117.516	2621.175	0	-33.3	15.256	1792.821	0	0.95
	137.102	1979.531	0	-47.434	9.977	1367.823	0	0.77
	151.596	1338.587	0	-53.69	6.983	1058.52	0	0.59
	156.688	1127.639	0	-48.408	6.093	954.638	0	0.53
	161.585	954.865	0	-36.448	5.311	858.228	0	0.46
	172.944	655.16	0	-30.264	3.756	649.499	0	0.31
	176.274	584.312	0	-29.374	3.363	592.734	0	0.26
	187.438	396.316	0	-22.818	2.232	418.31	0	0.11
2	0	386.874	1.975	-6.204	125.762	0	-4454.94	0
	0	386.874	1.975	-6.204	125.762	0	-4454.94	0
	6.506	352.724	0	-6.235	119.695	0	-4137.74	0.1
	18.976	463.646	23.297	0	111.163	0	-3059.28	0.3
	27.108	589.715	26.84	0	105.697	0	-2430.66	0.44
	29.548	630.731	25.159	0	104.072	0	-2253.32	0.48
	37.951	839.829	38.329	0	98.528	0	-1681.51	0.63
	54.216	1490.189	56.679	0	88.023	0	-743.252	0.91
	79.426	2762.423	52.013	0	72.535	1161.257	0	1.27
	81.324	2846.661	50.655	0	71.419	1237.808	0	1.29
	92.438	3287.594	42.681	0	65.051	1627.518	0	1.4
	108.432	3761.177	31.164	0	56.436	2020.105	0	1.5
	135.54	4118.366	11.594	-6.406	43.449	2288.688	0	1.57
	162.648	3910.592	0	-25.971	32.613	2179.46	0	1.48
	181.081	3448.532	0	-39.236	26.509	1967.727	0	1.34
	189.756	3142.642	0	-45.458	23.994	1846.767	0	1.25
	198.159	2793.496	0	-51.468	21.778	1723.785	0	1.16
	211.442	2187.394	0	-49.602	18.721	1530.664	0	0.98
	216.864	1964.444	0	-47.955	17.631	1456.119	0	0.89
	243.972	1176.508	0	-23.431	14.746	972.648	0	0.44
	255.9	1075.211	4.809	-13.191	14.383	1078.038	0	0.24
	263.761	1120.716	8.462	0	14.264	1167.021	0	0.11
3	0	1207.002	13.339	-18.575	112.498	0	-2672.58	0
	0	1207.002	13.339	-18.575	112.498	0	-2672.58	0

	11.046	1054.208	0	-8.633	92.983	0	-2979.28	0.1
	17.259	1064.799	16.771	-1.229	88.486	0	-2597.56	0.16
	28.477	1179.747	22.066	0	80.584	0	-1996.13	0.27
	34.518	1275.929	25.961	0	76.453	0	-1716.26	0.32
	51.777	1729	30.483	0	65.166	0	-1070.19	0.45
	64.549	1955.386	20.818	0	57.419	0	-719.668	0.51
	69.036	2004.119	17.406	-0.594	54.837	89.365	-618.155	0.53
	86.295	2040.958	4.242	-13.758	45.658	428.219	-311.145	0.56
	103.554	1837.396	0	-26.919	37.789	602.609	-96.72	0.52
	120.813	1397.084	0	-39.977	31.339	669.876	0	0.42
	132.894	953.275	0	-49.006	27.695	686.219	0	0.33
	138.072	844.064	0	-21.381	26.978	277.489	0	0.29
	155.331	708.224	9.669	-8.331	25.663	587.688	0	0.14
	156.021	707.773	9.169	-8.831	25.63	601.525	0	0.13
4	0	917.317	23.745	-4.378	127.96	0	-2270.23	0
	0	917.317	23.745	-4.378	127.96	0	-2270.23	0
	10.896	903.91	1.724	0	100.076	0	-2219.2	0.14
	20.954	1025.608	32.551	0	93.184	0	-1546.78	0.28
	41.908	1805.797	60.032	0	79.131	85.757	-443.349	0.55
	55.319	2468.057	51.348	0	70.452	755.513	0	0.69
	62.862	2785.714	45.945	0	65.708	1060.261	0	0.76
	66.843	2936.993	43.081	0	63.25	1200.503	0	0.79
	81.93	3403.272	32.166	0	54.263	1604.312	0	0.88
	83.816	3449.403	30.795	0	53.179	1641.002	0	0.89
	104.77	3774.452	15.5	-2.5	41.793	1857.891	0	0.94
	125.724	3748.697	0.096	-17.904	31.695	1770.668	0	0.9
	146.678	3363.878	0	-33.396	22.99	1453.696	0	0.78
	156.945	3042.225	0	-41.013	19.261	1239.596	0	0.7
	167.632	2613.639	0	-48.956	15.765	990.911	0	0.59
	171.404	2439.427	0	-51.762	14.627	899.114	0	0.55
	182.3	1868.625	0	-59.881	11.621	629.114	0	0.41
	188.586	1493.535	0	-64.572	10.081	474.061	-2.732	0.32
	209.54	0	7.993	-88.197	7.993	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	80.791	-18.404	-18.404	0	0	0
	19.586	-342.317	0	-17.478	-19.228	0	-253.85	-0.2
	39.172	-684.635	0	-17.478	-24.917	533.437	-220.157	-0.38
	43.481	-759.944	0	-17.478	-26.396	587.753	-217.275	-0.42
	58.758	-1026.95	0	-17.478	-32.205	740.173	-199.725	-0.54
	78.344	-1369.27	0	-17.478	-40.88	798.327	-212.164	-0.67
	97.93	-1711.59	0	-17.478	-50.813	638.99	-339.476	-0.74
	98.518	-1721.86	0	-17.478	-51.128	630.228	-345.859	-0.74
	117.516	-2053.9	0	-17.478	-61.827	208.902	-654.249	-0.75
	137.102	-2396.22	0	-17.478	-73.702	0	-1215.42	-0.68
	151.596	-2656.18	0	-21.512	-82.914	0	-1815.19	-0.57
	156.688	-2800.51	0	-35.403	-86.228	0	-2066.04	-0.52
	161.585	-3012.96	0	-52.541	-89.448	0	-2327.71	-0.46

	172.944	-3692.48	0	-68.795	-97.053	0	-3014.37	-0.33
	176.274	-3929.32	0	-74.01	-99.316	0	-3237.29	-0.28
	187.438	-4844.82	0	-88.356	-107.027	0	-4059	-0.13
2	0	-5649.66	112.754	-102.321	-117.852	0	-4453.56	0
	0	-5649.66	112.754	-102.321	-117.852	0	-4453.56	0
	6.506	-4935.85	108.621	0	-6.812	384.991	0	-0.08
	18.976	-3735.18	88.312	0	-7.052	345.03	0	-0.24
	27.108	-3063.65	76.961	0	-7.342	340.07	0	-0.33
	29.548	-2875.88	76.961	0	-7.478	618.756	0	-0.36
	37.951	-2337.26	55.766	0	-8.559	740.547	0	-0.44
	54.216	-1719.95	21.969	0	-11.213	1017.883	0	-0.58
	79.426	-1496.65	4.709	0	-16.942	1518.099	0	-0.71
	81.324	-1487.72	4.709	0	-17.455	1556.78	0	-0.71
	92.438	-1435.37	4.709	0	-20.687	1777.879	0	-0.73
	108.432	-1360.05	4.709	0	-26.007	2061.407	0	-0.75
	135.54	-1232.39	4.709	0	-36.785	2358.032	0	-0.72
	162.648	-1104.72	4.709	0	-49.699	2288.698	0	-0.65
	181.081	-1017.91	4.709	0	-59.632	1959.752	0	-0.59
	189.756	-977.056	4.709	0	-64.606	1712.889	0	-0.55
	198.159	-937.48	4.709	0	-69.594	1413.711	0	-0.52
	211.442	-938.734	0	-10.361	-77.783	816.623	0	-0.45
	216.864	-1016.32	0	-16.795	-81.22	528.646	-95.946	-0.42
	243.972	-2102.93	0	-66.524	-99.034	0	-1597.76	-0.24
	255.9	-3018.85	0	-87.165	-107.103	0	-2463.56	-0.14
	263.761	-3736.27	0	-94.436	-112.472	0	-3103.51	-0.07
3	0	-4475.62	89.605	-105.464	-135.115	0	-2674.84	0
	0	-4475.62	89.605	-105.464	-135.115	0	-2674.84	0
	11.046	-3586.1	70.475	0	-21.752	1011.932	0	-0.16
	17.259	-3168.11	58.611	0	-22.011	906.997	0	-0.24
	28.477	-2596.49	40.969	0	-22.791	742.724	0	-0.38
	34.518	-2375.68	30.793	0	-23.875	1098.347	0	-0.44
	51.777	-2174	7.658	0	-29.017	1129.068	0	-0.58
	64.549	-2076.2	7.658	0	-33.751	1119.277	0	-0.64
	69.036	-2041.83	7.658	0	-35.6	1103.995	0	-0.66
	86.295	-1909.67	7.658	0	-43.588	964.493	0	-0.67
	103.554	-1777.5	7.658	0	-52.874	655.059	-44.27	-0.62
	120.813	-1645.34	7.658	0	-63.284	128.901	-463.789	-0.53
	132.894	-1552.83	7.658	0	-71.119	0	-872.148	-0.44
	138.072	-1650.81	0	-30.28	-74.593	0	-1080.16	-0.39
	155.331	-2435.21	0	-61.986	-86.629	0	-1932.55	-0.21
	156.021	-2478	0	-61.986	-87.123	0	-1972.04	-0.2
4	0	-3712.24	95.731	-87.189	-102.972	0	-2269.32	0
	0	-3712.24	95.731	-87.189	-102.972	0	-2269.32	0
	10.896	-2745.73	80.608	0	-4.743	942.147	0	-0.08
	20.954	-2012.68	59.031	0	-5.453	1028.285	0	-0.14
	41.908	-1266.58	8.394	0	-8.391	1406.664	0	-0.23
	55.319	-1165.2	7.555	0	-11.011	1698.094	0	-0.27
	62.862	-1108.21	7.555	0	-12.756	1870.962	0	-0.28
	66.843	-1078.13	7.555	0	-13.758	1963.23	0	-0.28



81.93	-964.14	7.555	0	-18.065	2305.314	0	-0.29
83.816	-949.892	7.555	0	-18.661	2346.095	0	-0.29
104.77	-791.576	7.555	0	-26.129	2737.573	0	-0.27
125.724	-633.261	7.555	0	-35.202	2950.515	0	-0.24
146.678	-474.946	7.555	0	-45.921	2886.702	0	-0.2
156.945	-397.371	7.555	0	-51.783	2723.491	0	-0.17
167.632	-316.63	7.555	0	-58.314	2443.828	0	-0.14
171.404	-288.134	7.555	0	-60.725	2315.821	0	-0.13
182.3	-205.81	7.555	0	-68.001	1852.369	0	-0.09
188.586	-158.315	7.555	0	-72.411	1517.306	0	-0.07
209.54	0	7.993	-88.197	-88.197	0	0	0

Support	Reac. Pos	Reac. Negative
1	18.404	-80.825
2	8.941	-211.272
3	33.634	-193.73
4	29.911	-181.419
5	7.993	-88.197

Id Ohio 2F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	29.289	-4.065	29.289	0	0	0
	19.586	497.533	25.402	0	25.402	497.533	0	0.1
	39.172	844.364	21.555	0	21.555	844.364	0	0.19
	43.481	901.164	20.726	0	20.726	901.164	0	0.21
	58.758	1048.278	17.841	-2.159	17.841	1048.278	0	0.26
	78.344	1120.423	14.301	-5.699	14.301	1120.423	0	0.3
	97.93	1083.884	2.089	-17.911	10.994	1076.651	0	0.3
	98.518	1081.336	1.991	-18.009	10.899	1073.762	0	0.3
	117.516	955.274	0	-21.02	8.004	940.583	0	0.28
	137.102	756.35	0	-23.754	5.413	742.183	0	0.22
	151.596	582.164	0	-25.5	3.771	571.679	0	0.17
	156.688	517.178	0	-26.061	3.241	507.796	0	0.15
	161.585	453.129	0	-26.578	2.752	444.733	0	0.13
	172.944	298.11	0	-27.698	1.685	291.448	0	0.09
	176.274	250.983	0	-28.009	1.387	244.518	0	0.07
	187.438	128.755	0.687	0	0.687	128.755	0	0.03
2	0	134.54	0.687	-2.157	29.749	0	-56.123	0
	0	134.54	0.687	-2.157	29.749	0	-56.123	0
	6.506	120.504	0	-2.157	29.309	38.567	0	0.02
	18.976	209.815	18.884	-1.116	28.376	205.793	0	0.07
	27.108	313.338	18.261	-1.739	27.72	311.424	0	0.1
	29.548	343.762	18.067	-1.933	27.515	342.742	0	0.11
	37.951	450.646	26.769	0	26.769	450.646	0	0.15
	54.216	660.902	25.13	0	25.13	660.902	0	0.21
	79.426	965.936	22.138	0	22.138	965.936	0	0.3
	81.324	986.49	21.896	0	21.896	986.49	0	0.3
	92.438	1095.889	20.449	0	20.449	1095.889	0	0.33
	108.432	1214.806	18.303	-1.697	18.303	1214.806	0	0.35
	135.54	1295.462	14.599	-5.401	14.599	1295.462	0	0.36
	162.648	1230.604	1.814	-18.186	10.917	1218.58	0	0.34
	181.081	1100.232	0	-20.644	8.488	1080.412	0	0.3
	189.756	1016.38	0	-21.771	7.382	994.119	0	0.28
	198.159	923.138	0	-22.836	6.344	899.804	0	0.25
	211.442	756.505	0	-24.444	4.793	734.606	0	0.21
	216.864	683.559	0	-25.067	4.199	663.343	0	0.19
	243.972	302.339	0	-27.8	3.348	124.222	0	0.09
	255.9	164.158	3.348	0	3.348	164.158	0	0.05
	263.761	190.479	3.348	0	3.348	190.479	0	0.02
3	0	214.985	3.348	-1.605	29.524	0	-41.411	0
	0	214.985	3.348	-1.605	29.524	0	-41.411	0

	11.046	197.258	0	-1.605	28.005	145.635	0	0.03
	17.259	241.652	27.082	0	27.082	241.652	0	0.04
	28.477	399.867	25.304	0	25.304	399.867	0	0.07
	34.518	476.76	24.281	0	24.281	476.76	0	0.09
	51.777	659.698	21.116	0	21.116	659.698	0	0.13
	64.549	750.553	18.603	-1.397	18.603	750.553	0	0.16
	69.036	772.357	17.698	-2.302	17.698	772.357	0	0.16
	86.295	805.697	5.531	-14.469	14.161	804.873	0	0.17
	103.554	763.686	1.999	-18.001	10.663	754.836	0	0.16
	120.813	643.447	0	-21.396	7.365	629.951	0	0.13
	132.894	520.658	0	-23.603	5.657	0	-6.017	0.1
	138.072	460.026	0	-24.494	5.657	23.271	0	0.09
	155.331	226.896	0	-27.227	5.657	120.897	0	0.04
	156.021	216.753	0	-27.328	5.657	124.802	0	0.04
4	0	218.523	5.657	-1.043	29.753	0	-54.599	0
	0	218.523	5.657	-1.043	29.753	0	-54.599	0
	10.896	207.16	0	-1.043	28.967	105.126	0	0.03
	20.954	255.327	28.116	0	28.116	255.327	0	0.06
	41.908	574.831	25.974	0	25.974	574.831	0	0.12
	55.319	769.126	24.364	0	24.364	769.126	0	0.16
	62.862	870.3	23.385	0	23.385	870.3	0	0.18
	66.843	920.484	22.849	0	22.849	920.484	0	0.19
	81.93	1084.291	20.719	0	20.719	1084.291	0	0.22
	83.816	1101.427	20.444	0	20.444	1101.427	0	0.22
	104.77	1233.451	17.273	-2.727	17.273	1233.451	0	0.24
	125.724	1256.683	5.007	-14.993	13.925	1247.375	0	0.23
	146.678	1159.229	1.559	-18.441	10.436	1129.802	0	0.2
	156.945	1061.068	0	-20.174	8.686	1020.977	0	0.18
	167.632	922.199	0	-22.005	6.84	870.6	0	0.15
	171.404	864.074	0	-22.658	6.182	808.323	0	0.14
	182.3	668.984	0	-24.559	4.266	600.992	0	0.11
	188.586	537.816	0	-25.667	3.151	462.595	0	0.08
	209.54	0	2.291	-29.365	2.291	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	29.289	-4.065	-4.065	0	0	0
	19.586	-79.618	0	-4.065	-4.065	0	-79.618	-0.05
	39.172	-159.236	0	-4.065	-7.148	795.147	0	-0.09
	43.481	-176.752	0	-4.065	-7.988	857.106	0	-0.1
	58.758	-238.854	0	-4.065	-10.912	1021.561	0	-0.13
	78.344	-318.473	0	-4.065	-14.517	1112.982	0	-0.16
	97.93	-398.091	0	-4.065	-17.911	1083.884	0	-0.17
	98.518	-400.479	0	-4.065	-18.009	1081.336	0	-0.17
	117.516	-477.709	0	-4.065	-21.02	955.274	0	-0.18
	137.102	-557.327	0	-4.065	-23.754	756.35	0	-0.16
	151.596	-616.244	0	-4.065	-25.5	582.164	0	-0.13
	156.688	-636.945	0	-4.065	-26.061	517.178	0	-0.12
	161.585	-656.849	0	-4.065	-26.578	453.129	0	-0.11

	172.944	-703.028	0	-4.065	-27.698	298.11	0	-0.08
	176.274	-716.563	0	-4.065	-28.009	250.983	0	-0.07
	187.438	-761.945	0	-4.065	-29.007	86.091	0	-0.03
2	0	-796.181	21.322	-4.065	-29.705	0	-48.101	0
	0	-796.181	21.322	-4.065	-29.705	0	-48.101	0
	6.506	-670.862	3.348	0	-2.157	120.504	0	-0.02
	18.976	-629.111	3.348	0	-2.157	93.603	0	-0.06
	27.108	-601.882	3.348	0	-2.157	76.059	0	-0.09
	29.548	-593.714	3.348	0	-2.157	70.795	0	-0.1
	37.951	-565.577	3.348	0	-2.633	447.323	0	-0.12
	54.216	-511.119	3.348	0	-4.167	646.983	0	-0.15
	79.426	-426.71	3.348	0	-7.028	943.611	0	-0.18
	81.324	-420.356	3.348	0	-7.263	964.082	0	-0.18
	92.438	-383.143	3.348	0	-8.678	1074.808	0	-0.18
	108.432	-329.593	3.348	0	-10.796	1199.32	0	-0.17
	135.54	-238.83	3.348	0	-14.488	1293.699	0	-0.16
	162.648	-216.348	0	-2.157	-18.186	1230.604	0	-0.13
	181.081	-256.115	0	-2.157	-20.644	1100.232	0	-0.11
	189.756	-274.829	0	-2.157	-21.771	1016.38	0	-0.1
	198.159	-292.958	0	-2.157	-22.836	923.138	0	-0.1
	211.442	-321.614	0	-2.157	-24.444	756.505	0	-0.1
	216.864	-333.31	0	-2.157	-25.067	683.559	0	-0.09
	243.972	-391.791	0	-2.157	-27.8	302.339	0	-0.06
	255.9	-466.167	0	-17.735	-28.766	139.478	0	-0.03
	263.761	-610.983	0	-19.529	-29.32	36.995	0	-0.02
3	0	-757.739	5.657	-20.644	-29.774	0	-60.968	0
	0	-757.739	5.657	-20.644	-29.774	0	-60.968	0
	11.046	-695.258	5.657	0	-4.562	122.683	0	-0.03
	17.259	-660.113	5.657	0	-4.562	94.34	0	-0.05
	28.477	-596.656	5.657	0	-4.562	43.166	0	-0.07
	34.518	-562.486	5.657	0	-4.592	460.811	0	-0.08
	51.777	-464.86	5.657	0	-7.624	645.62	0	-0.1
	64.549	-392.617	5.657	0	-10.072	741.163	0	-0.11
	69.036	-367.234	5.657	0	-10.961	764.923	0	-0.11
	86.295	-269.608	5.657	0	-14.469	805.697	0	-0.1
	103.554	-299.311	0	-4.562	-18.001	763.686	0	-0.09
	120.813	-378.041	0	-4.562	-21.396	643.447	0	-0.08
	132.894	-433.152	0	-4.562	-23.603	520.658	0	-0.07
	138.072	-456.771	0	-4.562	-24.494	460.026	0	-0.07
	155.331	-535.502	0	-4.562	-27.227	226.896	0	-0.04
	156.021	-538.651	0	-4.562	-27.328	216.753	0	-0.04
4	0	-614.232	21.409	-4.562	-29.554	0	-45.026	0
	0	-614.232	21.409	-4.562	-29.554	0	-45.026	0
	10.896	-455.138	2.291	0	-1.043	207.16	0	-0.02
	20.954	-432.094	2.291	0	-1.306	246.381	0	-0.04
	41.908	-384.083	2.291	0	-3.293	552.017	0	-0.07
	55.319	-353.356	2.291	0	-4.813	742.323	0	-0.08
	62.862	-336.073	2.291	0	-5.747	842.962	0	-0.09
	66.843	-326.951	2.291	0	-6.261	893.479	0	-0.09

81.93	-292.383	2.291	0	-8.323	1062.086	0	-0.09
83.816	-288.062	2.291	0	-8.591	1080.149	0	-0.09
104.77	-240.052	2.291	0	-11.698	1225.56	0	-0.08
125.724	-192.042	2.291	0	-14.993	1256.683	0	-0.08
146.678	-144.031	2.291	0	-18.441	1159.229	0	-0.06
156.945	-120.506	2.291	0	-20.174	1061.068	0	-0.05
167.632	-96.021	2.291	0	-22.005	922.199	0	-0.04
171.404	-87.379	2.291	0	-22.658	864.074	0	-0.04
182.3	-62.414	2.291	0	-24.559	668.984	0	-0.03
188.586	-48.01	2.291	0	-25.667	537.816	0	-0.02
209.54	0	2.291	-29.365	-29.365	0	0	0

Support	Reac. Pos	Reac. Negative
1	4.065	-29.329
2	2.844	-30.101
3	5.391	-31.169
4	6.699	-30.595
5	2.291	-29.403

Id Ohio 3F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	44.356	-6.229	44.356	0	0	0
	19.586	752.185	38.404	0	38.404	752.185	0	0.16
	39.172	1273.947	32.522	0	32.522	1273.947	0	0.29
	43.481	1358.954	31.254	0	31.254	1358.954	0	0.32
	58.758	1577.556	26.848	0	26.848	1577.556	0	0.39
	78.344	1696.85	5.527	-11.473	21.451	1680.576	0	0.45
	97.93	1640.809	5.98	-11.02	16.42	1608.002	0	0.46
	98.518	1636.731	5.832	-11.168	16.276	1603.459	0	0.46
	117.516	1439.823	1.273	-15.727	11.888	1397.046	0	0.42
	137.102	1135.031	0	-19.846	7.976	1093.562	0	0.34
	151.596	869.837	0	-22.471	5.497	833.276	0	0.26
	156.688	770.834	0	-23.315	4.696	735.768	0	0.23
	161.585	673.152	0	-24.091	3.957	639.443	0	0.2
	172.944	436.438	0	-25.783	2.339	404.589	0	0.13
	176.274	364.197	0	-26.253	1.887	332.559	0	0.11
	187.438	197.144	1.052	0	1.052	197.144	0	0.05
2	0	206.002	1.052	-3.303	45.42	0	-128.408	0
	0	206.002	1.052	-3.303	45.42	0	-128.408	0
	6.506	184.512	0	-3.303	44.738	17.01	0	0.04
	18.976	302.118	32.033	0	43.289	274.639	0	0.11
	27.108	461.834	31.061	0	42.268	438.049	0	0.16
	29.548	508.944	30.758	0	41.947	486.769	0	0.17
	37.951	672.016	24.349	0	40.782	654.516	0	0.23
	54.216	988.773	21.89	0	38.225	981.211	0	0.33
	79.426	1452.191	17.369	0	33.591	1451.339	0	0.46
	81.324	1483.657	17.002	0	33.218	1482.74	0	0.46
	92.438	1652.161	14.798	-2.202	30.988	1649.406	0	0.5
	108.432	1837.399	11.522	-5.478	27.69	1828.982	0	0.54
	135.54	1968.09	5.847	-11.153	22.007	1946.827	0	0.55
	162.648	1863.43	5.659	-11.341	16.372	1823.343	0	0.51
	181.081	1659.5	1.905	-15.095	12.662	1608.609	0	0.46
	189.756	1529.721	0.188	-16.812	10.978	1475.665	0	0.42
	198.159	1386.091	0	-18.431	9.4	1330.926	0	0.39
	211.442	1131.327	0	-20.868	7.049	1078.862	0	0.32
	216.864	1020.344	0	-21.809	6.151	970.51	0	0.29
	243.972	444.403	0	-25.912	5.126	190.193	0	0.14
	255.9	251.338	5.126	0	5.126	251.338	0	0.07
	263.761	291.638	5.126	0	5.126	291.638	0	0.03
3	0	329.158	5.126	-2.457	44.892	0	-95.338	0
	0	329.158	5.126	-2.457	44.892	0	-95.338	0

	11.046	302.017	0	-2.457	42.531	191.318	0	0.04
	17.259	344.87	25.028	0	41.097	338.566	0	0.07
	28.477	587.822	22.344	0	38.332	581.413	0	0.11
	34.518	705.487	20.804	0	36.743	699.517	0	0.14
	51.777	986.892	16.018	-0.982	31.842	978.631	0	0.2
	64.549	1128.658	12.198	-4.802	27.968	1115.857	0	0.24
	69.036	1163.067	10.817	-6.183	26.574	1148.479	0	0.25
	86.295	1217.517	11.119	-5.881	21.15	1194.835	0	0.27
	103.554	1149.006	5.72	-11.28	15.81	1115.011	0	0.25
	120.813	962.239	0.564	-16.436	10.803	922.118	0	0.2
	132.894	773.882	0	-19.77	8.667	0	-9.22	0.16
	138.072	680.737	0	-21.117	8.667	35.656	0	0.14
	155.331	324.136	0	-25.231	8.667	185.241	0	0.07
	156.021	308.624	0	-25.383	8.667	191.224	0	0.06
4	0	334.825	8.667	-1.598	45.425	0	-125.099	0
	0	334.825	8.667	-1.598	45.425	0	-125.099	0
	10.896	317.415	0	-1.598	44.189	123.716	0	0.05
	20.954	369.372	26.405	0	42.851	357.823	0	0.09
	41.908	852.624	39.506	0	39.506	852.624	0	0.19
	55.319	1151.671	37.002	0	37.002	1151.671	0	0.25
	62.862	1306.58	35.483	0	35.483	1306.58	0	0.28
	66.843	1383.195	34.653	0	34.653	1383.195	0	0.29
	81.93	1633.854	15.256	-1.744	31.364	1631.673	0	0.33
	83.816	1660.597	14.837	-2.163	30.939	1657.495	0	0.34
	104.77	1869.902	10.007	-6.993	26.052	1853.986	0	0.36
	125.724	1904.847	10.462	-6.538	20.898	1867.948	0	0.35
	146.678	1748.615	0	-27.817	15.534	1679.145	0	0.31
	156.945	1602.435	0	-30.468	12.844	1507.805	0	0.28
	167.632	1394.201	0	-33.268	10.006	1272.418	0	0.23
	171.404	1306.775	0	-34.266	8.996	1175.193	0	0.22
	182.3	1012.647	0	-37.175	6.053	852.171	0	0.16
	188.586	814.477	0	-38.87	4.34	636.943	0	0.13
	209.54	0	3.511	-44.533	3.511	0	0	0

## Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	44.356	-6.229	-6.229	0	0	0
	19.586	-121.999	0	-6.229	-6.229	0	-121.999	-0.07
	39.172	-243.999	0	-6.229	-10.419	1157.774	0	-0.14
	43.481	-270.839	0	-6.229	-11.71	1254.949	0	-0.15
	58.758	-365.998	0	-6.229	-16.209	1514.453	0	-0.2
	78.344	-487.998	0	-6.229	-21.761	1662.95	0	-0.24
	97.93	-609.997	0	-6.229	-26.997	1624.929	0	-0.27
	98.518	-613.657	0	-6.229	-27.149	1621.188	0	-0.27
	117.516	-731.996	0	-6.229	-31.81	1431.599	0	-0.27
	137.102	-853.996	0	-6.229	-36.058	1127.13	0	-0.24
	151.596	-944.275	0	-6.229	-38.78	858.554	0	-0.2
	156.688	-975.995	0	-6.229	-39.655	758.191	0	-0.19
	161.585	-1006.5	0	-6.229	-40.459	659.311	0	-0.17

	172.944	-1077.26	0	-6.229	-42.204	420.525	0	-0.12
	176.274	-1098	0	-6.229	-42.687	348.05	0	-0.1
	187.438	-1167.53	0	-6.229	-44.235	94.863	0	-0.05
2	0	-1219.99	32.474	-6.229	-45.315	0	-110.814	0
	0	-1219.99	32.474	-6.229	-45.315	0	-110.814	0
	6.506	-1027.14	5.126	0	-3.303	184.512	0	-0.03
	18.976	-963.216	5.126	0	-3.303	143.321	0	-0.1
	27.108	-921.527	5.126	0	-3.303	116.458	0	-0.14
	29.548	-909.02	5.126	0	-3.303	108.399	0	-0.15
	37.951	-865.941	5.126	0	-3.806	646.199	0	-0.18
	54.216	-782.562	5.126	0	-6.116	948.47	0	-0.23
	79.426	-653.325	5.126	0	-10.442	1398.865	0	-0.27
	81.324	-643.597	5.126	0	-10.799	1430.113	0	-0.27
	92.438	-586.621	5.126	0	-12.952	1599.803	0	-0.27
	108.432	-504.632	5.126	0	-16.186	1792.516	0	-0.26
	135.54	-365.667	5.126	0	-21.838	1942.664	0	-0.24
	162.648	-331.263	0	-3.303	-27.512	1851.698	0	-0.2
	181.081	-392.153	0	-3.303	-31.291	1655.278	0	-0.16
	189.756	-420.808	0	-3.303	-33.025	1527.926	0	-0.16
	198.159	-448.566	0	-3.303	-34.667	1385.807	0	-0.16
	211.442	-492.443	0	-3.303	-37.153	1130.405	0	-0.15
	216.864	-510.352	0	-3.303	-38.119	1018.05	0	-0.14
	243.972	-599.896	0	-3.303	-42.377	427.483	0	-0.09
	255.9	-714.494	0	-26.735	-43.893	173.12	0	-0.05
	263.761	-936.437	0	-29.628	-44.765	13.169	0	-0.03
3	0	-1161.02	8.667	-32.095	-45.477	0	-139.151	0
	0	-1161.02	8.667	-32.095	-45.477	0	-139.151	0
	11.046	-1065.29	8.667	0	-6.989	187.954	0	-0.05
	17.259	-1011.44	8.667	0	-6.989	144.532	0	-0.07
	28.477	-914.209	8.667	0	-6.989	66.131	0	-0.11
	34.518	-861.854	8.667	0	-6.989	23.915	0	-0.12
	51.777	-712.269	8.667	0	-11.189	945.51	0	-0.15
	64.549	-601.576	8.667	0	-14.908	1093.691	0	-0.16
	69.036	-562.684	8.667	0	-16.263	1130.889	0	-0.16
	86.295	-413.099	8.667	0	-21.622	1196.778	0	-0.15
	103.554	-458.552	0	-6.989	-27.042	1135.833	0	-0.14
	120.813	-579.168	0	-6.989	-32.276	953.88	0	-0.13
	132.894	-663.6	0	-6.989	-35.697	765.951	0	-0.11
	138.072	-699.785	0	-6.989	-37.081	673.034	0	-0.1
	155.331	-820.401	0	-6.989	-41.331	314.942	0	-0.06
	156.021	-825.226	0	-6.989	-41.488	299.321	0	-0.06
4	0	-941.018	32.753	-6.989	-44.959	0	-103.587	0
	0	-941.018	32.753	-6.989	-44.959	0	-103.587	0
	10.896	-697.467	3.511	0	-1.598	317.415	0	-0.04
	20.954	-662.153	3.511	0	-1.785	336.601	0	-0.07
	41.908	-588.58	3.511	0	-4.766	798.905	0	-0.11
	55.319	-541.494	3.511	0	-7.058	1088.563	0	-0.13
	62.862	-515.008	3.511	0	-8.47	1242.327	0	-0.13
	66.843	-501.029	3.511	0	-9.248	1319.674	0	-0.13



81.93	-448.057	3.511	0	-12.377	1579.399	0	-0.14
83.816	-441.435	3.511	0	-12.785	1607.409	0	-0.14
104.77	-367.863	3.511	0	-17.519	1835.413	0	-0.13
125.724	-294.29	3.511	0	-22.549	1889.955	0	-0.12
146.678	-220.718	3.511	0	-27.817	1748.615	0	-0.09
156.945	-184.667	3.511	0	-30.468	1602.435	0	-0.08
167.632	-147.145	3.511	0	-33.268	1394.201	0	-0.07
171.404	-133.902	3.511	0	-34.266	1306.775	0	-0.06
182.3	-95.644	3.511	0	-37.175	1012.647	0	-0.04
188.586	-73.573	3.511	0	-38.87	814.477	0	-0.03
209.54	0	3.511	-44.533	-44.533	0	0	0

Support	Reac. Pos	Reac. Negative
1	6.229	-44.417
2	4.355	-46.148
3	8.259	-47.771
4	10.265	-46.911
5	3.511	-44.591

Id Ohio 4F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Moment	Corr. Moment	Deflect(max)
1	0	0	51.354	-7.306	51.354	0	0	0
	19.586	869.2	44.379	0	44.379	869.2	0	0.18
	39.172	1468.793	37.496	0	37.496	1468.793	0	0.34
	43.481	1569.721	23.389	0	36.013	1565.899	0	0.37
	58.758	1835.76	18.196	0	30.866	1813.604	0	0.46
	78.344	1967.117	11.824	-2.176	24.57	1924.887	0	0.53
	97.93	1901.69	0	-18.294	18.717	1832.976	0	0.54
	98.518	1897.108	0	-18.47	18.55	1827.505	0	0.54
	117.516	1670.507	0	-23.879	13.468	1582.656	0	0.5
	137.102	1313.177	0	-28.788	8.953	1227.5	0	0.4
	151.596	999.94	0	-31.926	6.091	923.325	0	0.3
	156.688	882.835	0	-32.936	5.166	809.396	0	0.27
	161.585	767.437	0	-33.864	4.31	696.449	0	0.23
	172.944	488.196	0	-35.882	2.434	420.898	0	0.15
	176.274	403.189	0	-36.442	1.907	336.226	0	0.13
	187.438	230.918	1.232	0	1.232	230.918	0	0.05
	2	0	241.293	1.232	-3.869	53.064	0	-204.805
0		241.293	1.232	-3.869	53.064	0	-204.805	0
6.506		216.121	0	-3.869	52.253	0	-33.534	0.04
18.976		328.98	25.954	0	50.526	270.778	0	0.13
27.108		515.641	24.828	0	49.305	464.892	0	0.19
29.548		570.687	24.477	0	48.92	522.89	0	0.2
37.951		764.398	34.203	0	47.524	722.994	0	0.27
54.216		1141.879	31.261	0	44.468	1111.797	0	0.39
79.426		1689.356	25.891	0	38.971	1666.107	0	0.54
81.324		1726.205	25.457	0	38.53	1702.789	0	0.54
92.438		1922.765	22.855	0	35.9	1896.892	0	0.59
108.432		2136.777	18.998	0	32.02	2103.958	0	0.63
135.54		2282.695	12.333	-1.667	25.348	2234.738	0	0.65
162.648		2165.4	0	-18.787	18.746	2082.589	0	0.6
181.081		1930.439	0	-23.208	14.412	1827.02	0	0.54
189.756		1779.595	0	-25.233	12.45	1670.306	0	0.5
198.159		1611.977	0	-27.146	10.616	1500.495	0	0.46
211.442	1312.814	0	-30.034	7.894	1206.416	0	0.38	
216.864	1181.81	0	-31.152	6.856	1080.486	0	0.34	
243.972	497.587	0	-36.057	6.011	223.021	0	0.16	
255.9	294.72	6.011	0	6.011	294.72	0	0.09	
263.761	341.975	6.011	0	6.011	341.975	0	0.04	
3	0	385.972	6.011	-2.881	52.199	0	-151.791	0
	0	385.972	6.011	-2.881	52.199	0	-151.791	0

	11.046	354.146	0	-2.881	49.389	184.496	0	0.05
	17.259	386.476	34.789	0	47.678	357.724	0	0.08
	28.477	671.852	31.589	0	44.383	643.132	0	0.13
	34.518	810.208	29.753	0	42.49	781.894	0	0.16
	51.777	1138.97	24.072	0	36.68	1107.525	0	0.24
	64.549	1302.729	19.558	0	32.108	1265.838	0	0.28
	69.036	1342.07	17.93	0	30.467	1303.048	0	0.29
	86.295	1402.376	1.871	-12.129	24.101	1352.905	0	0.31
	103.554	1326.396	0	-18.476	17.869	1255.317	0	0.29
	120.813	1110.12	0	-24.571	12.057	1027.052	0	0.24
	132.894	889.384	0	-28.533	10.169	0	-10.818	0.19
	138.072	780.144	0	-30.135	10.169	41.834	0	0.16
	155.331	360.674	0	-35.043	10.169	217.339	0	0.08
	156.021	342.396	0	-35.225	10.169	224.359	0	0.08
4	0	392.843	10.169	-1.875	53.06	0	-198.449	0
	0	392.843	10.169	-1.875	53.06	0	-198.449	0
	10.896	372.416	0	-1.875	51.57	98.763	0	0.05
	20.954	412.638	36.624	0	49.958	378.296	0	0.11
	41.908	986.15	32.781	0	45.952	965.09	0	0.22
	55.319	1335.163	29.89	0	42.969	1317.222	0	0.29
	62.862	1516.787	28.132	0	41.165	1498.673	0	0.33
	66.843	1606.918	27.169	0	40.18	1588.017	0	0.34
	81.93	1901.463	23.344	0	36.29	1875.972	0	0.39
	83.816	1932.298	22.849	0	35.788	1905.681	0	0.39
	104.77	2170.426	17.146	0	30.019	2128.496	0	0.42
	125.724	2211.966	0.941	-13.059	23.944	2135.196	0	0.41
	146.678	2035.131	0	-19.265	17.628	1902.445	0	0.36
	156.945	1857.724	0	-22.386	14.462	1695.49	0	0.32
	167.632	1611.083	0	-38.443	11.122	1412.914	0	0.27
	171.404	1510.643	0	-39.612	9.933	1296.533	0	0.25
	182.3	1171.817	0	-43.018	6.472	910.685	0	0.19
	188.586	943	0	-45.003	4.458	654.101	0	0.15
	209.54	0	4.114	-51.641	4.114	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	51.354	-7.306	-7.306	0	0	0
	19.586	-143.101	0	-7.306	-7.306	0	-143.101	-0.08
	39.172	-286.202	0	-7.306	-11.528	1279.71	0	-0.16
	43.481	-317.685	0	-7.306	-13.048	1396.62	0	-0.18
	58.758	-429.303	0	-7.306	-18.348	1710.826	0	-0.23
	78.344	-572.405	0	-7.306	-24.897	1896.063	0	-0.28
	97.93	-715.506	0	-7.306	-31.084	1860.17	0	-0.31
	98.518	-719.799	0	-7.306	-31.263	1856.001	0	-0.31
	117.516	-858.607	0	-7.306	-36.789	1638.624	0	-0.32
	137.102	-1001.71	0	-7.306	-41.846	1282.27	0	-0.29
	151.596	-1107.6	0	-7.306	-45.101	965.052	0	-0.24
	156.688	-1144.81	0	-7.306	-46.147	846.511	0	-0.22
	161.585	-1180.58	0	-7.306	-47.109	729.473	0	-0.2

	172.944	-1263.58	0	-7.306	-49.191	447.629	0	-0.14
	176.274	-1287.91	0	-7.306	-49.768	362.06	0	-0.12
	187.438	-1369.48	0	-7.306	-51.609	64.193	0	-0.05
2	0	-1431.01	37.801	-7.306	-52.891	0	-177.302	0
	0	-1431.01	37.801	-7.306	-52.891	0	-177.302	0
	6.506	-1204.43	6.011	0	-3.869	216.121	0	-0.04
	18.976	-1129.47	6.011	0	-3.869	167.874	0	-0.11
	27.108	-1080.59	6.011	0	-3.869	136.409	0	-0.16
	29.548	-1065.92	6.011	0	-3.869	126.969	0	-0.17
	37.951	-1015.41	6.011	0	-4.174	708.382	0	-0.21
	54.216	-917.635	6.011	0	-6.836	1058.721	0	-0.27
	79.426	-766.091	6.011	0	-11.834	1581.38	0	-0.32
	81.324	-754.684	6.011	0	-12.247	1617.836	0	-0.32
	92.438	-687.874	6.011	0	-14.751	1816.707	0	-0.32
	108.432	-591.733	6.011	0	-18.526	2044.856	0	-0.31
	135.54	-428.782	6.011	0	-25.148	2227.961	0	-0.28
	162.648	-388.013	0	-3.869	-31.813	2128.684	0	-0.23
	181.081	-459.335	0	-3.869	-36.26	1902.673	0	-0.19
	189.756	-492.898	0	-3.869	-38.305	1754.875	0	-0.19
	198.159	-525.412	0	-3.869	-40.242	1589.262	0	-0.18
	211.442	-576.805	0	-3.869	-43.185	1289.829	0	-0.17
	216.864	-597.782	0	-3.869	-44.331	1157.527	0	-0.16
	243.972	-702.666	0	-3.869	-49.414	456.921	0	-0.1
	255.9	-837.925	0	-31.813	-51.239	152.545	0	-0.06
	263.761	-1098.18	0	-34.293	-52.292	0	-39.219	-0.03
3	0	-1362.2	10.169	-37.208	-53.15	0	-221.022	0
	0	-1362.2	10.169	-37.208	-53.15	0	-221.022	0
	11.046	-1249.88	10.169	0	-8.197	220.457	0	-0.05
	17.259	-1186.7	10.169	0	-8.197	169.526	0	-0.08
	28.477	-1072.62	10.169	0	-8.197	77.567	0	-0.13
	34.518	-1011.2	10.169	0	-8.197	28.051	0	-0.14
	51.777	-835.69	10.169	0	-12.495	1053.777	0	-0.18
	64.549	-705.816	10.169	0	-16.815	1229.714	0	-0.19
	69.036	-660.185	10.169	0	-18.393	1274.383	0	-0.19
	86.295	-484.68	10.169	0	-24.654	1356.061	0	-0.18
	103.554	-537.85	0	-8.197	-31.017	1289.054	0	-0.16
	120.813	-679.325	0	-8.197	-37.196	1078.789	0	-0.15
	132.894	-778.358	0	-8.197	-41.255	858.864	0	-0.13
	138.072	-820.8	0	-8.197	-42.902	749.68	0	-0.12
	155.331	-962.275	0	-8.197	-47.968	328.626	0	-0.07
	156.021	-967.934	0	-8.197	-48.156	310.218	0	-0.07
4	0	-1103.75	38.383	-8.197	-52.305	0	-164.813	0
	0	-1103.75	38.383	-8.197	-52.305	0	-164.813	0
	10.896	-817.243	4.114	0	-1.875	372.416	0	-0.04
	20.954	-775.863	4.114	0	-1.875	353.559	0	-0.08
	41.908	-689.656	4.114	0	-5.237	877.948	0	-0.13
	55.319	-634.484	4.114	0	-7.878	1214.97	0	-0.15
	62.862	-603.449	4.114	0	-9.508	1394.635	0	-0.15
	66.843	-587.07	4.114	0	-10.408	1485.228	0	-0.16

81.93	-525.001	4.114	0	-14.037	1791.28	0	-0.16
83.816	-517.242	4.114	0	-14.512	1824.5	0	-0.16
104.77	-431.035	4.114	0	-20.028	2098.38	0	-0.15
125.724	-344.828	4.114	0	-25.903	2171.088	0	-0.13
146.678	-258.621	4.114	0	-32.063	2015.522	0	-0.11
156.945	-216.38	4.114	0	-35.165	1849.487	0	-0.09
167.632	-172.414	4.114	0	-38.443	1611.083	0	-0.08
171.404	-156.897	4.114	0	-39.612	1510.643	0	-0.07
182.3	-112.069	4.114	0	-43.018	1171.817	0	-0.05
188.586	-86.207	4.114	0	-45.003	943	0	-0.04
209.54	0	4.114	-51.641	-51.641	0	0	0

Support	Reac. Pos	Reac. Negative
1	7.306	-51.425
2	5.101	-54.164
3	9.687	-56.054
4	12.044	-55.039
5	4.114	-51.708

Id Ohio 5C1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (max	Corr. Mom	Corr. Mom	Deflect(max)
1	0	0	67.06	-10.52	67.06	0	0	0
	19.586	1115.994	56.979	0	56.979	1115.994	0	0.26
	39.172	1886.928	39.846	0	47.155	1847.162	0	0.48
	43.481	2016.878	37.697	0	45.056	1959.073	0	0.53
	58.758	2339.301	30.263	0	37.827	2222.633	0	0.65
	78.344	2485.204	6.04	-10.96	29.164	2284.831	0	0.74
	97.93	2395.474	1.918	-15.082	21.36	2091.815	0	0.76
	98.518	2390.346	1.652	-15.348	21.141	2082.762	0	0.76
	117.516	2100.793	0	-23.576	14.55	1709.878	0	0.7
	137.102	1595.819	0	-31.177	8.694	1191.95	0	0.56
	151.596	1128.917	0	-36.152	4.894	741.913	0	0.43
	156.688	950.377	0	-37.774	3.648	571.526	0	0.38
	161.585	772.903	0	-39.273	2.49	402.371	0	0.33
	172.944	341.412	0	-42.538	1.707	295.276	0	0.22
	176.274	300.961	1.707	0	1.707	300.961	0	0.18
	187.438	320.022	1.707	0	1.707	320.022	0	0.08
2	0	334.401	1.707	-5.362	74.906	0	-898.153	0
	0	334.401	1.707	-5.362	74.906	0	-898.153	0
	6.506	299.516	0	-5.362	73.5	0	-622.623	0.06
	18.976	232.652	0	-5.362	70.453	0	-112.496	0.18
	27.108	380.091	42.775	0	68.301	216.113	0	0.27
	29.548	470.982	42.172	0	67.63	313.652	0	0.29
	37.951	779.838	40.008	0	65.229	644.865	0	0.38
	54.216	1359.317	51.188	0	60.186	1258.125	0	0.55
	79.426	2157.771	42.923	0	51.616	2055.092	0	0.77
	81.324	2209.056	42.267	0	50.945	2104.613	0	0.78
	92.438	2478.488	22.779	0	46.977	2359.066	0	0.85
	108.432	2767.507	17.067	0	41.196	2610.356	0	0.91
	135.54	2938.839	7.254	-9.746	31.415	2706.984	0	0.93
	162.648	2798.447	0.245	-16.755	21.976	2403.305	0	0.87
	181.081	2480.354	0	-23.32	16.011	2007.285	0	0.77
	189.756	2271.999	0	-41.954	13.396	1781.527	0	0.72
	198.159	2039.787	0	-44.844	11.004	1545.352	0	0.66
	211.442	1614.023	0	-49.254	8.499	38.853	0	0.55
	216.864	1422.991	0	-50.984	8.499	84.932	0	0.5
	243.972	389.471	0	-42.836	8.499	315.323	0	0.23
	255.9	416.695	8.499	0	8.499	416.695	0	0.12
	263.761	483.508	8.499	0	8.499	483.508	0	0.06
3	0	545.714	8.499	-4.074	70.088	0	-607.036	0
	0	545.714	8.499	-4.074	70.088	0	-607.036	0

	11.046	500.716	0	-4.074	65.332	0	-97.267	0.07
	17.259	475.405	0	-4.074	62.471	163.336	0	0.11
	28.477	671.506	49.66	0	57.075	582.657	0	0.18
	34.518	872.343	46.77	0	54.052	779.692	0	0.22
	51.777	1334.002	23.128	0	45.067	1219.508	0	0.33
	64.549	1556.792	16.451	-0.549	38.266	1411.721	0	0.38
	69.036	1607.789	14.069	-2.931	35.882	1451.078	0	0.4
	86.295	1674.22	11.322	-5.678	26.895	1468.07	0	0.42
	103.554	1590.367	2.138	-14.862	18.469	1283.56	0	0.4
	120.813	1298.327	0	-23.86	14.719	0	-193.485	0.33
	132.894	985.284	0	-44.901	14.719	0	-15.658	0.26
	138.072	826.755	0	-47.411	14.719	60.554	0	0.22
	155.331	314.592	14.719	0	14.719	314.592	0	0.11
	156.021	324.754	14.719	0	14.719	324.754	0	0.1
4	0	568.631	14.719	-2.714	74.391	0	-779.369	0
	0	568.631	14.719	-2.714	74.391	0	-779.369	0
	10.896	539.062	0	-2.714	71.646	0	-278.575	0.08
	20.954	511.768	0	-2.714	68.78	177.982	0	0.15
	41.908	1157.837	53.183	0	61.981	1082.523	0	0.32
	55.319	1665.522	48.602	0	57.144	1586.959	0	0.42
	62.862	1920.852	45.864	0	54.28	1834.506	0	0.46
	66.843	2045.132	44.376	0	52.732	1953.117	0	0.49
	81.93	2439.12	23.094	0	46.665	2315.89	0	0.55
	83.816	2480.405	22.347	0	45.887	2350.846	0	0.56
	104.77	2779.942	13.757	-3.243	37.001	2567.014	0	0.6
	125.724	2840.8	9.005	-7.995	27.736	2442.519	0	0.59
	146.678	2638.528	0	-32.264	18.165	1949.097	0	0.51
	156.945	2421.842	0	-36.785	13.384	1565.643	0	0.46
	167.632	2101.223	0	-41.575	9.014	1145.991	0	0.39
	171.404	1964.347	0	-43.285	7.591	992.452	0	0.36
	182.3	1523.851	0	-55.941	5.693	0	-155.08	0.27
	188.586	1232.451	0	-58.817	5.693	0	-119.292	0.21
	209.54	0	5.693	-68.457	5.693	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	67.06	-10.52	-10.52	0	0	0
	19.586	-206.054	0	-10.52	-10.52	0	-206.054	-0.12
	39.172	-412.108	0	-10.52	-10.52	0	-412.108	-0.23
	43.481	-457.44	0	-10.52	-10.829	1159.847	0	-0.26
	58.758	-618.163	0	-10.52	-18.231	1691.401	0	-0.33
	78.344	-824.217	0	-10.52	-28.24	2117.102	0	-0.4
	97.93	-1030.27	0	-10.52	-37.819	2192.816	0	-0.45
	98.518	-1036.45	0	-10.52	-38.098	2190.071	0	-0.45
	117.516	-1236.33	0	-10.52	-46.818	1961.427	0	-0.46
	137.102	-1442.38	0	-10.52	-55.052	1482.395	0	-0.41
	151.596	-1594.86	0	-10.52	-60.545	1011.279	0	-0.34
	156.688	-1648.43	0	-10.52	-62.347	827.997	0	-0.31
	161.585	-1699.95	0	-10.52	-64.017	644.646	0	-0.28

	172.944	-1819.46	0	-10.52	-67.654	197.254	0	-0.2
	176.274	-1854.49	0	-10.52	-68.658	61.277	0	-0.17
	187.438	-1971.94	0	-10.52	-71.838	0	-408.076	-0.08
2	0	-2060.54	54.923	-10.52	-74.02	0	-780.53	0
	0	-2060.54	54.923	-10.52	-74.02	0	-780.53	0
	6.506	-1711.02	51.779	0	-5.362	299.516	0	-0.06
	18.976	-1596.92	8.499	0	-5.362	232.652	0	-0.16
	27.108	-1527.81	8.499	0	-5.362	189.045	0	-0.23
	29.548	-1507.07	8.499	0	-5.362	175.963	0	-0.24
	37.951	-1435.65	8.499	0	-5.362	130.902	0	-0.3
	54.216	-1297.42	8.499	0	-6.349	982.665	0	-0.38
	79.426	-1083.15	8.499	0	-12.758	1689.232	0	-0.45
	81.324	-1067.02	8.499	0	-13.293	1738.424	0	-0.45
	92.438	-972.564	8.499	0	-16.573	2011.622	0	-0.45
	108.432	-836.633	8.499	0	-21.69	2344.787	0	-0.44
	135.54	-606.242	8.499	0	-31.099	2674.822	0	-0.39
	162.648	-537.736	0	-5.362	-40.89	2622.76	0	-0.32
	181.081	-636.578	0	-5.362	-47.54	2351.186	0	-0.27
	189.756	-683.092	0	-5.362	-50.63	2159.308	0	-0.26
	198.159	-728.152	0	-5.362	-53.583	1937.121	0	-0.25
	211.442	-799.377	0	-5.362	-58.129	1520.001	0	-0.24
	216.864	-828.448	0	-5.362	-59.929	1329.421	0	-0.23
	243.972	-973.804	0	-5.362	-68.252	252.944	0	-0.14
	255.9	-1208.3	0	-45.755	-71.445	0	-251.331	-0.09
	263.761	-1588.21	0	-50.91	-73.361	0	-581.757	-0.04
3	0	-1971.76	14.719	-53.954	-74.963	0	-896.613	0
	0	-1971.76	14.719	-53.954	-74.963	0	-896.613	0
	11.046	-1809.17	14.719	0	-11.737	315.666	0	-0.08
	17.259	-1717.72	14.719	0	-11.737	242.739	0	-0.12
	28.477	-1552.59	14.719	0	-11.737	111.066	0	-0.18
	34.518	-1463.68	14.719	0	-11.737	40.165	0	-0.21
	51.777	-1209.64	14.719	0	-11.737	0	-162.41	-0.26
	64.549	-1021.65	14.719	0	-16.974	1231.526	0	-0.27
	69.036	-955.601	14.719	0	-19.076	1307.11	0	-0.28
	86.295	-701.562	14.719	0	-27.624	1478.594	0	-0.26
	103.554	-770.133	0	-11.737	-36.675	1441.393	0	-0.23
	120.813	-972.708	0	-11.737	-45.852	1186.953	0	-0.22
	132.894	-1114.51	0	-11.737	-52.135	888.321	0	-0.19
	138.072	-1175.28	0	-11.737	-54.754	732.97	0	-0.17
	155.331	-1377.86	0	-11.737	-63.067	107.247	0	-0.1
	156.021	-1385.96	0	-11.737	-63.383	79.283	0	-0.1
4	0	-1580.43	55.264	-11.737	-70.457	0	-648.809	0
	0	-1580.43	55.264	-11.737	-70.457	0	-648.809	0
	10.896	-1130.89	5.693	0	-2.714	539.062	0	-0.06
	20.954	-1073.63	5.693	0	-2.714	511.768	0	-0.11
	41.908	-954.338	5.693	0	-4.037	676.67	0	-0.18
	55.319	-877.991	5.693	0	-7.278	1122.398	0	-0.2
	62.862	-835.045	5.693	0	-9.318	1366.813	0	-0.21
	66.843	-812.38	5.693	0	-10.459	1492.474	0	-0.22



81.93	-726.489	5.693	0	-15.153	1933.609	0	-0.22
83.816	-715.753	5.693	0	-15.777	1983.599	0	-0.22
104.77	-596.461	5.693	0	-23.22	2432.803	0	-0.21
125.724	-477.169	5.693	0	-31.429	2634.235	0	-0.19
146.678	-357.877	5.693	0	-40.177	2525.592	0	-0.15
156.945	-299.423	5.693	0	-44.618	2346.638	0	-0.13
167.632	-238.584	5.693	0	-49.332	2067.422	0	-0.11
171.404	-217.112	5.693	0	-51.017	1945.614	0	-0.1
182.3	-155.08	5.693	0	-55.941	1523.851	0	-0.07
188.586	-119.292	5.693	0	-58.817	1232.451	0	-0.06
209.54	0	5.693	-68.457	-68.457	0	0	0

Support	Reac. Pos	Reac. Negative
1	10.52	-67.15
2	7.069	-79.772
3	13.871	-81.738
4	17.433	-80.235
5	5.693	-68.556

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	115.44	138.26	20466.60	N/A	N/A	1699.63	5.16	8.61
13.793	1228.91	1512.02	400.28	62.76	119.76	20466.60	5.75	9.59	1699.63	6.23	10.38
27.586	1731.27	2562.75	800.56	10.08	101.49	20466.60	3.28	5.46	1699.63	7.66	12.77
41.379	1507.08	3183.99	1200.83	-42.59	83.90	20466.60	2.68	4.47	1699.63	9.03	15.06
55.172	556.34	3347.89	1549.99	-95.27	66.07	20466.60	2.72	4.53	1699.63	10.99	18.32
68.965	-1120.96	3290.09	1937.48	-147.94	75.67	20466.60	2.66	4.44	1699.63	9.18	15.30
82.758	-3524.81	2978.16	2324.98	-200.62	92.51	20466.60	2.46	4.10	1699.63	7.17	11.95
93.379	-5870.89	2557.68	2623.35	-241.18	105.08	20466.60	2.25	3.76	1699.63	6.08	10.13
96.551	-6655.73	2406.63	2712.47	-253.62	108.72	29369.29	3.52	5.87	1889.12	6.61	11.02
109.93	-10401.10	1658.86	3088.34	-306.32	121.47	29369.29	2.36	3.94	1889.12	5.66	9.43
110.344	-10528.20	1633.20	3099.97	-308.00	121.84	36780.94	3.43	5.72	2174.35	6.71	11.18
120.965	-14029.10	937.93	3398.34	-351.29	131.00	36780.94	2.51	4.19	2174.35	6.04	10.07
124.137	-15164.71	962.53	3487.47	-364.64	133.59	50194.21	4.03	6.71	2713.10	7.72	12.88
137.93	-20596.58	1069.47	3874.96	-423.10	148.43	50194.21	2.79	4.64	2713.10	6.72	11.20
0	-20596.58	1050.91	3807.69	528.43	148.43	50194.21	2.83	4.72	2713.10	6.29	10.49
8.396	-16309.89	917.36	3029.78	492.78	145.93	50194.21	4.41	7.35	2713.10	6.54	10.91
16.521	-12441.29	788.12	2328.29	459.56	143.15	39523.43	4.62	7.70	2302.25	5.49	9.15
25.458	-8492.87	790.52	1632.41	424.08	139.68	30218.27	5.41	9.02	2085.93	5.06	8.44
27.083	-7808.80	864.48	1508.57	417.87	139.00	20466.60	3.15	5.25	1699.63	3.83	6.39
54.166	2107.74	2362.86	1203.23	314.44	123.34	20466.60	3.46	5.76	1699.63	4.82	8.04
72.041	7118.16	3385.86	1061.98	246.18	110.37	20466.60	1.53	2.54	1699.63	5.76	9.60
81.249	9217.96	3859.90	989.21	259.35	103.63	27107.64	1.81	3.01	1716.86	6.14	10.23
84.499	9879.30	4014.59	963.52	197.09	101.26	27107.64	1.64	2.73	1716.86	6.65	11.08
102.374	12753.47	4720.77	822.27	124.50	88.33	33918.43	1.69	2.82	1735.52	8.21	13.69
108.332	13421.40	4895.89	775.18	99.70	84.07	39666.64	2.09	3.49	1749.87	8.88	14.81
135.415	14595.23	5276.78	1097.19	-13.02	65.19	39666.64	1.81	3.01	1749.87	12.25	20.42
162.498	12716.29	5039.63	1525.70	-125.74	80.31	39666.64	2.12	3.53	1749.87	9.10	15.17
167.373	12053.88	4926.01	1602.83	-146.03	83.79	39666.64	2.24	3.74	1749.87	8.58	14.30
189.581	7810.47	4152.00	1954.21	-235.72	99.88	33918.43	2.64	4.40	1735.52	6.59	10.99
197.977	5692.56	3764.50	2087.04	-268.80	106.03	27107.64	2.41	4.02	1716.86	5.94	9.91
216.664	1.91	2787.01	2395.41	-340.27	119.70	27107.64	4.48	7.47	1716.86	4.91	8.18
235.622	-7138.08	1677.83	2696.96	-413.00	132.11	22495.19	2.26	3.76	1825.96	4.50	7.50
243.747	-10624.67	1190.59	2826.20	-445.27	136.10	32194.45	3.00	5.00	1969.51	4.71	7.85
246.997	-12092.82	994.31	2877.89	-458.22	137.62	32194.45	2.64	4.40	1969.51	4.60	7.67
256.476	-16621.18	896.45	3028.67	-497.27	141.81	43023.05	3.26	5.43	2111.62	4.76	7.94
270.83	-24200.05	964.03	3256.99	-558.80	147.51	55144.43	3.35	5.59	2499.64	5.54	9.23

HS20-44:

North Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location From Rear (Ft)	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C* (k-ft)	RF Inventory	RF Operating	C* (kips)	RF Inventory	RF Operating
	D	M+ L+I	M- L+I	V D L+I							
0	-24200.05	964.03	3256.99	476.35	147.51	55144.43	3.35	5.59	2499.64	5.87	9.79
11.451	-18610.52	767.58	3010.07	422.54	140.68	56147.74	4.89	8.16	2726.88	7.13	11.89
21.606	-14205.60	981.17	2802.43	376.27	134.84	56147.74	6.20	10.33	2726.88	7.65	12.75
25.711	-12569.43	1234.63	2718.49	357.66	132.34	44610.99	4.79	7.99	2527.05	7.18	11.97
39.539	-7649.69	2034.59	2435.75	297.52	123.32	44610.99	6.56	10.93	2527.05	8.00	13.33
43.212	-6493.33	2232.21	2360.64	282.20	120.50	31673.44	4.54	7.56	2100.14	6.63	11.05
61.145	-1723.39	3091.43	1993.96	207.64	104.65	22401.59	3.01	5.01	1820.21	6.83	11.38
64.818	-925.42	3261.59	1930.72	192.41	101.36	22401.59	3.00	4.99	1820.21	7.14	11.90
86.424	2538.20	3922.78	1486.20	102.79	81.92	20466.60	2.02	3.36	1699.63	8.81	14.68
108.03	3898.71	4127.72	1041.68	13.17	64.38	20466.60	1.72	2.87	1699.63	12.04	20.08
129.636	3156.08	3882.14	1267.65	-76.46	82.12	20466.60	1.94	3.24	1699.63	8.98	14.97
151.242	310.34	3167.49	1630.51	-166.08	100.83	20466.60	2.92	4.87	1699.63	6.78	11.30
163.773	-2303.84	2607.16	1845.49	-218.06	111.41	20466.60	3.09	5.15	1699.63	5.86	9.76
172.848	-4638.86	2146.24	2001.16	-255.80	118.86	20466.60	3.10	5.17	1699.63	5.30	8.84
189.269	-9813.65	1217.68	2282.85	-324.61	131.90	25609.30	2.59	4.32	2012.57	5.56	9.26
194.454	-11706.90	909.15	2371.81	-347.69	135.65	25609.30	2.02	3.37	2012.57	5.30	8.84
205.041	-15975.16	948.35	2553.43	-394.65	141.50	37980.43	3.11	5.18	2589.07	6.76	11.27
234.67	-21000.31	1173.66	3422.56	-445.17	147.44	49118.80	2.94	4.90	2790.61	6.91	11.52
0	-21000.31	1173.66	3422.56	537.72	147.44	49118.80	2.94	4.90	2790.61	6.54	10.90
9.075	-16296.03	1131.31	3299.05	499.12	144.69	48059.39	3.75	6.26	2558.06	6.08	10.14
21.606	-10362.68	1071.82	3125.57	447.88	140.19	48059.39	5.10	8.50	2558.06	6.49	10.83
22.038	-10169.52	1069.74	3119.53	446.12	140.03	37165.38	3.54	5.90	2204.93	5.35	8.91
43.212	-1607.63	2557.26	2855.87	362.72	130.31	37165.38	5.66	9.43	2204.93	6.13	10.22
64.818	5316.16	3951.90	2534.56	278.32	115.27	26347.80	2.27	3.78	2055.64	6.77	11.29
65.466	5495.74	3990.44	2524.76	275.79	114.81	26347.80	2.22	3.70	2055.64	6.81	11.36
77.566	8539.15	4660.24	2340.21	227.28	105.98	26347.80	1.51	2.51	2055.64	7.65	12.76
86.424	10390.37	5079.01	2203.06	190.68	99.36	33918.43	1.85	3.09	1735.52	6.90	11.50
93.554	11644.92	5362.78	2091.42	161.23	93.96	33918.43	1.61	2.69	1735.52	7.48	12.48
108.03	13535.43	5763.20	1859.02	99.97	82.67	39666.64	1.76	2.94	1749.88	9.03	15.05
129.636	14707.48	5793.34	1466.83	8.53	71.35	39666.64	1.63	2.72	1749.87	11.23	18.72
151.242	13903.95	5261.15	1084.83	-82.91	89.24	39666.64	1.89	3.15	1749.87	8.48	14.14
155.563	13506.18	5082.41	1009.66	-101.20	92.99	39666.64	2.00	3.34	1749.87	8.02	13.37
171.984	11287.56	4205.67	727.71	-169.03	107.79	39666.64	2.74	4.57	1749.87	6.54	10.91
172.848	11139.98	4149.19	713.03	-172.50	108.60	33918.43	2.16	3.60	1735.52	6.41	10.69
185.163	8711.53	3231.56	505.66	-221.88	118.55	27107.64	2.25	3.75	1716.86	5.55	9.26
194.454	6482.31	2399.52	351.42	-258.01	125.87	27107.64	3.59	5.98	1716.86	5.06	8.43
216.06	0.00	0.00	0.00	-342.04	142.82	20466.60	N/A	N/A	1699.63	4.05	6.75

HS20-44:

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	D	M+ L+I	M- L+I	V D L+I						
0	0.00	0.00	0.00	115.44	147.40	20466.60	N/A	N/A	1699.63	4.84	8.08
13.793	1228.91	1473.15	742.01	62.76	123.27	20466.60	5.90	9.84	1699.63	6.05	10.08
27.586	1731.27	2594.56	1484.02	10.08	101.46	20466.60	3.24	5.39	1699.63	7.66	12.77
41.379	1507.08	3369.02	2226.03	-42.59	82.09	20466.60	2.53	4.22	1699.63	9.23	15.39
55.172	556.34	3683.04	2873.27	-95.27	93.13	20466.60	2.47	4.12	1699.63	7.80	13.00
68.965	-1120.96	3787.31	3591.58	-147.94	107.05	20466.60	2.31	3.86	1699.63	6.49	10.82
82.758	-3524.81	3588.18	4309.90	-200.62	125.79	20466.60	1.70	2.83	1699.63	5.27	8.79
93.379	-5870.89	3238.66	4863.00	-241.18	141.65	20466.60	1.22	2.03	1699.63	4.51	7.52
96.551	-6655.73	3102.40	5028.22	-253.62	146.57	29369.29	1.90	3.17	1889.12	4.90	8.17
109.93	-10401.10	2369.79	5724.98	-306.32	165.58	29369.29	1.28	2.13	1889.12	4.15	6.92
110.344	-10528.20	2343.25	5746.62	-308.00	166.19	36780.94	1.85	3.09	2174.35	4.92	8.20
120.965	-14029.10	1798.06	6560.40	-351.29	181.94	36780.94	1.30	2.17	2174.35	4.35	7.25
124.137	-15164.71	1681.22	6918.05	-364.64	186.76	50194.21	2.03	3.38	2713.10	5.52	9.21
137.93	-20596.58	1622.94	8856.67	-423.10	265.60	50194.21	1.22	2.03	2713.10	3.75	6.26
0	-20596.58	1594.77	8702.91	528.43	265.60	50194.21	1.24	2.07	2713.10	3.52	5.86
8.396	-16309.89	1411.30	7089.03	492.78	242.53	50194.21	1.88	3.14	2713.10	3.94	6.56
16.521	-12441.29	1286.18	5672.12	459.56	230.99	39523.43	1.90	3.16	2302.25	3.40	5.67
25.458	-8492.87	1323.86	4254.00	424.08	218.39	30218.27	2.08	3.46	2085.93	3.24	5.40
27.083	-7808.80	1351.14	4015.87	417.87	216.12	20466.60	1.18	1.97	1699.63	2.47	4.11
54.166	2107.74	2464.93	1504.56	314.44	175.79	20466.60	3.31	5.52	1699.63	3.38	5.64
72.041	7118.16	3957.45	1259.04	246.18	149.45	20466.60	1.31	2.18	1699.63	4.25	7.09
81.249	9217.96	4792.88	1403.69	259.35	136.90	27107.64	1.45	2.42	1716.86	4.64	7.74
84.499	9879.30	5061.27	1454.74	197.09	132.64	27107.64	1.30	2.17	1716.86	5.07	8.46
102.374	12753.47	6282.47	1735.51	124.50	110.69	33918.43	1.27	2.12	1735.52	6.55	10.92
108.332	13421.40	6592.21	1829.11	99.70	103.93	39666.64	1.55	2.59	1749.87	7.18	11.98
135.415	14595.23	7375.66	2254.53	-13.02	79.94	39666.64	1.29	2.16	1749.87	9.99	16.65
162.498	12716.29	7131.39	2679.95	-125.74	106.49	39666.64	1.50	2.49	1749.87	6.87	11.44
167.373	12053.88	6978.54	2756.52	-146.03	111.85	39666.64	1.58	2.64	1749.87	6.43	10.71
189.581	7810.47	5869.70	3105.37	-235.72	138.66	33918.43	1.87	3.11	1735.52	4.75	7.92
197.977	5692.56	5278.47	3237.25	-268.80	149.83	27107.64	1.72	2.87	1716.86	4.21	7.01
216.664	1.91	3772.71	3708.98	-340.27	176.82	27107.64	3.31	5.52	1716.86	3.32	5.54
235.622	-7138.08	2450.29	4978.56	-413.00	205.48	22495.19	1.22	2.04	1825.96	2.89	4.82
243.747	-10624.67	2106.67	5925.07	-445.27	216.81	32194.45	1.43	2.38	1969.51	2.96	4.93
246.997	-12092.82	2004.93	6368.77	-458.22	221.39	32194.45	1.19	1.99	1969.51	2.86	4.77
256.476	-16621.18	1780.85	7829.70	-497.27	234.91	43023.05	1.26	2.10	2111.62	2.87	4.79
270.83	-24200.05	1861.00	10472.78	-558.80	281.27	55144.43	1.04	1.74	2499.64	2.91	4.84

HS20-44 LANE:

North Girder, Pier 37 to Pier 39

CUY-2-1441 Load Rating Analysis

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	D	M+ L+I	M- L+I	V						
0	-24200.05	1861.00	10472.78	476.35	281.27	55144.43	1.04	1.74	2499.64	3.08	5.14
11.451	-18610.52	1631.01	8303.49	422.54	224.12	56147.74	1.77	2.96	2726.88	4.48	7.46
21.606	-14205.60	1767.50	6708.38	376.27	208.15	56147.74	2.59	4.31	2726.88	4.95	8.26
25.711	-12569.43	1845.96	6133.67	357.66	201.81	44610.99	2.12	3.54	2527.05	4.71	7.85
39.539	-7649.69	2284.53	4607.59	297.52	180.95	44610.99	3.47	5.78	2527.05	5.45	9.09
43.212	-6493.33	2448.54	4315.86	282.20	175.17	31673.44	2.48	4.14	2100.14	4.56	7.60
61.145	-1723.39	3489.20	3526.96	207.64	146.43	22401.59	2.63	4.39	1820.21	4.88	8.13
64.818	-925.42	3764.89	3515.49	192.41	140.96	22401.59	2.59	4.33	1820.21	5.13	8.56
86.424	2538.20	4826.91	3319.77	102.79	111.53	20466.60	1.64	2.73	1699.63	6.47	10.79
108.03	3898.71	5128.12	3124.05	13.17	86.80	20466.60	1.38	2.31	1699.63	8.93	14.89
129.636	3156.08	4657.99	2928.33	-76.46	106.12	20466.60	1.62	2.70	1699.63	6.95	11.58
151.242	310.34	3408.47	2715.82	-166.08	134.80	20466.60	2.71	4.52	1699.63	5.07	8.46
163.773	-2303.84	2569.36	2851.66	-218.06	153.36	20466.60	2.82	4.71	1699.63	4.26	7.09
172.848	-4638.86	2189.79	3413.92	-255.80	167.69	20466.60	1.95	3.25	1699.63	3.76	6.26
189.269	-9813.65	1758.04	5087.10	-324.61	195.63	25609.30	1.16	1.94	2012.57	3.75	6.25
194.454	-11706.90	1688.97	5787.54	-347.69	204.62	25609.30	0.83	1.38	2012.57	3.51	5.86
205.041	-15975.16	1690.29	7436.79	-394.65	221.23	37980.43	1.07	1.78	2589.07	4.32	7.21
234.67	-21000.31	2000.68	9495.53	-445.17	273.40	49118.80	1.06	1.77	2790.61	3.73	6.22
0	-21000.31	2000.68	9495.53	537.72	273.40	49118.80	1.06	1.77	2790.61	3.53	5.88
9.075	-16296.03	1981.67	7926.64	499.12	230.11	48059.39	1.56	2.60	2558.06	3.82	6.37
21.606	-10362.68	2238.02	6106.55	447.88	213.75	48059.39	2.61	4.35	2558.06	4.26	7.10
22.038	-10169.52	2257.59	6054.41	446.12	213.19	37165.38	1.82	3.04	2204.93	3.51	5.86
43.212	-1607.63	3858.48	4515.11	362.72	185.39	37165.38	3.58	5.97	2204.93	4.31	7.18
64.818	5316.16	5879.69	4005.89	278.32	153.99	26347.80	1.52	2.54	2055.64	5.07	8.45
65.466	5495.74	5931.37	3990.40	275.79	153.10	26347.80	1.49	2.49	2055.64	5.11	8.52
77.566	8539.15	6795.66	3698.71	227.28	137.00	26347.80	1.03	1.72	2055.64	5.92	9.87
86.424	10390.37	7302.26	3481.94	190.68	125.82	33918.43	1.29	2.15	1735.52	5.45	9.08
93.554	11644.92	7628.47	3305.51	161.23	117.22	33918.43	1.13	1.89	1735.52	6.00	10.00
108.03	13535.43	8046.97	2938.19	99.97	100.68	39666.64	1.26	2.11	1749.88	7.41	12.36
129.636	14707.48	7856.31	2318.33	8.53	79.30	39666.64	1.21	2.01	1749.87	10.10	16.84
151.242	13903.95	6936.33	1714.59	-82.91	100.92	39666.64	1.43	2.39	1749.87	7.50	12.50
155.563	13506.18	6666.30	1595.77	-101.20	106.23	39666.64	1.53	2.55	1749.87	7.02	11.70
171.984	11287.56	5383.69	1150.14	-169.03	128.22	39666.64	2.14	3.57	1749.87	5.50	9.17
172.848	11139.98	5305.06	1126.95	-172.50	129.46	33918.43	1.69	2.81	1735.52	5.38	8.97
185.163	8711.53	4065.43	799.20	-221.88	145.83	27107.64	1.79	2.98	1716.86	4.51	7.52
194.454	6482.31	2984.82	555.42	-258.01	158.60	27107.64	2.88	4.81	1716.86	4.01	6.69
216.06	0.00	0.00	0.00	-342.04	190.50	20466.60	N/A	N/A	1699.63	3.04	5.06

HS20-44 LANE:

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	115.44	61.02	20466.60	---	N/A	1699.63	---	19.53
13.793	1228.91	672.28	167.55	62.76	53.25	20466.60	---	21.59	1699.63	---	23.38
27.586	1731.27	1149.63	335.11	10.08	45.53	20466.60	---	12.19	1699.63	---	28.50
41.379	1507.08	1441.00	502.66	-42.59	38.04	20466.60	---	9.88	1699.63	---	33.25
55.172	556.34	1510.82	648.81	-95.27	30.37	20466.60	---	10.05	1699.63	---	39.92
68.965	-1120.96	1487.17	811.02	-147.94	34.46	20466.60	---	9.83	1699.63	---	33.64
82.758	-3524.81	1350.81	973.22	-200.62	41.32	20466.60	---	9.05	1699.63	---	26.79
93.379	-5870.89	1172.59	1098.12	-241.18	46.40	20466.60	---	8.42	1699.63	---	22.98
96.551	-6655.73	1109.12	1135.43	-253.62	47.86	29369.29	---	14.04	1889.12	---	25.06
109.93	-10401.10	796.93	1292.76	-306.32	52.91	29369.29	---	9.43	1889.12	---	21.68
110.344	-10528.20	786.27	1297.63	-308.00	53.06	36780.94	---	13.69	2174.35	---	25.72
120.965	-14029.10	491.47	1422.52	-351.29	56.68	36780.94	---	10.03	2174.35	---	23.31
124.137	-15164.71	404.05	1459.83	-364.64	57.71	50194.21	---	16.06	2713.10	---	29.84
137.93	-20596.58	448.94	1622.04	-423.10	62.59	50194.21	---	11.11	2713.10	---	26.58
0	-20596.58	441.15	1593.87	528.43	62.59	50194.21	---	11.30	2713.10	---	24.90
8.396	-16309.89	385.09	1268.30	492.78	61.63	50194.21	---	17.58	2713.10	---	25.87
16.521	-12441.29	330.84	974.80	459.56	60.58	39523.43	---	18.43	2302.25	---	21.65
25.458	-8492.87	432.27	684.02	424.08	59.27	30218.27	---	21.57	2085.93	---	19.92
27.083	-7808.80	462.39	632.13	417.87	59.02	20466.60	---	12.55	1699.63	---	15.07
54.166	2107.74	1086.09	510.05	314.44	52.84	20466.60	---	12.55	1699.63	---	18.79
72.041	7118.16	1513.45	450.17	246.18	47.55	20466.60	---	5.70	1699.63	---	22.32
81.249	9217.96	1713.31	419.32	259.35	44.77	27107.64	---	6.79	1716.86	---	23.70
84.499	9879.30	1778.54	408.44	197.09	43.79	27107.64	---	6.17	1716.86	---	25.66
102.374	12753.47	2076.75	348.56	124.50	38.43	33918.43	---	6.42	1735.52	---	31.50
108.332	13421.40	2151.06	328.60	99.70	36.65	39666.64	---	7.95	1749.87	---	34.00
135.415	14595.23	2315.22	460.58	-13.02	28.76	39666.64	---	6.88	1749.87	---	46.34
162.498	12716.29	2212.18	640.46	-125.74	35.09	39666.64	---	8.04	1749.87	---	34.77
167.373	12053.88	2163.73	672.84	-146.03	36.54	39666.64	---	8.53	1749.87	---	32.84
189.581	7810.47	1836.25	820.33	-235.72	43.22	33918.43	---	9.96	1735.52	---	25.44
197.977	5692.56	1673.06	876.10	-268.80	45.76	27107.64	---	9.06	1716.86	---	22.99
216.664	1.91	1265.30	1005.54	-340.27	51.35	27107.64	---	16.48	1716.86	---	19.09
235.622	-7138.08	806.30	1132.13	-413.00	56.35	22495.19	---	8.98	1825.96	---	17.60
243.747	-10624.67	606.59	1186.38	-445.27	57.92	32194.45	---	11.92	1969.51	---	18.47
246.997	-12092.82	526.21	1208.08	-458.22	58.51	32194.45	---	10.49	1969.51	---	18.06
256.476	-16621.18	375.83	1271.37	-497.27	60.17	43023.05	---	12.96	2111.62	---	18.73
270.83	-24200.05	404.16	1367.22	-558.80	62.44	55144.43	---	13.33	2499.64	---	21.84

2F1

North Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-24200.05	404.16	1367.22	476.35	62.44	55144.43	---	13.33	2499.64	---	23.17
11.451	-18610.52	321.80	1260.50	422.54	59.91	56147.74	---	19.50	2726.88	---	27.96
21.606	-14205.60	522.06	1173.55	376.27	57.58	56147.74	---	24.70	2726.88	---	29.90
25.711	-12569.43	627.07	1138.40	357.66	56.59	44610.99	---	19.10	2527.05	---	28.03
39.539	-7649.69	957.43	1020.00	297.52	53.00	44610.99	---	26.14	2527.05	---	31.06
43.212	-6493.33	1039.20	988.55	282.20	51.87	31673.44	---	17.20	2100.14	---	25.71
61.145	-1723.39	1396.85	834.99	207.64	45.41	22401.59	---	11.10	1820.21	---	26.26
64.818	-925.42	1468.49	808.51	192.41	44.07	22401.59	---	11.10	1820.21	---	27.41
86.424	2538.20	1746.41	622.36	102.79	36.04	20466.60	---	7.56	1699.63	---	33.43
108.03	3898.71	1834.44	436.21	13.17	28.69	20466.60	---	6.46	1699.63	---	45.10
129.636	3156.08	1729.16	531.46	-76.46	36.08	20466.60	---	7.28	1699.63	---	34.12
151.242	310.34	1428.18	683.58	-166.08	43.79	20466.60	---	10.81	1699.63	---	26.06
163.773	-2303.84	1195.29	773.71	-218.06	48.10	20466.60	---	11.24	1699.63	---	22.65
172.848	-4638.86	1004.74	838.98	-255.80	51.11	20466.60	---	11.05	1699.63	---	20.58
189.269	-9813.65	619.22	957.08	-324.61	56.38	25609.30	---	10.33	2012.57	---	21.70
194.454	-11706.90	491.71	994.37	-347.69	57.88	25609.30	---	8.04	2012.57	---	20.74
205.041	-15975.16	397.13	1070.51	-394.65	60.20	37980.43	---	12.37	2589.07	---	26.53
234.67	-21000.31	491.48	1436.69	-445.17	62.44	49118.80	---	11.68	2790.61	---	27.25
0	-21000.31	491.48	1436.69	537.72	62.44	49118.80	---	11.68	2790.61	---	25.77
9.075	-16296.03	473.75	1384.84	499.12	61.38	48059.39	---	14.93	2558.06	---	23.93
21.606	-10362.68	538.78	1312.02	447.88	59.65	48059.39	---	20.28	2558.06	---	25.48
22.038	-10169.52	551.18	1309.48	446.12	59.58	37165.38	---	14.07	2204.93	---	20.98
43.212	-1607.63	1173.91	1198.81	362.72	55.79	37165.38	---	22.51	2204.93	---	23.90
64.818	5316.16	1757.38	1063.93	278.32	49.72	26347.80	---	8.51	2055.64	---	26.21
65.466	5495.74	1773.54	1059.82	275.79	49.53	26347.80	---	8.33	2055.64	---	26.36
77.566	8539.15	2056.02	982.35	227.28	45.94	26347.80	---	5.70	2055.64	---	29.47
86.424	10390.37	2233.89	924.77	190.68	43.24	33918.43	---	7.03	1735.52	---	26.47
93.554	11644.92	2354.97	877.91	161.23	41.02	33918.43	---	6.13	1735.52	---	28.62
108.03	13535.43	2527.61	780.36	99.97	36.38	39666.64	---	6.72	1749.88	---	34.25
129.636	14707.48	2538.62	615.73	8.53	31.67	39666.64	---	6.23	1749.87	---	42.24
151.242	13903.95	2308.32	455.38	-82.91	39.23	39666.64	---	7.20	1749.87	---	32.20
155.563	13506.18	2230.38	423.82	-101.20	40.81	39666.64	---	7.62	1749.87	---	30.51
171.984	11287.56	1835.72	305.47	-169.03	47.05	39666.64	---	10.47	1749.87	---	25.02
172.848	11139.98	1810.60	299.31	-172.50	47.39	33918.43	---	8.26	1735.52	---	24.53
185.163	8711.53	1405.47	212.26	-221.88	51.56	27107.64	---	8.64	1716.86	---	21.31
194.454	6482.31	1041.28	147.51	-258.01	54.62	27107.64	---	13.80	1716.86	---	19.45
216.06	0.00	0.00	0.00	-342.04	61.70	20466.60	---	N/A	1699.63	---	15.65

2F1

North Girder, Pier 39 to East Abutment



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	115.44	91.99	20466.60	---	N/A	1699.63	---	12.96
13.793	1228.91	1011.24	256.74	62.76	80.09	20466.60	---	14.35	1699.63	---	15.54
27.586	1731.27	1724.64	513.48	10.08	68.30	20466.60	---	8.12	1699.63	---	19.00
41.379	1507.08	2154.72	770.22	-42.59	56.89	20466.60	---	6.61	1699.63	---	22.23
55.172	556.34	2274.26	994.17	-95.27	45.22	20466.60	---	6.68	1699.63	---	26.80
68.965	-1120.96	2243.87	1242.72	-147.94	51.53	20466.60	---	6.52	1699.63	---	22.50
82.758	-3524.81	2025.47	1491.26	-200.62	62.12	20466.60	---	6.03	1699.63	---	17.82
93.379	-5870.89	1748.49	1682.64	-241.18	69.99	20466.60	---	5.65	1699.63	---	15.23
96.551	-6655.73	1650.29	1739.80	-253.62	72.26	29369.29	---	9.16	1889.12	---	16.60
109.93	-10401.10	1169.73	1980.89	-306.32	80.12	29369.29	---	6.15	1889.12	---	14.31
110.344	-10528.20	1153.29	1988.35	-308.00	80.35	36780.94	---	8.93	2174.35	---	16.98
120.965	-14029.10	698.98	2179.72	-351.29	85.98	36780.94	---	6.54	2174.35	---	15.37
124.137	-15164.71	618.69	2236.89	-364.64	87.59	50194.21	---	10.48	2713.10	---	19.66
137.93	-20596.58	687.44	2485.43	-423.10	95.65	50194.21	---	7.25	2713.10	---	17.40
0	-20596.58	675.50	2442.28	528.43	95.65	50194.21	---	7.38	2713.10	---	16.29
8.396	-16309.89	589.66	1943.60	492.78	94.15	50194.21	---	11.47	2713.10	---	16.93
16.521	-12441.29	506.59	1493.89	459.56	92.49	39523.43	---	12.02	2302.25	---	14.18
25.458	-8492.87	617.80	1048.35	424.08	90.43	30218.27	---	14.07	2085.93	---	13.05
27.083	-7808.80	665.95	968.67	417.87	90.03	20466.60	---	8.19	1699.63	---	9.88
54.166	2107.74	1619.74	779.71	314.44	80.38	20466.60	---	8.42	1699.63	---	12.35
72.041	7118.16	2267.84	688.17	246.18	72.21	20466.60	---	3.80	1699.63	---	14.70
81.249	9217.96	2573.46	641.01	259.35	67.93	27107.64	---	4.52	1716.86	---	15.62
84.499	9879.30	2673.49	624.37	197.09	66.43	27107.64	---	4.10	1716.86	---	16.91
102.374	12753.47	3135.89	532.84	124.50	58.18	33918.43	---	4.25	1735.52	---	20.81
108.332	13421.40	3252.29	502.32	99.70	55.46	39666.64	---	5.26	1749.87	---	22.47
135.415	14595.23	3516.80	705.25	-13.02	43.37	39666.64	---	4.53	1749.87	---	30.74
162.498	12716.29	3349.00	980.69	-125.74	53.06	39666.64	---	5.31	1749.87	---	23.00
167.373	12053.88	3272.64	1030.27	-146.03	55.28	39666.64	---	5.64	1749.87	---	21.71
189.581	7810.47	2764.29	1256.12	-235.72	65.54	33918.43	---	6.61	1735.52	---	16.77
197.977	5692.56	2513.81	1341.51	-268.80	69.45	27107.64	---	6.03	1716.86	---	15.15
216.664	1.91	1892.67	1539.72	-340.27	78.08	27107.64	---	11.02	1716.86	---	12.56
235.622	-7138.08	1198.57	1733.55	-413.00	85.83	22495.19	---	5.86	1825.96	---	11.55
243.747	-10624.67	895.61	1816.62	-445.27	88.28	32194.45	---	7.78	1969.51	---	12.12
246.997	-12092.82	773.28	1849.85	-458.22	89.21	32194.45	---	6.85	1969.51	---	11.85
256.476	-16621.18	575.78	1946.77	-497.27	91.78	43023.05	---	8.46	2111.62	---	12.28
270.83	-24200.05	619.18	2093.52	-558.80	95.31	55144.43	---	8.70	2499.64	---	14.31

3F1

North Girder, Pier 37 to Pier 39



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-24200.05	619.18	2093.52	476.35	95.31	55144.43	---	8.70	2499.64	---	15.18
11.451	-18610.52	493.01	1931.52	422.54	91.29	56147.74	---	12.73	2726.88	---	18.35
21.606	-14205.60	766.76	1798.28	376.27	87.67	56147.74	---	16.12	2726.88	---	19.63
25.711	-12569.43	927.68	1744.42	357.66	86.13	44610.99	---	12.47	2527.05	---	18.42
39.539	-7649.69	1432.27	1562.98	297.52	80.55	44610.99	---	17.06	2527.05	---	20.44
43.212	-6493.33	1556.97	1514.79	282.20	78.79	31673.44	---	11.48	2100.14	---	16.92
61.145	-1723.39	2102.45	1279.49	207.64	68.82	22401.59	---	7.38	1820.21	---	17.33
64.818	-925.42	2212.06	1238.91	192.41	66.74	22401.59	---	7.37	1820.21	---	18.10
86.424	2538.20	2640.07	953.67	102.79	54.39	20466.60	---	5.00	1699.63	---	22.15
108.03	3898.71	2780.34	668.43	13.17	43.13	20466.60	---	4.26	1699.63	---	30.00
129.636	3156.08	2613.13	814.20	-76.46	54.47	20466.60	---	4.82	1699.63	---	22.60
151.242	310.34	2150.52	1047.26	-166.08	66.35	20466.60	---	7.18	1699.63	---	17.20
163.773	-2303.84	1795.82	1185.33	-218.06	73.00	20466.60	---	7.48	1699.63	---	14.92
172.848	-4638.86	1504.69	1285.32	-255.80	77.66	20466.60	---	7.38	1699.63	---	13.54
189.269	-9813.65	917.87	1466.25	-324.61	85.82	25609.30	---	6.74	2012.57	---	14.26
194.454	-11706.90	720.68	1523.38	-347.69	88.15	25609.30	---	5.25	2012.57	---	13.62
205.041	-15975.16	608.54	1640.03	-394.65	91.76	37980.43	---	8.07	2589.07	---	17.40
234.67	-21000.31	753.12	2200.19	-445.17	95.29	49118.80	---	7.63	2790.61	---	17.85
0	-21000.31	753.12	2200.19	537.72	95.29	49118.80	---	7.63	2790.61	---	16.88
9.075	-16296.03	725.94	2120.79	499.12	93.63	48059.39	---	9.75	2558.06	---	15.68
21.606	-10362.68	782.67	2009.27	447.88	90.92	48059.39	---	13.24	2558.06	---	16.72
22.038	-10169.52	801.51	2005.38	446.12	90.82	37165.38	---	9.18	2204.93	---	13.76
43.212	-1607.63	1745.95	1835.89	362.72	84.88	37165.38	---	14.70	2204.93	---	15.71
64.818	5316.16	2638.15	1629.34	278.32	75.48	26347.80	---	5.67	2055.64	---	17.26
65.466	5495.74	2662.87	1623.04	275.79	75.19	26347.80	---	5.55	2055.64	---	17.36
77.566	8539.15	3095.94	1504.40	227.28	69.64	26347.80	---	3.79	2055.64	---	19.44
86.424	10390.37	3371.40	1416.23	190.68	65.47	33918.43	---	4.66	1735.52	---	17.48
93.554	11644.92	3560.22	1344.47	161.23	62.05	33918.43	---	4.06	1735.52	---	18.92
108.03	13535.43	3833.77	1195.06	99.97	54.91	39666.64	---	4.43	1749.88	---	22.69
129.636	14707.48	3849.05	942.95	8.53	47.65	39666.64	---	4.11	1749.87	---	28.07
151.242	13903.95	3483.73	697.38	-82.91	59.20	39666.64	---	4.77	1749.87	---	21.34
155.563	13506.18	3367.71	649.06	-101.20	61.61	39666.64	---	5.05	1749.87	---	20.20
171.984	11287.56	2776.20	467.80	-169.03	71.15	39666.64	---	6.93	1749.87	---	16.54
172.848	11139.98	2738.43	458.37	-172.50	71.67	33918.43	---	5.46	1735.52	---	16.22
185.163	8711.53	2127.78	325.06	-221.88	78.06	27107.64	---	5.71	1716.86	---	14.08
194.454	6482.31	1577.46	225.91	-258.01	82.75	27107.64	---	9.11	1716.86	---	12.84
216.06	0.00	0.00	0.00	-342.04	93.60	20466.60	---	N/A	1699.63	---	10.31

3F1

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	115.44	105.95	20466.60	---	N/A	1699.63	---	11.25
13.793	1228.91	1161.86	301.17	62.76	92.02	20466.60	---	12.49	1699.63	---	13.53
27.586	1731.27	1975.57	602.35	10.08	78.23	20466.60	---	7.09	1699.63	---	16.58
41.379	1507.08	2495.47	903.53	-42.59	64.92	20466.60	---	5.70	1699.63	---	19.48
55.172	556.34	2627.22	1166.23	-95.27	51.38	20466.60	---	5.78	1699.63	---	23.59
68.965	-1120.96	2585.99	1457.79	-147.94	58.77	20466.60	---	5.65	1699.63	---	19.73
82.758	-3524.81	2340.65	1749.35	-200.62	71.30	20466.60	---	5.22	1699.63	---	15.52
93.379	-5870.89	2020.27	1973.85	-241.18	80.64	20466.60	---	4.89	1699.63	---	13.22
96.551	-6655.73	1905.99	2040.91	-253.62	83.34	29369.29	---	7.81	1889.12	---	14.39
109.93	-10401.10	1343.98	2323.72	-306.32	92.72	29369.29	---	5.25	1889.12	---	12.37
110.344	-10528.20	1324.73	2332.47	-308.00	93.00	36780.94	---	7.62	2174.35	---	14.67
120.965	-14029.10	792.87	2556.97	-351.29	99.72	36780.94	---	5.58	2174.35	---	13.25
124.137	-15164.71	725.64	2624.02	-364.64	101.62	50194.21	---	8.94	2713.10	---	16.95
137.93	-20596.58	806.27	2915.58	-423.10	111.85	50194.21	---	6.18	2713.10	---	14.88
0	-20596.58	792.27	2864.96	528.43	111.85	50194.21	---	6.29	2713.10	---	13.93
8.396	-16309.89	691.59	2279.84	492.78	110.05	50194.21	---	9.78	2713.10	---	14.49
16.521	-12441.29	594.16	1752.21	459.56	108.05	39523.43	---	10.25	2302.25	---	12.14
25.458	-8492.87	690.61	1229.13	424.08	105.55	30218.27	---	12.00	2085.93	---	11.18
27.083	-7808.80	746.08	1135.56	417.87	105.05	20466.60	---	6.99	1699.63	---	8.47
54.166	2107.74	1868.61	913.40	314.44	93.51	20466.60	---	7.30	1699.63	---	10.62
72.041	7118.16	2634.76	806.17	246.18	83.84	20466.60	---	3.27	1699.63	---	12.66
81.249	9217.96	2993.48	750.93	259.35	78.81	27107.64	---	3.89	1716.86	---	13.47
84.499	9879.30	3110.69	731.43	197.09	77.03	27107.64	---	3.53	1716.86	---	14.59
102.374	12753.47	3647.28	624.20	124.50	67.34	33918.43	---	3.66	1735.52	---	17.98
108.332	13421.40	3781.19	588.46	99.70	64.14	39666.64	---	4.52	1749.87	---	19.43
135.415	14595.23	4078.06	827.16	-13.02	49.96	39666.64	---	3.90	1749.87	---	26.68
162.498	12716.29	3891.53	1150.21	-125.74	61.32	39666.64	---	4.57	1749.87	---	19.90
167.373	12053.88	3804.19	1208.36	-146.03	63.93	39666.64	---	4.85	1749.87	---	18.77
189.581	7810.47	3215.02	1473.26	-235.72	75.99	33918.43	---	5.69	1735.52	---	14.47
197.977	5692.56	2922.01	1573.40	-268.80	80.60	27107.64	---	5.19	1716.86	---	13.05
216.664	1.91	2189.40	1805.88	-340.27	90.80	27107.64	---	9.52	1716.86	---	10.80
235.622	-7138.08	1364.99	2033.21	-413.00	100.00	22495.19	---	5.00	1825.96	---	9.92
243.747	-10624.67	1005.29	2130.64	-445.27	102.93	32194.45	---	6.64	1969.51	---	10.39
246.997	-12092.82	859.96	2169.62	-458.22	104.04	32194.45	---	5.84	1969.51	---	10.16
256.476	-16621.18	675.08	2283.28	-497.27	107.12	43023.05	---	7.21	2111.62	---	10.52
270.83	-24200.05	725.98	2455.41	-558.80	111.31	55144.43	---	7.42	2499.64	---	12.25

4F1

North Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-24200.05	725.98	2455.41	476.35	111.31	55144.43	---	7.42	2499.64	---	12.99
11.451	-18610.52	578.04	2265.50	422.54	106.41	56147.74	---	10.85	2726.88	---	15.74
21.606	-14205.60	851.78	2109.23	376.27	102.10	56147.74	---	13.74	2726.88	---	16.86
25.711	-12569.43	1041.00	2046.05	357.66	100.27	44610.99	---	10.63	2527.05	---	15.82
39.539	-7649.69	1636.54	1833.24	297.52	93.62	44610.99	---	14.55	2527.05	---	17.59
43.212	-6493.33	1783.74	1776.72	282.20	91.53	31673.44	---	10.02	2100.14	---	14.57
61.145	-1723.39	2426.69	1500.74	207.64	79.73	22401.59	---	6.39	1820.21	---	14.96
64.818	-925.42	2555.04	1453.14	192.41	77.27	22401.59	---	6.38	1820.21	---	15.63
86.424	2538.20	3054.60	1118.58	102.79	62.72	20466.60	---	4.32	1699.63	---	19.21
108.03	3898.71	3213.46	784.01	13.17	49.52	20466.60	---	3.69	1699.63	---	26.13
129.636	3156.08	3023.54	954.63	-76.46	62.84	20466.60	---	4.16	1699.63	---	19.59
151.242	310.34	2483.02	1227.88	-166.08	76.84	20466.60	---	6.22	1699.63	---	14.85
163.773	-2303.84	2064.54	1389.78	-218.06	84.72	20466.60	---	6.51	1699.63	---	12.86
172.848	-4638.86	1721.11	1507.01	-255.80	90.25	20466.60	---	6.45	1699.63	---	11.65
189.269	-9813.65	1027.93	1719.14	-324.61	99.92	25609.30	---	5.75	2012.57	---	12.24
194.454	-11706.90	797.04	1786.13	-347.69	102.69	25609.30	---	4.47	2012.57	---	11.69
205.041	-15975.16	713.77	1922.90	-394.65	107.00	37980.43	---	6.89	2589.07	---	14.92
234.67	-21000.31	883.34	2580.28	-445.17	111.28	49118.80	---	6.50	2790.61	---	15.29
0	-21000.31	883.34	2580.28	537.72	111.28	49118.80	---	6.50	2790.61	---	14.46
9.075	-16296.03	851.47	2487.17	499.12	109.29	48059.39	---	8.31	2558.06	---	13.44
21.606	-10362.68	880.95	2356.38	447.88	106.02	48059.39	---	11.29	2558.06	---	14.34
22.038	-10169.52	903.28	2351.82	446.12	105.90	37165.38	---	7.83	2204.93	---	11.80
43.212	-1607.63	2019.82	2153.05	362.72	98.77	37165.38	---	12.53	2204.93	---	13.50
64.818	5316.16	3067.70	1910.81	278.32	87.62	26347.80	---	4.87	2055.64	---	14.87
65.466	5495.74	3096.73	1903.43	275.79	87.28	26347.80	---	4.77	2055.64	---	14.96
77.566	8539.15	3603.47	1764.29	227.28	80.71	26347.80	---	3.25	2055.64	---	16.78
86.424	10390.37	3922.79	1660.89	190.68	75.77	33918.43	---	4.00	1735.52	---	15.10
93.554	11644.92	4140.30	1576.73	161.23	71.74	33918.43	---	3.49	1735.52	---	16.36
108.03	13535.43	4450.89	1401.52	99.97	63.31	39666.64	---	3.81	1749.88	---	19.68
129.636	14707.48	4471.41	1105.85	8.53	54.78	39666.64	---	3.53	1749.87	---	24.42
151.242	13903.95	4055.51	817.86	-82.91	68.28	39666.64	---	4.10	1749.87	---	18.50
155.563	13506.18	3914.95	761.18	-101.20	71.10	39666.64	---	4.34	1749.87	---	17.51
171.984	11287.56	3209.30	548.62	-169.03	82.25	39666.64	---	5.99	1749.87	---	14.31
172.848	11139.98	3165.90	537.56	-172.50	82.86	33918.43	---	4.72	1735.52	---	14.03
185.163	8711.53	2462.66	381.22	-221.88	90.34	27107.64	---	4.93	1716.86	---	12.16
194.454	6482.31	1827.07	264.94	-258.01	95.84	27107.64	---	7.86	1716.86	---	11.09
216.06	0.00	0.00	0.00	-342.04	108.57	20466.60	---	N/A	1699.63	---	8.89

4F1

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	115.44	131.59	20466.60	---	N/A	1699.63	---	9.06
13.793	1228.91	1411.18	434.96	62.76	111.77	20466.60	---	10.29	1699.63	---	11.14
27.586	1731.27	2390.90	869.92	10.08	92.52	20466.60	---	5.86	1699.63	---	14.02
41.379	1507.08	3007.07	1304.88	-42.59	74.32	20466.60	---	4.73	1699.63	---	17.02
55.172	556.34	3130.27	1684.28	-95.27	56.44	20466.60	---	4.85	1699.63	---	21.48
68.965	-1120.96	3042.90	2105.35	-147.94	63.56	20466.60	---	4.81	1699.63	---	18.24
82.758	-3524.81	2777.16	2526.42	-200.62	83.00	20466.60	---	4.40	1699.63	---	13.33
93.379	-5870.89	2362.37	2850.65	-241.18	97.74	20466.60	---	3.46	1699.63	---	10.91
96.551	-6655.73	2210.01	2947.50	-253.62	102.05	29369.29	---	5.41	1889.12	---	11.75
109.93	-10401.10	1419.42	3355.94	-306.32	117.80	29369.29	---	3.63	1889.12	---	9.74
110.344	-10528.20	1391.51	3368.57	-308.00	118.26	36780.94	---	5.27	2174.35	---	11.54
120.965	-14029.10	1008.01	3692.79	-351.29	129.78	36780.94	---	3.86	2174.35	---	10.18
124.137	-15164.71	1034.45	3789.64	-364.64	133.06	50194.21	---	6.19	2713.10	---	12.94
137.93	-20596.58	1149.39	4210.71	-423.10	158.75	50194.21	---	4.28	2713.10	---	10.48
0	-20596.58	1129.43	4137.61	528.43	158.75	50194.21	---	4.35	2713.10	---	9.82
8.396	-16309.89	985.91	3290.91	492.78	155.20	50194.21	---	6.78	2713.10	---	10.27
16.521	-12441.29	847.02	2527.10	459.56	151.31	39523.43	---	7.11	2302.25	---	8.67
25.458	-8492.87	694.23	1765.89	424.08	146.62	30218.27	---	8.35	2085.93	---	8.05
27.083	-7808.80	662.92	1628.85	417.87	145.72	20466.60	---	4.87	1699.63	---	6.10
54.166	2107.74	2181.63	1232.33	314.44	126.65	20466.60	---	6.25	1699.63	---	7.84
72.041	7118.16	3300.72	1087.66	246.18	111.87	20466.60	---	2.61	1699.63	---	9.49
81.249	9217.96	3803.45	1013.13	259.35	104.31	27107.64	---	3.06	1716.86	---	10.17
84.499	9879.30	3965.45	986.83	197.09	101.66	27107.64	---	2.77	1716.86	---	11.05
102.374	12753.47	4698.72	842.15	124.50	87.30	33918.43	---	2.84	1735.52	---	13.87
108.332	13421.40	4878.66	793.93	99.70	82.61	39666.64	---	3.50	1749.87	---	15.09
135.415	14595.23	5236.92	1179.18	-13.02	61.98	39666.64	---	3.04	1749.87	---	21.51
162.498	12716.29	5023.15	1639.70	-125.74	78.43	39666.64	---	3.54	1749.87	---	15.56
167.373	12053.88	4908.97	1722.60	-146.03	82.25	39666.64	---	3.76	1749.87	---	14.59
189.581	7810.47	4105.06	2100.23	-235.72	100.09	33918.43	---	4.45	1735.52	---	10.98
197.977	5692.56	3697.55	2242.99	-268.80	106.98	27107.64	---	4.10	1716.86	---	9.83
216.664	1.91	2632.71	2574.40	-340.27	122.50	27107.64	---	7.92	1716.86	---	8.00
235.622	-7138.08	1380.59	2898.48	-413.00	137.11	22495.19	---	3.51	1825.96	---	7.23
243.747	-10624.67	901.82	3037.38	-445.27	142.09	32194.45	---	4.66	1969.51	---	7.53
246.997	-12092.82	918.32	3092.93	-458.22	144.01	32194.45	---	4.10	1969.51	---	7.34
256.476	-16621.18	966.43	3254.98	-497.27	149.36	43023.05	---	5.06	2111.62	---	7.55
270.83	-24200.05	1039.29	3520.68	-558.80	156.67	55144.43	---	5.17	2499.64	---	8.71

5C1

North Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-24200.05	1039.29	3520.68	476.35	156.67	55144.43	---	5.17	2499.64	---	9.23
11.451	-18610.52	827.51	3266.58	422.54	146.75	56147.74	---	7.52	2726.88	---	11.41
21.606	-14205.60	639.70	3041.25	376.27	139.45	56147.74	---	9.53	2726.88	---	12.34
25.711	-12569.43	831.59	2950.16	357.66	136.35	44610.99	---	7.37	2527.05	---	11.63
39.539	-7649.69	1741.88	2643.32	297.52	125.30	44610.99	---	10.09	2527.05	---	13.14
43.212	-6493.33	1964.37	2561.81	282.20	121.93	31673.44	---	6.98	2100.14	---	10.93
61.145	-1723.39	2917.41	2163.88	207.64	103.72	22401.59	---	5.32	1820.21	---	11.50
64.818	-925.42	3100.06	2095.25	192.41	99.99	22401.59	---	5.26	1820.21	---	12.08
86.424	2538.20	3802.89	1612.85	102.79	78.43	20466.60	---	3.47	1699.63	---	15.36
108.03	3898.71	4000.76	1130.45	13.17	59.60	20466.60	---	2.96	1699.63	---	21.71
129.636	3156.08	3761.52	1366.62	-76.46	78.83	20466.60	---	3.35	1699.63	---	15.62
151.242	310.34	3001.56	1757.80	-166.08	99.71	20466.60	---	5.14	1699.63	---	11.45
163.773	-2303.84	2384.78	1989.56	-218.06	111.85	20466.60	---	5.64	1699.63	---	9.74
172.848	-4638.86	1865.94	2157.39	-255.80	120.55	20466.60	---	5.15	1699.63	---	8.72
189.269	-9813.65	808.26	2461.07	-324.61	136.06	25609.30	---	4.02	2012.57	---	8.99
194.454	-11706.90	794.24	2556.97	-347.69	140.58	25609.30	---	3.13	2012.57	---	8.54
205.041	-15975.16	1029.16	2752.77	-394.65	147.94	37980.43	---	4.81	2589.07	---	10.79
234.67	-21000.31	1273.68	3680.52	-445.17	156.19	49118.80	---	4.56	2790.61	---	10.89
0	-21000.31	1273.68	3680.52	537.72	156.19	49118.80	---	4.56	2790.61	---	10.30
9.075	-16296.03	1227.71	3547.70	499.12	152.46	48059.39	---	5.83	2558.06	---	9.63
21.606	-10362.68	1163.15	3361.14	447.88	146.49	48059.39	---	7.92	2558.06	---	10.38
22.038	-10169.52	1160.91	3354.65	446.12	146.27	37165.38	---	5.49	2204.93	---	8.55
43.212	-1607.63	2376.89	3071.11	362.72	133.91	37165.38	---	8.79	2204.93	---	9.96
64.818	5316.16	3894.11	2725.59	278.32	116.14	26347.80	---	3.84	2055.64	---	11.22
65.466	5495.74	3934.76	2715.05	275.79	115.60	26347.80	---	3.75	2055.64	---	11.29
77.566	8539.15	4629.10	2516.58	227.28	105.36	26347.80	---	2.53	2055.64	---	12.85
86.424	10390.37	5057.87	2369.10	190.68	97.73	33918.43	---	3.10	1735.52	---	11.71
93.554	11644.92	5344.21	2249.05	161.23	91.51	33918.43	---	2.70	1735.52	---	12.83
108.03	13535.43	5726.04	1999.13	99.97	78.62	39666.64	---	2.96	1749.88	---	15.85
129.636	14707.48	5771.67	1577.38	8.53	66.99	39666.64	---	2.74	1749.87	---	19.97
151.242	13903.95	5281.85	1166.60	-82.91	86.06	39666.64	---	3.14	1749.87	---	14.68
155.563	13506.18	5111.03	1085.75	-101.20	90.07	39666.64	---	3.33	1749.87	---	13.82
171.984	11287.56	4205.49	782.55	-169.03	105.97	39666.64	---	4.57	1749.87	---	11.11
172.848	11139.98	4146.48	766.77	-172.50	106.84	33918.43	---	3.61	1735.52	---	10.88
185.163	8711.53	3208.58	543.77	-221.88	117.70	27107.64	---	3.78	1716.86	---	9.34
194.454	6482.31	2397.06	377.91	-258.01	125.74	27107.64	---	5.99	1716.86	---	8.45
216.06	0.00	0.00	0.00	-342.04	144.39	20466.60	---	N/A	1699.63	---	6.69

5C1

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location From Rear (Ft)	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	D	M+	M-	V							
0	0.00	0.00	0.00	150.33	118.99	20466.60	N/A	N/A	1699.63	5.83	9.71
16.623	2054.10	1540.26	302.29	96.81	102.78	20466.60	5.32	8.88	1699.63	7.06	11.76
33.246	3218.71	2600.92	604.59	43.31	86.78	20466.60	2.88	4.81	1699.63	8.73	14.55
49.869	3493.83	3219.97	906.89	-10.20	70.62	20466.60	2.28	3.80	1699.63	11.01	18.35
66.492	2879.47	3466.26	1209.18	-63.71	55.15	20466.60	2.22	3.71	1699.63	13.51	22.52
83.115	1375.61	3375.04	1511.47	-117.22	66.63	20466.60	2.55	4.25	1699.63	10.70	17.84
99.738	-1017.73	2936.43	1773.53	-170.73	80.93	20466.60	3.00	5.01	1699.63	8.41	14.03
116.361	-4300.55	2324.94	2069.12	-224.24	94.68	20466.60	2.95	4.92	1699.63	6.85	11.43
127.166	-6911.38	1833.18	2261.25	-259.02	102.88	20466.60	2.34	3.90	1699.63	6.10	10.18
132.984	-8474.65	1545.32	2364.71	-278.38	106.47	28590.33	3.42	5.71	1848.92	6.44	10.73
138.303	-10002.65	1269.65	2459.30	-296.14	109.59	28590.33	2.92	4.87	1848.92	6.16	10.26
149.607	-13573.24	644.82	2660.30	-335.70	115.77	40749.48	4.00	6.67	2299.10	7.41	12.36
152.267	-14478.54	576.41	2707.59	-345.07	117.15	40749.48	3.73	6.22	2299.10	7.28	12.13
166.23	-19655.52	629.27	2955.89	-396.53	125.77	53037.44	4.29	7.14	2714.82	8.06	13.43
0	-19655.52	624.88	2935.25	477.13	125.77	53037.44	4.32	7.19	2714.82	7.67	12.79
8.937	-15538.69	532.90	2232.38	444.19	123.25	53037.44	6.78	11.30	2714.82	7.99	13.32
17.604	-11821.25	443.70	1811.48	413.73	120.50	40749.48	6.46	10.76	2299.10	6.74	11.23
26.541	-8257.37	840.76	1727.52	383.86	117.34	30630.54	5.31	8.85	1952.28	5.71	9.51
27.083	-8049.92	865.45	1722.43	382.12	117.14	20466.60	2.68	4.46	1699.63	4.73	7.89
54.166	1118.39	2222.59	1452.52	294.94	103.64	20466.60	3.94	6.57	1699.63	5.85	9.76
72.582	6004.18	3129.43	1281.34	235.65	92.33	20466.60	1.86	3.11	1699.63	6.95	11.59
81.249	7921.05	3510.43	1200.78	259.35	86.99	27107.64	2.21	3.68	1716.86	7.31	12.18
83.686	8414.97	3610.25	1178.12	198.57	85.50	27107.64	2.06	3.44	1716.86	7.86	13.11
97.77	10868.19	4110.98	1047.22	149.82	76.93	33918.43	2.22	3.70	1735.52	9.23	15.39
108.332	12250.88	4392.63	949.04	111.99	70.60	40838.18	2.61	4.36	1752.75	10.49	17.49
116.728	13064.87	4554.42	871.00	81.92	65.64	40838.18	2.41	4.02	1752.75	11.56	19.27
135.415	13956.08	4709.13	760.66	13.47	54.85	45528.02	2.68	4.47	1764.23	14.68	24.47
162.498	12977.37	4493.56	1036.45	-85.74	68.65	45528.02	2.94	4.90	1764.23	11.09	18.49
170.081	12221.86	4329.71	1113.67	-113.52	73.18	45528.02	3.15	5.26	1764.23	10.18	16.97
189.581	9327.29	3706.77	1312.24	-183.37	85.04	40838.18	3.57	5.95	1752.75	8.21	13.68
190.123	9227.44	3685.55	1317.76	-185.31	85.38	40838.18	3.61	6.01	1752.75	8.16	13.60
204.206	6274.53	3069.14	1461.17	-234.05	94.13	33918.43	3.87	6.45	1735.52	7.01	11.68
215.581	3396.19	2495.18	1577.00	-272.04	101.27	27107.64	4.19	6.99	1716.86	6.20	10.34
216.664	3099.60	2437.82	1588.03	-275.53	101.96	20466.60	3.11	5.18	1699.63	6.06	10.11
243.747	-5543.05	974.18	1883.68	-362.71	116.21	20466.60	3.24	5.41	1699.63	4.87	8.12
249.434	-7657.98	669.92	1942.22	-381.02	118.44	20466.60	2.49	4.16	1699.63	4.69	7.81
258.913	-11422.25	651.89	2039.77	-413.33	121.84	35414.96	4.65	7.75	2291.20	6.63	11.06
270.83	-16604.76	691.09	2595.87	-456.54	125.55	48676.07	4.81	8.02	2707.93	7.76	12.94

HS20-44:

North Girder, Pier 37 to Pier 39



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-16604.76	691.09	2595.87	348.40	125.55	48676.07	4.81	8.02	2707.93	8.28	13.80
16.514	-11345.32	556.18	2313.31	288.72	115.33	48676.07	6.76	11.27	2707.93	9.32	15.54
20.388	-10252.58	760.46	2247.04	275.47	113.19	33203.35	4.08	6.79	2179.09	7.41	12.36
32.417	-7184.89	1359.96	2041.22	234.66	106.09	33203.35	5.39	8.98	2179.09	8.14	13.57
40.776	-5335.77	1742.29	1898.20	207.76	100.76	20466.60	3.28	5.48	1699.63	6.54	10.90
61.164	-1769.06	2526.47	1549.37	142.13	84.44	20466.60	3.31	5.52	1699.63	8.27	13.78
81.552	459.60	3056.02	1215.30	76.50	68.04	20466.60	3.00	4.99	1699.63	10.84	18.07
94.193	1169.41	3185.64	996.36	35.81	58.12	20466.60	2.74	4.57	1699.63	13.11	21.85
101.94	1350.22	3194.67	862.18	10.87	54.95	20466.60	2.70	4.50	1699.63	14.14	23.56
122.328	902.80	3002.14	1087.26	-54.76	70.81	20466.60	2.96	4.94	1699.63	10.60	17.67
142.716	-882.67	2439.75	1368.24	-120.39	86.91	20466.60	3.65	6.08	1699.63	8.18	13.64
156.172	-2794.06	1946.99	1562.40	-163.70	97.41	20466.60	3.98	6.64	1699.63	7.03	11.73
163.104	-4006.31	1657.57	1662.43	-186.08	102.61	27018.82	6.05	10.08	2094.39	8.32	13.87
183.492	-8476.06	689.42	1956.62	-252.56	114.35	27018.82	3.77	6.28	2094.39	7.12	11.86
185.939	-9103.81	585.50	1991.92	-260.61	115.63	27018.82	3.51	5.86	2094.39	7.00	11.66
203.88	-14342.66	892.48	2408.73	-323.45	125.22	39013.64	3.90	6.50	2642.47	8.18	13.63
0	-14342.66	901.89	2434.13	430.38	125.22	39013.64	3.86	6.43	2642.47	7.67	12.78
12.536	-9222.77	848.67	2290.52	386.48	120.79	39013.64	5.44	9.06	2642.47	8.16	13.61
21.248	-5980.65	851.46	2190.72	357.86	117.30	26943.96	4.03	6.72	2090.09	6.38	10.64
42.496	885.73	2082.18	1943.92	288.57	107.44	26943.96	5.71	9.52	2090.09	7.36	12.26
58.007	4972.52	2906.21	1766.54	238.45	97.35	26943.96	3.25	5.41	2090.09	8.43	14.05
63.744	6285.52	3184.39	1700.93	219.29	93.58	27107.64	2.74	4.57	1716.86	7.05	11.75
69.056	7403.24	3426.12	1640.18	201.54	90.06	27107.64	2.35	3.92	1716.86	7.44	12.41
83.505	9954.00	3986.57	1474.95	151.54	80.44	33918.43	2.42	4.04	1735.52	8.81	14.69
84.992	10175.43	4035.18	1457.94	146.21	79.45	40838.18	3.15	5.26	1752.75	9.06	15.11
106.24	12473.48	4513.12	1214.95	70.10	65.22	40838.18	2.51	4.19	1752.75	11.74	19.57
127.488	13154.34	4593.47	971.96	-6.01	57.55	40838.18	2.38	3.97	1752.75	13.97	23.29
148.736	12218.00	4225.65	728.97	-82.12	72.91	40838.18	2.72	4.54	1752.75	10.40	17.34
160.422	11013.69	3823.20	595.33	-123.98	82.04	40838.18	3.20	5.33	1752.75	8.94	14.90
169.984	9670.01	3377.75	485.98	-157.08	89.90	33918.43	2.91	4.86	1735.52	7.85	13.08
174.446	8934.67	3131.35	434.95	-172.52	93.23	33918.43	3.28	5.47	1735.52	7.47	12.45
185.92	6735.35	2383.12	303.74	-210.84	101.61	27107.64	3.55	5.92	1716.86	6.54	10.91
191.232	5569.94	1979.97	242.99	-227.94	105.52	20466.60	3.08	5.13	1699.63	6.13	10.22
212.48	0.00	0.00	0.00	-296.34	121.23	20466.60	N/A	N/A	1699.63	5.00	8.33

HS20-44:

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location From Rear (Ft)	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	D	M+	M-	V							
0	0.00	0.00	0.00	150.33	132.98	20466.60	N/A	N/A	1699.63	5.21	8.69
16.623	2054.10	1575.81	550.25	96.81	109.32	20466.60	5.20	8.68	1699.63	6.63	11.06
33.246	3218.71	2745.27	1100.51	43.31	88.11	20466.60	2.73	4.56	1699.63	8.59	14.33
49.869	3493.83	3513.77	1650.76	-10.20	68.70	20466.60	2.09	3.48	1699.63	11.31	18.86
66.492	2879.47	3890.29	2201.02	-63.71	71.29	20466.60	1.98	3.30	1699.63	10.45	17.42
83.115	1375.61	3887.40	2751.27	-117.22	84.96	20466.60	2.21	3.69	1699.63	8.39	13.99
99.738	-1017.73	3443.15	3228.29	-170.73	103.01	20466.60	2.56	4.27	1699.63	6.61	11.02
116.361	-4300.55	2749.27	3766.33	-224.24	123.26	20466.60	1.82	3.03	1699.63	5.26	8.78
127.166	-6911.38	2128.80	4116.07	-259.02	137.12	20466.60	1.29	2.14	1699.63	4.58	7.64
132.984	-8474.65	1767.03	4330.23	-278.38	144.01	28590.33	1.87	3.12	1848.92	4.76	7.93
138.303	-10002.65	1494.29	4644.77	-296.14	150.41	28590.33	1.55	2.58	1848.92	4.49	7.48
149.607	-13573.24	1063.72	5653.59	-335.70	164.31	40749.48	1.88	3.14	2299.10	5.22	8.71
152.267	-14478.54	985.27	5940.71	-345.07	167.65	40749.48	1.70	2.84	2299.10	5.09	8.48
166.23	-19655.52	858.26	7733.53	-396.53	222.38	53037.44	1.64	2.73	2714.82	4.56	7.60
0	-19655.52	852.27	7679.54	477.13	222.38	53037.44	1.65	2.75	2714.82	4.34	7.24
8.937	-15538.69	754.42	6209.36	444.19	206.66	53037.44	2.44	4.06	2714.82	4.77	7.94
17.604	-11821.25	804.12	4925.32	413.73	196.16	40749.48	2.37	3.96	2299.10	4.14	6.90
26.541	-8257.37	965.24	3778.41	383.86	185.45	30630.54	2.43	4.05	1952.28	3.61	6.02
27.083	-8049.92	978.22	3715.61	382.12	184.80	20466.60	1.24	2.07	1699.63	3.00	5.00
54.166	1118.39	2359.79	1811.99	294.94	150.64	20466.60	3.71	6.19	1699.63	4.03	6.71
72.582	6004.18	3877.45	1711.98	235.65	127.78	20466.60	1.50	2.51	1699.63	5.02	8.38
81.249	7921.05	4523.84	1735.08	259.35	117.84	27107.64	1.71	2.85	1716.86	5.40	8.99
83.686	8414.97	4690.55	1741.57	198.57	115.14	27107.64	1.59	2.65	1716.86	5.84	9.73
97.77	10868.19	5520.43	1779.10	149.82	100.33	33918.43	1.65	2.75	1735.52	7.08	11.80
108.332	12250.88	5991.18	1807.25	111.99	90.09	40838.18	1.92	3.19	1752.75	8.22	13.70
116.728	13064.87	6271.36	1829.63	81.92	82.47	40838.18	1.75	2.92	1752.75	9.20	15.34
135.415	13956.08	6593.64	1879.43	13.47	67.08	45528.02	1.91	3.19	1764.23	12.00	20.00
162.498	12977.37	6320.39	1951.61	-85.74	85.54	45528.02	2.09	3.48	1764.23	8.90	14.84
170.081	12221.86	6087.33	1971.82	-113.52	92.66	45528.02	2.24	3.74	1764.23	8.04	13.40
189.581	9327.29	5177.38	2023.79	-183.37	112.74	40838.18	2.56	4.26	1752.75	6.19	10.32
190.123	9227.44	5145.77	2025.23	-185.31	113.34	40838.18	2.58	4.31	1752.75	6.15	10.25
204.206	6274.53	4206.75	2062.76	-234.05	129.56	33918.43	2.82	4.70	1735.52	5.09	8.49
215.581	3396.19	3344.39	2169.60	-272.04	143.75	27107.64	3.13	5.21	1716.86	4.37	7.29
216.664	3099.60	3264.60	2191.84	-275.53	145.15	20466.60	2.32	3.87	1699.63	4.26	7.10
243.747	-5543.05	1722.48	3744.96	-362.71	179.28	20466.60	1.63	2.72	1699.63	3.16	5.26
249.434	-7657.98	1570.29	4369.33	-381.02	186.10	20466.60	1.11	1.85	1699.63	2.98	4.97
258.913	-11422.25	1466.52	5638.07	-413.33	197.59	35414.96	1.68	2.80	2291.20	4.09	6.82
270.83	-16604.76	1573.49	7488.30	-456.54	236.75	48676.07	1.67	2.78	2707.93	4.12	6.86

HS20-44 LANE:

North Girder, Pier 37 to Pier 39



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location From Rear (Ft)	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C* (k-ft)	RF Inventory	RF Operating	C* (kips)	RF Inventory	RF Operating
	D	M+ L+I	M- L+I	V D L+I							
0	-16604.76	1573.49	7488.30	348.40	236.75	48676.07	1.67	2.78	2707.93	4.39	7.32
16.514	-11345.32	1429.60	5353.97	288.72	169.21	48676.07	2.92	4.87	2707.93	6.35	10.59
20.388	-10252.58	1471.04	4941.12	275.47	164.38	33203.35	1.85	3.09	2179.09	5.10	8.51
32.417	-7184.89	1709.16	3903.02	234.66	149.70	33203.35	2.82	4.70	2179.09	5.77	9.62
40.776	-5335.77	1964.76	3397.62	207.76	139.79	20466.60	1.84	3.06	1699.63	4.71	7.86
61.164	-1769.06	2919.05	2994.83	142.13	113.90	20466.60	2.80	4.66	1699.63	6.13	10.22
81.552	459.60	3611.31	2858.56	76.50	91.45	20466.60	2.54	4.23	1699.63	8.06	13.44
94.193	1169.41	3762.91	2751.22	35.81	79.31	20466.60	2.32	3.87	1699.63	9.60	16.01
101.94	1350.22	3758.03	2685.44	10.87	72.54	20466.60	2.29	3.82	1699.63	10.71	17.85
122.328	902.80	3390.88	2512.32	-54.76	89.95	20466.60	2.62	4.37	1699.63	8.34	13.91
142.716	-882.67	2489.78	2310.78	-120.39	112.63	20466.60	3.58	5.96	1699.63	6.31	10.53
156.172	-2794.06	1811.87	2381.88	-163.70	129.44	20466.60	3.26	5.43	1699.63	5.29	8.82
163.104	-4006.31	1612.18	2701.37	-186.08	138.53	27018.82	3.72	6.20	2094.39	6.16	10.27
183.492	-8476.06	1284.85	4310.70	-252.56	163.14	27018.82	1.71	2.85	2094.39	4.99	8.32
185.939	-9103.81	1271.14	4567.65	-260.61	166.17	27018.82	1.53	2.55	2094.39	4.87	8.12
203.88	-14342.66	1560.53	6850.49	-323.45	227.41	39013.64	1.37	2.28	2642.47	4.50	7.51
0	-14342.66	1576.99	6922.72	430.38	227.41	39013.64	1.36	2.26	2642.47	4.22	7.04
12.536	-9222.77	1561.82	5126.25	386.48	182.59	39013.64	2.43	4.05	2642.47	5.40	9.00
21.248	-5980.65	1784.78	4124.50	357.86	171.94	26943.96	2.14	3.57	2090.09	4.35	7.26
42.496	885.73	3075.89	2857.93	288.57	146.46	26943.96	3.86	6.44	2090.09	5.40	9.00
58.007	4972.52	4263.40	2597.15	238.45	126.26	26943.96	2.21	3.69	2090.09	6.50	10.83
63.744	6285.52	4635.21	2500.69	219.29	119.25	27107.64	1.88	3.14	1716.86	5.53	9.22
69.056	7403.24	4946.65	2411.38	201.54	112.97	27107.64	1.63	2.72	1716.86	5.93	9.89
83.505	9954.00	5627.66	2168.46	151.54	96.89	33918.43	1.72	2.86	1735.52	7.32	12.20
84.992	10175.43	5683.66	2143.45	146.21	95.32	40838.18	2.24	3.73	1752.75	7.55	12.59
106.24	12473.48	6187.17	1786.21	70.10	74.52	40838.18	1.83	3.06	1752.75	10.27	17.13
127.488	13154.34	6125.45	1428.97	-6.01	61.18	40838.18	1.79	2.98	1752.75	13.14	21.91
148.736	12218.00	5484.92	1071.72	-82.12	81.31	40838.18	2.10	3.50	1752.75	9.33	15.55
160.422	11013.69	4881.96	875.24	-123.98	94.18	40838.18	2.50	4.17	1752.75	7.79	12.98
169.984	9670.01	4255.11	714.48	-157.08	105.78	33918.43	2.31	3.85	1735.52	6.67	11.12
174.446	8934.67	3921.26	639.46	-172.52	110.98	33918.43	2.62	4.37	1735.52	6.28	10.46
185.92	6735.35	2941.58	446.55	-210.84	124.67	27107.64	2.87	4.79	1716.86	5.33	8.89
191.232	5569.94	2428.72	357.24	-227.94	131.32	20466.60	2.51	4.18	1699.63	4.92	8.21
212.48	0.00	0.00	0.00	-296.34	159.77	20466.60	N/A	N/A	1699.63	3.79	6.32

HS20-44 LANE:

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	150.33	52.06	20466.60	---	N/A	1699.63	---	22.23
16.623	2054.10	678.26	126.62	96.81	45.26	20466.60	---	20.18	1699.63	---	26.75
33.246	3218.71	1154.31	253.24	43.31	38.51	20466.60	---	10.85	1699.63	---	32.82
49.869	3493.83	1438.02	379.87	-10.20	31.64	20466.60	---	8.52	1699.63	---	41.00
66.492	2879.47	1545.25	506.49	-63.71	25.01	20466.60	---	8.32	1699.63	---	49.73
83.115	1375.61	1506.70	633.11	-117.22	29.82	20466.60	---	9.54	1699.63	---	39.92
99.738	-1017.73	1316.78	742.88	-170.73	35.64	20466.60	---	11.18	1699.63	---	31.89
116.361	-4300.55	1058.82	866.69	-224.24	41.20	20466.60	---	10.81	1699.63	---	26.29
127.166	-6911.38	854.11	947.17	-259.02	44.49	20466.60	---	9.32	1699.63	---	23.57
132.984	-8474.65	735.29	990.50	-278.38	45.89	28590.33	---	13.65	1848.92	---	24.92
138.303	-10002.65	621.75	1030.12	-296.14	47.12	28590.33	---	11.64	1848.92	---	23.90
149.607	-13573.24	362.87	1114.31	-335.70	49.56	40749.48	---	15.95	2299.10	---	28.91
152.267	-14478.54	298.39	1134.12	-345.07	50.11	40749.48	---	14.87	2299.10	---	28.40
166.23	-19655.52	264.58	1238.13	-396.53	53.11	53037.44	---	17.08	2714.82	---	31.86
0	-19655.52	262.73	1229.48	477.13	53.11	53037.44	---	17.20	2714.82	---	30.34
8.937	-15538.69	224.06	933.98	444.19	52.12	53037.44	---	27.04	2714.82	---	31.54
17.604	-11821.25	273.76	763.56	413.73	51.06	40749.48	---	25.57	2299.10	---	26.53
26.541	-8257.37	442.12	728.17	383.86	49.85	30630.54	---	21.02	1952.28	---	22.42
27.083	-8049.92	452.33	726.02	382.12	49.78	20466.60	---	10.60	1699.63	---	18.59
54.166	1118.39	1011.82	612.26	294.94	44.41	20466.60	---	14.45	1699.63	---	22.80
72.582	6004.18	1390.78	540.10	235.65	39.79	20466.60	---	7.00	1699.63	---	26.94
81.249	7921.05	1551.47	506.14	259.35	37.58	27107.64	---	8.33	1716.86	---	28.24
83.686	8414.97	1593.57	496.59	198.57	36.97	27107.64	---	7.80	1716.86	---	30.35
97.77	10868.19	1805.11	441.42	149.82	33.41	33918.43	---	8.43	1735.52	---	35.48
108.332	12250.88	1924.54	400.03	111.99	30.77	40838.18	---	9.96	1752.75	---	40.17
116.728	13064.87	1993.60	367.14	81.92	28.70	40838.18	---	9.20	1752.75	---	44.12
135.415	13956.08	2061.56	319.82	13.47	24.19	45528.02	---	10.22	1764.23	---	55.55
162.498	12977.37	1968.12	435.77	-85.74	29.96	45528.02	---	11.20	1764.23	---	42.43
170.081	12221.86	1898.37	468.24	-113.52	31.85	45528.02	---	12.01	1764.23	---	39.05
189.581	9327.29	1635.15	551.73	-183.37	36.78	40838.18	---	13.51	1752.75	---	31.67
190.123	9227.44	1626.21	554.05	-185.31	36.92	40838.18	---	13.64	1752.75	---	31.50
204.206	6274.53	1366.62	614.34	-234.05	40.54	33918.43	---	14.50	1735.52	---	27.15
215.581	3396.19	1125.13	663.05	-272.04	43.48	27107.64	---	15.51	1716.86	---	24.12
216.664	3099.60	1101.02	667.68	-275.53	43.76	20466.60	---	11.48	1699.63	---	23.58
243.747	-5543.05	494.63	791.99	-362.71	49.47	20466.60	---	12.88	1699.63	---	19.10
249.434	-7657.98	371.89	816.60	-381.02	50.33	20466.60	---	9.90	1699.63	---	18.41
258.913	-11422.25	273.31	857.62	-413.33	51.63	35414.96	---	18.45	2291.20	---	26.13
270.83	-16604.76	289.74	1086.02	-456.54	53.08	48676.07	---	19.19	2707.93	---	30.64

2F1

North Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-16604.76	289.74	1086.02	348.40	53.08	48676.07	---	19.19	2707.93	---	32.68
16.514	-11345.32	326.48	967.81	288.72	49.44	48676.07	---	26.97	2707.93	---	36.29
20.388	-10252.58	411.24	940.08	275.47	48.59	33203.35	---	16.26	2179.09	---	28.83
32.417	-7184.89	657.83	853.97	234.66	45.78	33203.35	---	21.50	2179.09	---	31.49
40.776	-5335.77	815.80	794.14	207.76	43.66	20466.60	---	12.76	1699.63	---	25.19
61.164	-1769.06	1144.14	648.20	142.13	36.99	20466.60	---	12.21	1699.63	---	31.50
81.552	459.60	1368.85	508.44	76.50	30.19	20466.60	---	11.17	1699.63	---	40.78
94.193	1169.41	1424.66	416.84	35.81	26.03	20466.60	---	10.23	1699.63	---	48.86
101.94	1350.22	1429.28	360.70	10.87	24.69	20466.60	---	10.07	1699.63	---	52.50
122.328	902.80	1346.08	455.84	-54.76	31.32	20466.60	---	11.03	1699.63	---	40.00
142.716	-882.67	1107.99	573.63	-120.39	37.96	20466.60	---	13.41	1699.63	---	31.27
156.172	-2794.06	903.05	655.04	-163.70	42.23	20466.60	---	14.34	1699.63	---	27.08
163.104	-4006.31	783.50	696.97	-186.08	44.33	27018.82	---	21.41	2094.39	---	32.14
183.492	-8476.06	380.72	820.31	-252.56	49.00	27018.82	---	15.00	2094.39	---	27.72
185.939	-9103.81	328.52	835.11	-260.61	49.51	27018.82	---	13.99	2094.39	---	27.28
203.88	-14342.66	373.38	1012.46	-323.45	53.04	39013.64	---	15.48	2642.47	---	32.23
0	-14342.66	377.32	1023.13	430.38	53.04	39013.64	---	15.31	2642.47	---	30.21
12.536	-9222.77	355.05	962.77	386.48	51.31	39013.64	---	21.59	2642.47	---	32.08
21.248	-5980.65	444.92	920.82	357.86	49.94	26943.96	---	16.01	2090.09	---	25.03
42.496	885.73	956.65	817.08	288.57	46.03	26943.96	---	20.74	2090.09	---	28.66
58.007	4972.52	1299.98	742.52	238.45	41.94	26943.96	---	12.12	2090.09	---	32.65
63.744	6285.52	1416.51	714.95	219.29	40.40	27107.64	---	10.28	1716.86	---	27.26
69.056	7403.24	1518.20	689.41	201.54	38.97	27107.64	---	8.86	1716.86	---	28.72
83.505	9954.00	1755.33	619.96	151.54	35.01	33918.43	---	9.19	1735.52	---	33.80
84.992	10175.43	1775.97	612.81	146.21	34.60	40838.18	---	11.96	1752.75	---	34.74
106.24	12473.48	1980.62	510.68	70.10	28.74	40838.18	---	9.56	1752.75	---	44.48
127.488	13154.34	2014.17	408.54	-6.01	25.56	40838.18	---	9.07	1752.75	---	52.52
148.736	12218.00	1855.37	306.41	-82.12	32.07	40838.18	---	10.35	1752.75	---	39.48
160.422	11013.69	1674.41	250.23	-123.98	35.93	40838.18	---	12.18	1752.75	---	34.07
169.984	9670.01	1474.77	204.27	-157.08	39.25	33918.43	---	11.13	1735.52	---	30.01
174.446	8934.67	1365.39	182.82	-172.52	40.65	33918.43	---	12.57	1735.52	---	28.60
185.92	6735.35	1035.94	127.67	-210.84	44.17	27107.64	---	13.63	1716.86	---	25.13
191.232	5569.94	859.59	102.14	-227.94	45.81	20466.60	---	11.84	1699.63	---	23.56
212.48	0.00	0.00	0.00	-296.34	52.39	20466.60	---	N/A	1699.63	---	19.30

2F1

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	150.33	78.68	20466.60	---	N/A	1699.63	---	14.71
16.623	2054.10	1023.12	194.03	96.81	68.27	20466.60	---	13.38	1699.63	---	17.73
33.246	3218.71	1737.11	388.06	43.31	57.96	20466.60	---	7.21	1699.63	---	21.81
49.869	3493.83	2157.87	582.10	-10.20	47.48	20466.60	---	5.68	1699.63	---	27.32
66.492	2879.47	2334.23	776.13	-63.71	37.39	20466.60	---	5.51	1699.63	---	33.26
83.115	1375.61	2277.74	970.16	-117.22	44.80	20466.60	---	6.31	1699.63	---	26.57
99.738	-1017.73	1980.18	1138.36	-170.73	53.80	20466.60	---	7.44	1699.63	---	21.13
116.361	-4300.55	1582.92	1328.09	-224.24	62.40	20466.60	---	7.23	1699.63	---	17.36
127.166	-6911.38	1270.70	1451.42	-259.02	67.51	20466.60	---	6.09	1699.63	---	15.53
132.984	-8474.65	1089.08	1517.82	-278.38	69.70	28590.33	---	8.91	1848.92	---	16.41
138.303	-10002.65	915.25	1578.53	-296.14	71.61	28590.33	---	7.60	1848.92	---	15.73
149.607	-13573.24	517.76	1707.55	-335.70	75.41	40749.48	---	10.41	2299.10	---	19.00
152.267	-14478.54	418.66	1737.90	-345.07	76.26	40749.48	---	9.71	2299.10	---	18.66
166.23	-19655.52	405.07	1897.27	-396.53	81.12	53037.44	---	11.14	2714.82	---	20.85
0	-19655.52	402.25	1884.03	477.13	81.12	53037.44	---	11.22	2714.82	---	19.86
8.937	-15538.69	343.03	1432.23	444.19	79.59	53037.44	---	17.64	2714.82	---	20.66
17.604	-11821.25	384.05	1169.24	413.73	77.93	40749.48	---	16.70	2299.10	---	17.39
26.541	-8257.37	646.56	1115.05	383.86	76.03	30630.54	---	13.73	1952.28	---	14.70
27.083	-8049.92	662.64	1111.76	382.12	75.91	20466.60	---	6.92	1699.63	---	12.19
54.166	1118.39	1509.62	937.55	294.94	67.56	20466.60	---	9.69	1699.63	---	14.99
72.582	6004.18	2089.26	827.06	235.65	60.41	20466.60	---	4.66	1699.63	---	17.74
81.249	7921.05	2334.77	775.06	259.35	57.02	27107.64	---	5.54	1716.86	---	18.61
83.686	8414.97	2398.93	760.44	198.57	56.07	27107.64	---	5.18	1716.86	---	20.01
97.77	10868.19	2723.83	675.94	149.82	50.61	33918.43	---	5.59	1735.52	---	23.42
108.332	12250.88	2910.77	612.57	111.99	46.56	40838.18	---	6.58	1752.75	---	26.55
116.728	13064.87	3020.03	562.20	81.92	43.39	40838.18	---	6.08	1752.75	---	29.19
135.415	13956.08	3132.53	489.65	13.47	36.47	45528.02	---	6.72	1764.23	---	36.84
162.498	12977.37	2980.61	667.18	-85.74	45.32	45528.02	---	7.40	1764.23	---	28.05
170.081	12221.86	2870.58	716.89	-113.52	48.21	45528.02	---	7.94	1764.23	---	25.79
189.581	9327.29	2461.65	844.71	-183.37	55.79	40838.18	---	8.97	1752.75	---	20.88
190.123	9227.44	2448.07	848.26	-185.31	56.00	40838.18	---	9.06	1752.75	---	20.77
204.206	6274.53	2052.65	940.58	-234.05	61.57	33918.43	---	9.65	1735.52	---	17.88
215.581	3396.19	1682.62	1015.14	-272.04	66.10	27107.64	---	10.37	1716.86	---	15.86
216.664	3099.60	1645.59	1022.24	-275.53	66.53	20466.60	---	7.68	1699.63	---	15.51
243.747	-5543.05	727.81	1212.56	-362.71	75.40	20466.60	---	8.41	1699.63	---	12.53
249.434	-7657.98	542.56	1250.24	-381.02	76.75	20466.60	---	6.47	1699.63	---	12.07
258.913	-11422.25	418.99	1313.04	-413.33	78.79	35414.96	---	12.05	2291.20	---	17.12
270.83	-16604.76	444.18	1664.36	-456.54	81.05	48676.07	---	12.52	2707.93	---	20.07

3F1

North Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-16604.76	444.18	1664.36	348.40	81.05	48676.07	---	12.52	2707.93	---	21.40
16.514	-11345.32	467.39	1483.20	288.72	75.20	48676.07	---	17.60	2707.93	---	23.86
20.388	-10252.58	597.42	1440.70	275.47	73.87	33203.35	---	10.61	2179.09	---	18.96
32.417	-7184.89	974.96	1308.75	234.66	69.51	33203.35	---	14.03	2179.09	---	20.74
40.776	-5335.77	1215.05	1217.05	207.76	66.21	20466.60	---	8.55	1699.63	---	16.61
61.164	-1769.06	1717.05	993.39	142.13	55.90	20466.60	---	8.14	1699.63	---	20.85
81.552	459.60	2065.11	779.20	76.50	45.44	20466.60	---	7.40	1699.63	---	27.09
94.193	1169.41	2154.55	638.83	35.81	39.07	20466.60	---	6.76	1699.63	---	32.54
101.94	1350.22	2163.82	552.79	10.87	37.03	20466.60	---	6.65	1699.63	---	35.01
122.328	902.80	2030.53	698.82	-54.76	47.20	20466.60	---	7.31	1699.63	---	26.54
142.716	-882.67	1663.87	879.41	-120.39	57.42	20466.60	---	8.93	1699.63	---	20.67
156.172	-2794.06	1351.23	1004.20	-163.70	64.03	20466.60	---	9.58	1699.63	---	17.86
163.104	-4006.31	1168.08	1068.49	-186.08	67.28	27018.82	---	14.36	2094.39	---	21.18
183.492	-8476.06	553.50	1257.57	-252.56	74.54	27018.82	---	9.79	2094.39	---	18.23
185.939	-9103.81	473.93	1280.27	-260.61	75.33	27018.82	---	9.12	2094.39	---	17.93
203.88	-14342.66	572.22	1551.62	-323.45	80.95	39013.64	---	10.10	2642.47	---	21.12
0	-14342.66	578.25	1567.98	430.38	80.95	39013.64	---	9.99	2642.47	---	19.79
12.536	-9222.77	544.13	1475.47	386.48	78.25	39013.64	---	14.09	2642.47	---	21.04
21.248	-5980.65	644.05	1411.18	357.86	76.12	26943.96	---	10.45	2090.09	---	16.42
42.496	885.73	1421.05	1252.20	288.57	70.02	26943.96	---	13.96	2090.09	---	18.84
58.007	4972.52	1948.46	1137.94	238.45	63.70	26943.96	---	8.09	2090.09	---	21.50
63.744	6285.52	2126.94	1095.68	219.29	61.32	27107.64	---	6.85	1716.86	---	17.96
69.056	7403.24	2282.29	1056.54	201.54	59.10	27107.64	---	5.89	1716.86	---	18.94
83.505	9954.00	2647.30	950.11	151.54	53.01	33918.43	---	6.10	1735.52	---	22.32
84.992	10175.43	2679.49	939.15	146.21	52.38	40838.18	---	7.93	1752.75	---	22.95
106.24	12473.48	3003.80	782.62	70.10	43.36	40838.18	---	6.31	1752.75	---	29.48
127.488	13154.34	3053.30	626.10	-6.01	38.45	40838.18	---	5.98	1752.75	---	34.90
148.736	12218.00	2799.59	469.57	-82.12	48.39	40838.18	---	6.86	1752.75	---	26.16
160.422	11013.69	2529.75	383.49	-123.98	54.28	40838.18	---	8.06	1752.75	---	22.55
169.984	9670.01	2230.15	313.05	-157.08	59.36	33918.43	---	7.36	1735.52	---	19.84
174.446	8934.67	2065.56	280.18	-172.52	61.50	33918.43	---	8.31	1735.52	---	18.90
185.92	6735.35	1568.59	195.66	-210.84	66.88	27107.64	---	9.00	1716.86	---	16.59
191.232	5569.94	1302.05	156.52	-227.94	69.39	20466.60	---	7.81	1699.63	---	15.56
212.48	0.00	0.00	0.00	-296.34	79.47	20466.60	---	N/A	1699.63	---	12.72

3F1

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location From Rear (Ft)	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C* (k-ft)	RF Inventory	RF Operating	C* (kips)	RF Inventory	RF Operating
	D	M+ L+I	M- L+I	V D L+I							
0	0.00	0.00	0.00	150.33	90.89	20466.60	---	N/A	1699.63	---	12.73
16.623	2054.10	1179.28	227.58	96.81	78.69	20466.60	---	11.61	1699.63	---	15.38
33.246	3218.71	1996.99	455.15	43.31	66.63	20466.60	---	6.27	1699.63	---	18.97
49.869	3493.83	2506.25	682.73	-10.20	54.41	20466.60	---	4.89	1699.63	---	23.84
66.492	2879.47	2701.75	910.31	-63.71	42.67	20466.60	---	4.76	1699.63	---	29.14
83.115	1375.61	2633.25	1137.89	-117.22	51.38	20466.60	---	5.46	1699.63	---	23.16
99.738	-1017.73	2293.25	1335.17	-170.73	62.03	20466.60	---	6.42	1699.63	---	18.32
116.361	-4300.55	1829.85	1557.70	-224.24	72.24	20466.60	---	6.25	1699.63	---	14.99
127.166	-6911.38	1462.04	1702.34	-259.02	78.31	20466.60	---	5.19	1699.63	---	13.39
132.984	-8474.65	1248.07	1780.23	-278.38	80.94	28590.33	---	7.59	1848.92	---	14.13
138.303	-10002.65	1043.01	1851.44	-296.14	83.22	28590.33	---	6.48	1848.92	---	13.53
149.607	-13573.24	576.12	2002.76	-335.70	87.75	40749.48	---	8.87	2299.10	---	16.33
152.267	-14478.54	459.85	2038.36	-345.07	88.77	40749.48	---	8.27	2299.10	---	16.04
166.23	-19655.52	474.87	2225.29	-396.53	94.82	53037.44	---	9.50	2714.82	---	17.84
0	-19655.52	471.55	2209.75	477.13	94.82	53037.44	---	9.57	2714.82	---	16.99
8.937	-15538.69	402.14	1680.08	444.19	92.99	53037.44	---	15.03	2714.82	---	17.68
17.604	-11821.25	416.71	1369.90	413.73	90.99	40749.48	---	14.25	2299.10	---	14.89
26.541	-8257.37	721.46	1306.40	383.86	88.70	30630.54	---	11.72	1952.28	---	12.60
27.083	-8049.92	740.07	1302.56	382.12	88.55	20466.60	---	5.91	1699.63	---	10.45
54.166	1118.39	1747.26	1098.45	294.94	78.59	20466.60	---	8.37	1699.63	---	12.88
72.582	6004.18	2426.94	968.99	235.65	70.14	20466.60	---	4.01	1699.63	---	15.28
81.249	7921.05	2715.43	908.07	259.35	66.15	27107.64	---	4.76	1716.86	---	16.04
83.686	8414.97	2791.08	890.94	198.57	65.03	27107.64	---	4.46	1716.86	---	17.26
97.77	10868.19	3171.64	791.94	149.82	58.60	33918.43	---	4.80	1735.52	---	20.22
108.332	12250.88	3386.83	717.70	111.99	53.86	40838.18	---	5.66	1752.75	---	22.95
116.728	13064.87	3511.41	658.68	81.92	50.13	40838.18	---	5.23	1752.75	---	25.26
135.415	13956.08	3634.65	574.02	13.47	42.02	45528.02	---	5.80	1764.23	---	31.97
162.498	12977.37	3465.50	782.14	-85.74	52.40	45528.02	---	6.36	1764.23	---	24.26
170.081	12221.86	3339.69	840.42	-113.52	55.79	45528.02	---	6.83	1764.23	---	22.29
189.581	9327.29	2865.57	990.26	-183.37	64.69	40838.18	---	7.71	1752.75	---	18.01
190.123	9227.44	2849.48	994.42	-185.31	64.94	40838.18	---	7.79	1752.75	---	17.91
204.206	6274.53	2382.73	1102.65	-234.05	71.50	33918.43	---	8.32	1735.52	---	15.40
215.581	3396.19	1949.30	1190.06	-272.04	76.84	27107.64	---	8.95	1716.86	---	13.65
216.664	3099.60	1906.17	1198.38	-275.53	77.35	20466.60	---	6.63	1699.63	---	13.34
243.747	-5543.05	818.41	1421.49	-362.71	87.91	20466.60	---	7.18	1699.63	---	10.75
249.434	-7657.98	595.88	1465.66	-381.02	89.54	20466.60	---	5.52	1699.63	---	10.35
258.913	-11422.25	491.31	1539.28	-413.33	92.00	35414.96	---	10.28	2291.20	---	14.66
270.83	-16604.76	520.86	1952.45	-456.54	94.70	48676.07	---	10.67	2707.93	---	17.18

4F1

North Girder, Pier 37 to Pier 39



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-16604.76	520.86	1952.45	348.40	94.70	48676.07	---	10.67	2707.93	---	18.32
16.514	-11345.32	512.15	1739.93	288.72	87.47	48676.07	---	15.00	2707.93	---	20.51
20.388	-10252.58	664.95	1690.08	275.47	85.89	33203.35	---	9.05	2179.09	---	16.31
32.417	-7184.89	1110.17	1535.28	234.66	80.68	33203.35	---	11.96	2179.09	---	17.87
40.776	-5335.77	1394.20	1427.71	207.76	76.74	20466.60	---	7.29	1699.63	---	14.33
61.164	-1769.06	1983.98	1165.34	142.13	64.56	20466.60	---	7.04	1699.63	---	18.05
81.552	459.60	2387.41	914.07	76.50	52.26	20466.60	---	6.40	1699.63	---	23.55
94.193	1169.41	2488.23	749.40	35.81	44.79	20466.60	---	5.86	1699.63	---	28.39
101.94	1350.22	2496.81	648.47	10.87	42.40	20466.60	---	5.76	1699.63	---	30.58
122.328	902.80	2346.65	819.44	-54.76	54.33	20466.60	---	6.32	1699.63	---	23.06
142.716	-882.67	1919.57	1031.20	-120.39	66.38	20466.60	---	7.74	1699.63	---	17.88
156.172	-2794.06	1551.27	1177.54	-163.70	74.20	20466.60	---	8.35	1699.63	---	15.41
163.104	-4006.31	1335.75	1252.93	-186.08	78.06	27018.82	---	12.56	2094.39	---	18.26
183.492	-8476.06	611.26	1474.65	-252.56	86.72	27018.82	---	8.35	2094.39	---	15.67
185.939	-9103.81	517.24	1501.26	-260.61	87.66	27018.82	---	7.78	2094.39	---	15.41
203.88	-14342.66	671.26	1818.90	-323.45	94.53	39013.64	---	8.61	2642.47	---	18.08
0	-14342.66	678.34	1838.08	430.38	94.53	39013.64	---	8.52	2642.47	---	16.95
12.536	-9222.77	638.32	1729.64	386.48	91.29	39013.64	---	12.02	2642.47	---	18.03
21.248	-5980.65	725.53	1654.28	357.86	88.73	26943.96	---	8.91	2090.09	---	14.09
42.496	885.73	1644.84	1467.91	288.57	81.46	26943.96	---	12.06	2090.09	---	16.19
58.007	4972.52	2262.35	1333.96	238.45	73.97	26943.96	---	6.96	2090.09	---	18.51
63.744	6285.52	2471.62	1284.42	219.29	71.16	27107.64	---	5.89	1716.86	---	15.48
69.056	7403.24	2654.24	1238.55	201.54	68.54	27107.64	---	5.07	1716.86	---	16.33
83.505	9954.00	3080.57	1113.78	151.54	61.35	33918.43	---	5.24	1735.52	---	19.29
84.992	10175.43	3117.70	1100.93	146.21	60.61	40838.18	---	6.81	1752.75	---	19.83
106.24	12473.48	3486.78	917.44	70.10	49.98	40838.18	---	5.43	1752.75	---	25.58
127.488	13154.34	3546.62	733.96	-6.01	44.20	40838.18	---	5.15	1752.75	---	30.37
148.736	12218.00	3258.56	550.47	-82.12	55.80	40838.18	---	5.89	1752.75	---	22.69
160.422	11013.69	2931.57	449.55	-123.98	62.68	40838.18	---	6.96	1752.75	---	19.53
169.984	9670.01	2577.81	366.98	-157.08	68.61	33918.43	---	6.37	1735.52	---	17.17
174.446	8934.67	2388.61	328.44	-172.52	71.12	33918.43	---	7.18	1735.52	---	16.35
185.92	6735.35	1815.76	229.36	-210.84	77.42	27107.64	---	7.77	1716.86	---	14.34
191.232	5569.94	1507.87	183.49	-227.94	80.36	20466.60	---	6.75	1699.63	---	13.43
212.48	0.00	0.00	0.00	-296.34	92.17	20466.60	---	N/A	1699.63	---	10.97

4F1

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	150.33	116.10	20466.60	---	N/A	1699.63	---	9.97
16.623	2054.10	1477.48	328.21	96.81	98.59	20466.60	---	9.27	1699.63	---	12.28
33.246	3218.71	2500.77	656.41	43.31	81.56	20466.60	---	5.01	1699.63	---	15.50
49.869	3493.83	3117.47	984.62	-10.20	64.73	20466.60	---	3.93	1699.63	---	20.04
66.492	2879.47	3329.06	1312.83	-63.71	49.00	20466.60	---	3.86	1699.63	---	25.38
83.115	1375.61	3222.93	1641.04	-117.22	59.66	20466.60	---	4.46	1699.63	---	19.95
99.738	-1017.73	2810.00	1925.56	-170.73	76.20	20466.60	---	5.24	1699.63	---	14.92
116.361	-4300.55	2174.31	2246.48	-224.24	92.36	20466.60	---	5.09	1699.63	---	11.73
127.166	-6911.38	1641.97	2455.09	-259.02	102.22	20466.60	---	3.60	1699.63	---	10.26
132.984	-8474.65	1322.08	2567.41	-278.38	106.71	28590.33	---	5.27	1848.92	---	10.72
138.303	-10002.65	1010.51	2670.11	-296.14	110.67	28590.33	---	4.49	1848.92	---	10.18
149.607	-13573.24	603.11	2888.34	-335.70	118.58	40749.48	---	6.15	2299.10	---	12.08
152.267	-14478.54	613.84	2939.69	-345.07	120.35	40749.48	---	5.74	2299.10	---	11.83
166.23	-19655.52	670.13	3209.26	-396.53	134.16	53037.44	---	6.59	2714.82	---	12.61
0	-19655.52	665.45	3186.86	477.13	134.16	53037.44	---	6.63	2714.82	---	12.01
8.937	-15538.69	567.50	2422.39	444.19	130.75	53037.44	---	10.43	2714.82	---	12.57
17.604	-11821.25	472.51	1907.50	413.73	127.04	40749.48	---	10.24	2299.10	---	10.66
26.541	-8257.37	494.72	1819.09	383.86	122.91	30630.54	---	8.41	1952.28	---	9.10
27.083	-8049.92	526.55	1813.73	382.12	122.65	20466.60	---	4.24	1699.63	---	7.54
54.166	1118.39	2107.63	1529.52	294.94	106.39	20466.60	---	6.94	1699.63	---	9.52
72.582	6004.18	3094.21	1349.26	235.65	93.56	20466.60	---	3.15	1699.63	---	11.46
81.249	7921.05	3496.08	1264.43	259.35	87.59	27107.64	---	3.70	1716.86	---	12.12
83.686	8414.97	3600.09	1240.58	198.57	85.92	27107.64	---	3.45	1716.86	---	13.06
97.77	10868.19	4114.19	1102.73	149.82	76.42	33918.43	---	3.70	1735.52	---	15.51
108.332	12250.88	4402.95	999.35	111.99	69.44	40838.18	---	4.35	1752.75	---	17.80
116.728	13064.87	4563.60	917.17	81.92	63.99	40838.18	---	4.02	1752.75	---	19.79
135.415	13956.08	4694.40	810.05	13.47	52.22	45528.02	---	4.49	1764.23	---	25.73
162.498	12977.37	4498.26	1103.74	-85.74	67.27	45528.02	---	4.90	1764.23	---	18.90
170.081	12221.86	4333.11	1185.98	-113.52	72.26	45528.02	---	5.26	1764.23	---	17.21
189.581	9327.29	3691.43	1397.44	-183.37	85.40	40838.18	---	5.98	1752.75	---	13.64
190.123	9227.44	3669.53	1403.31	-185.31	85.78	40838.18	---	6.05	1752.75	---	13.56
204.206	6274.53	3023.42	1556.03	-234.05	95.55	33918.43	---	6.55	1735.52	---	11.52
215.581	3396.19	2407.93	1679.39	-272.04	103.60	27107.64	---	7.25	1716.86	---	10.12
216.664	3099.60	2345.81	1691.13	-275.53	104.37	20466.60	---	5.39	1699.63	---	9.89
243.747	-5543.05	701.17	2005.98	-362.71	121.16	20466.60	---	5.09	1699.63	---	7.80
249.434	-7657.98	669.79	2068.31	-381.02	124.00	20466.60	---	3.91	1699.63	---	7.47
258.913	-11422.25	703.43	2172.20	-413.33	128.45	35414.96	---	7.28	2291.20	---	10.50
270.83	-16604.76	745.72	2826.68	-456.54	133.45	48676.07	---	7.37	2707.93	---	12.19

5C1

North Girder, Pier 37 to Pier 39



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-16604.76	745.72	2826.68	348.40	133.45	48676.07	---	7.37	2707.93	---	13.00
16.514	-11345.32	532.44	2519.00	288.72	117.77	48676.07	---	10.36	2707.93	---	15.24
20.388	-10252.58	517.18	2446.83	275.47	115.09	33203.35	---	6.25	2179.09	---	12.17
32.417	-7184.89	1104.64	2222.72	234.66	106.39	33203.35	---	8.26	2179.09	---	13.55
40.776	-5335.77	1529.48	2066.98	207.76	100.01	20466.60	---	5.04	1699.63	---	11.00
61.164	-1769.06	2378.05	1687.13	142.13	81.54	20466.60	---	5.88	1699.63	---	14.29
81.552	459.60	2926.37	1323.36	76.50	63.59	20466.60	---	5.22	1699.63	---	19.36
94.193	1169.41	3049.92	1084.95	35.81	53.04	20466.60	---	4.78	1699.63	---	23.97
101.94	1350.22	3049.33	938.84	10.87	49.55	20466.60	---	4.72	1699.63	---	26.17
122.328	902.80	2869.66	1173.22	-54.76	66.58	20466.60	---	5.17	1699.63	---	18.81
142.716	-882.67	2281.98	1476.41	-120.39	84.47	20466.60	---	6.51	1699.63	---	14.05
156.172	-2794.06	1743.92	1685.92	-163.70	96.47	20466.60	---	7.43	1699.63	---	11.86
163.104	-4006.31	1420.16	1793.85	-186.08	102.52	27018.82	---	9.35	2094.39	---	13.90
183.492	-8476.06	591.98	2111.30	-252.56	116.99	27018.82	---	5.83	2094.39	---	11.61
185.939	-9103.81	637.56	2149.39	-260.61	118.60	27018.82	---	5.43	2094.39	---	11.39
203.88	-14342.66	971.83	2566.22	-323.45	132.44	39013.64	---	6.11	2642.47	---	12.91
0	-14342.66	982.08	2593.28	430.38	132.44	39013.64	---	6.04	2642.47	---	12.10
12.536	-9222.77	924.13	2440.28	386.48	126.73	39013.64	---	8.52	2642.47	---	12.99
21.248	-5980.65	883.87	2333.95	357.86	122.32	26943.96	---	6.32	2090.09	---	10.22
42.496	885.73	1942.42	2071.02	288.57	110.13	26943.96	---	9.58	2090.09	---	11.98
58.007	4972.52	2842.38	1882.04	238.45	98.40	26943.96	---	5.54	2090.09	---	13.92
63.744	6285.52	3137.49	1812.14	219.29	94.05	27107.64	---	4.64	1716.86	---	11.71
69.056	7403.24	3389.91	1747.42	201.54	90.02	27107.64	---	3.97	1716.86	---	12.43
83.505	9954.00	3962.94	1571.38	151.54	79.05	33918.43	---	4.07	1735.52	---	14.97
84.992	10175.43	4012.65	1553.26	146.21	77.92	40838.18	---	5.29	1752.75	---	15.43
106.24	12473.48	4477.01	1294.39	70.10	61.80	40838.18	---	4.23	1752.75	---	20.68
127.488	13154.34	4569.61	1035.51	-6.01	53.91	40838.18	---	4.00	1752.75	---	24.90
148.736	12218.00	4236.52	776.63	-82.12	70.18	40838.18	---	4.53	1752.75	---	18.04
160.422	11013.69	3833.34	634.25	-123.98	79.90	40838.18	---	5.32	1752.75	---	15.32
169.984	9670.01	3369.88	517.75	-157.08	88.30	33918.43	---	4.87	1735.52	---	13.34
174.446	8934.67	3111.41	463.39	-172.52	91.90	33918.43	---	5.51	1735.52	---	12.65
185.92	6735.35	2369.04	323.60	-210.84	101.01	27107.64	---	5.96	1716.86	---	10.99
191.232	5569.94	1975.29	258.88	-227.94	105.27	20466.60	---	5.15	1699.63	---	10.25
212.48	0.00	0.00	0.00	-296.34	122.43	20466.60	---	N/A	1699.63	---	8.26

5C1

North Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	236.68	141.55	20466.60	N/A	N/A	1699.63	4.53	7.55
19.586	3903.10	2124.31	354.71	161.88	122.08	20466.60	3.34	5.57	1699.63	5.62	9.37
39.172	6341.19	3580.78	709.42	87.08	102.89	20466.60	1.57	2.62	1699.63	7.11	11.84
43.481	6680.97	3815.09	787.46	70.63	98.51	20466.60	1.42	2.37	1699.63	7.52	12.54
58.758	7304.93	4423.91	1064.13	11.06	82.62	24878.90	1.60	2.67	1711.12	9.46	15.78
78.344	6773.72	4733.08	1418.84	-65.31	64.81	24878.90	1.56	2.61	1711.12	11.56	19.28
97.93	4746.80	4573.89	1773.55	-141.67	80.10	24878.90	1.88	3.14	1711.12	8.78	14.64
98.518	4662.88	4563.00	1784.19	-143.96	80.62	24878.90	1.90	3.17	1711.12	8.71	14.52
117.516	1238.49	4012.05	2128.26	-216.54	96.97	21036.38	2.23	3.72	1735.52	6.91	11.52
137.102	-3735.67	3084.31	2448.57	-291.40	113.06	21036.38	2.42	4.03	1735.52	5.53	9.22
151.596	-8360.76	2310.93	2707.42	-346.83	124.40	21036.38	1.73	2.88	1735.52	4.76	7.93
156.688	-10178.11	2021.29	2798.37	-366.94	127.84	28927.68	2.58	4.31	1808.73	4.80	8.00
161.585	-12022.20	1736.48	2885.82	-386.30	130.59	28927.68	2.12	3.54	1808.73	4.61	7.69
172.944	-16673.94	1046.16	3088.70	-432.71	136.55	37948.47	2.43	4.05	1904.91	4.53	7.55
176.274	-18138.27	836.62	3148.17	-446.88	138.19	53750.16	4.42	7.36	2397.00	6.06	10.10
187.438	-23393.70	561.62	3347.55	-494.69	143.45	53750.16	3.21	5.36	2397.00	5.63	9.39
195.86	-27717.10	586.86	3497.96	-532.03	147.73	63433.41	3.61	6.02	2735.49	6.38	10.63
0	-27717.10	589.43	3513.32	589.57	147.73	63433.41	3.59	5.99	2735.49	6.14	10.24
6.506	-23975.30	527.94	2948.54	560.73	145.42	63433.41	5.04	8.41	2735.49	6.36	10.60
18.976	-17316.55	655.44	2765.04	507.33	140.48	53322.20	5.14	8.56	2381.21	5.65	9.41
27.108	-13326.32	1116.38	2645.36	474.01	136.98	39726.05	3.90	6.51	1978.12	4.58	7.64
29.548	-12182.03	1252.29	2609.46	259.35	135.87	39726.05	4.22	7.03	1978.12	5.57	9.28
37.951	-8422.25	1738.03	2485.79	430.80	131.86	29590.05	3.46	5.76	1841.75	4.48	7.47
54.216	-1921.47	2679.52	2246.44	368.58	121.17	21173.90	3.21	5.35	1744.13	4.81	8.02
79.426	6155.92	3966.58	1845.94	272.24	103.04	21173.90	1.53	2.55	1744.13	6.22	10.36
81.324	6665.41	4055.32	1818.46	264.76	101.67	27107.64	2.10	3.49	1716.86	6.22	10.37
92.438	9364.70	4526.58	1657.48	220.97	93.67	27107.64	1.52	2.53	1716.86	7.03	11.72
108.432	12379.47	5036.70	1425.82	156.02	82.31	33918.43	1.63	2.72	1735.52	8.58	14.31
135.54	15072.34	5375.37	1033.18	42.66	63.68	40838.18	1.82	3.04	1752.75	12.28	20.48
162.648	14692.09	5101.96	932.93	-70.71	81.77	40838.18	1.96	3.27	1752.75	9.36	15.60
181.081	12678.16	4542.01	1104.41	-147.80	94.83	40838.18	2.47	4.12	1752.75	7.58	12.64
189.756	11243.28	4180.56	1185.11	-183.03	101.07	33918.43	2.13	3.55	1735.52	6.83	11.38
198.159	9561.84	3777.65	1263.29	-217.15	107.16	33918.43	2.62	4.37	1735.52	6.25	10.42
211.442	6329.84	3055.35	1386.85	-269.49	116.82	27107.64	2.85	4.75	1716.86	5.39	8.99
216.864	4812.64	2737.39	1437.29	-290.20	120.76	23319.85	2.87	4.79	1876.20	5.72	9.53
243.972	-4461.31	1084.42	1716.48	-394.11	137.21	23319.85	4.70	7.84	1876.20	4.58	7.64
255.9	-9435.66	721.50	2057.88	-440.00	142.45	23319.85	2.48	4.13	1876.20	4.22	7.03
263.761	-13017.76	837.18	2698.48	-471.38	145.50	33581.07	2.84	4.74	2330.68	5.44	9.07
271.08	-16577.79	944.89	3345.22	-501.45	147.99	41845.72	2.80	4.66	2471.21	5.67	9.44

HS20-44 TRUCK:

South Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-16577.79	944.89	3345.22	349.95	147.99	42837.54	2.93	4.89	2695.87	6.98	11.63
11.046	-12965.33	869.13	3077.00	304.21	136.81	42837.54	3.89	6.49	2695.87	7.75	12.92
17.259	-11152.29	826.34	2925.52	279.41	132.11	32126.60	2.78	4.63	2253.30	6.59	10.99
28.477	-8267.74	1530.06	2650.92	234.91	122.99	32126.60	3.72	6.20	2253.30	7.30	12.17
34.518	-6918.74	1876.82	2502.48	211.74	117.75	22028.52	2.40	4.00	1797.25	5.96	9.93
51.777	-3834.97	2697.94	2076.09	145.64	100.27	22028.52	2.91	4.85	1797.25	7.39	12.32
64.549	-2286.72	3108.77	1758.42	96.82	86.39	22028.52	2.82	4.71	1797.25	8.92	14.86
69.036	-1890.68	3208.11	1646.37	79.69	81.54	20473.41	2.59	4.31	1700.06	9.02	15.04
86.295	-1084.14	3364.29	1213.31	13.78	64.75	20473.41	2.61	4.35	1700.06	11.97	19.96
103.554	-1415.18	3195.27	1349.57	-52.14	83.69	20473.41	2.69	4.48	1700.06	8.99	14.98
120.813	-2883.80	2668.59	1711.01	-118.05	103.28	20473.41	2.89	4.81	1700.06	6.90	11.50
132.894	-4588.69	2116.46	1965.62	-164.19	116.74	20473.41	3.16	5.27	1700.06	5.87	9.78
138.072	-5490.05	1840.74	2075.14	-183.99	121.69	25364.79	4.05	6.75	1998.22	6.66	11.10
155.331	-9238.24	777.05	2441.96	-250.47	137.06	25364.79	2.52	4.20	1998.22	5.62	9.37
156.021	-9412.07	730.43	2456.69	-253.15	137.64	25364.79	2.46	4.11	1998.22	5.59	9.32
172.59	-14160.34	1002.11	2811.48	-320.07	153.36	33785.10	2.52	4.20	2504.66	6.28	10.46
0	-14160.34	976.53	2739.71	494.16	147.64	33785.10	2.59	4.31	2504.66	5.81	9.69
10.896	-9019.71	929.25	2028.73	449.47	143.86	33785.10	5.01	8.35	2504.66	6.15	10.25
20.954	-4697.77	898.38	1932.71	409.96	139.69	24298.77	4.34	7.23	1935.05	4.63	7.71
41.908	3032.81	2346.78	1716.94	327.97	129.04	24298.77	4.00	6.66	1935.05	5.39	8.98
55.319	7080.62	3238.55	1586.84	275.73	118.93	24298.77	2.15	3.58	1935.05	6.11	10.18
62.862	9046.49	3703.78	1513.10	245.48	113.11	27107.64	1.91	3.18	1716.86	5.69	9.49
66.843	9992.04	3935.06	1474.02	229.52	110.01	27107.64	1.65	2.76	1716.86	5.94	9.90
81.93	12984.61	4694.51	1324.93	167.19	98.13	33918.43	1.67	2.79	1735.52	7.13	11.88
83.816	13292.35	4774.60	1306.18	159.18	96.64	40838.18	2.27	3.79	1752.75	7.37	12.29
104.77	15694.23	5401.51	1096.18	70.08	79.84	40838.18	1.74	2.91	1752.75	9.59	15.99
125.724	16229.19	5546.29	883.11	-19.02	70.44	40838.18	1.64	2.73	1752.75	11.31	18.85
146.678	14897.22	5145.40	666.95	-108.12	90.02	40838.18	1.92	3.21	1752.75	8.25	13.76
156.945	13563.04	4735.35	559.91	-151.77	100.42	40838.18	2.26	3.76	1752.75	7.14	11.90
167.632	11705.24	4145.09	447.71	-195.92	111.87	33918.43	2.08	3.47	1735.52	6.10	10.17
171.404	10936.91	3893.16	407.92	-211.50	115.50	33918.43	2.33	3.89	1735.52	5.83	9.71
182.3	8394.36	3034.23	292.42	-255.19	126.03	27107.64	2.46	4.10	1716.86	5.06	8.44
188.586	6713.33	2448.21	225.40	-279.64	132.19	20466.60	2.21	3.68	1699.63	4.66	7.76
209.54	0.00	0.00	0.00	-361.13	152.98	20466.60	N/A	N/A	1699.63	3.71	6.18

HS20-44 TRUCK:

South Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	236.68	169.66	20466.60	N/A	N/A	1699.63	3.78	6.30
19.586	3903.10	2345.95	638.69	161.88	137.98	20466.60	3.02	5.04	1699.63	4.97	8.29
39.172	6341.19	4064.25	1277.38	87.08	109.77	20466.60	1.39	2.31	1699.63	6.66	11.10
43.481	6680.97	4358.81	1417.89	70.63	103.79	20466.60	1.25	2.08	1699.63	7.14	11.90
58.758	7304.93	5163.20	1916.07	11.06	83.31	24878.90	1.37	2.29	1711.12	9.39	15.65
78.344	6773.72	5654.62	2554.77	-65.31	82.28	24878.90	1.31	2.18	1711.12	9.11	15.18
97.930	4746.80	5555.42	3193.46	-141.67	100.49	24878.90	1.55	2.59	1711.12	7.00	11.67
98.518	4662.88	5543.53	3212.62	-143.96	101.17	24878.90	1.56	2.61	1711.12	6.94	11.57
117.516	1238.49	4890.55	3832.15	-216.54	124.43	21036.38	1.83	3.05	1735.52	5.38	8.98
137.102	-3735.67	3642.22	4408.91	-291.40	151.45	21036.38	1.69	2.82	1735.52	4.13	6.88
151.596	-8360.76	2462.92	4887.21	-346.83	173.50	21036.38	0.96	1.60	1735.52	3.41	5.69
156.688	-10178.11	2074.79	5152.76	-366.94	181.08	28927.68	1.40	2.34	1808.73	3.39	5.65
161.585	-12022.20	1756.89	5543.67	-386.30	187.84	28927.68	1.11	1.84	1808.73	3.21	5.34
172.944	-16673.94	1205.46	6793.95	-432.71	203.81	37948.47	1.10	1.84	1904.91	3.04	5.06
176.274	-18138.27	1075.10	7229.72	-446.88	208.57	53750.16	1.92	3.21	2397.00	4.01	6.69
187.438	-23393.70	729.20	8914.18	-494.69	224.76	53750.16	1.21	2.01	2397.00	3.60	5.99
195.86	-27717.10	711.83	10395.04	-532.03	264.10	63433.41	1.21	2.02	2735.49	3.57	5.94
0	-27717.10	714.95	10440.68	589.57	264.10	63433.41	1.21	2.02	2735.49	3.44	5.73
6.506	-23975.30	651.84	9121.53	560.73	251.36	63433.41	1.63	2.72	2735.49	3.68	6.13
18.976	-17316.55	856.83	6902.68	507.33	233.44	53322.20	2.06	3.43	2381.21	3.40	5.67
27.108	-13326.32	1089.80	5661.68	474.01	221.97	39726.05	1.82	3.04	1978.12	2.83	4.71
29.548	-12182.03	1165.60	5314.68	259.35	218.55	39726.05	2.07	3.45	1978.12	3.46	5.77
37.951	-8422.25	1552.02	4319.29	430.80	206.91	29590.05	1.99	3.32	1841.75	2.85	4.76
54.216	-1921.47	2753.90	3178.49	368.58	181.86	21173.90	2.71	4.51	1744.13	3.21	5.34
79.426	6155.92	5024.68	2722.32	272.24	145.83	21173.90	1.21	2.01	1744.13	4.39	7.32
81.324	6665.41	5177.91	2706.07	264.76	143.33	27107.64	1.64	2.74	1716.86	4.41	7.36
92.438	9364.70	5979.94	2610.86	220.97	129.25	27107.64	1.15	1.92	1716.86	5.10	8.50
108.432	12379.47	6841.36	2473.85	156.02	110.69	33918.43	1.20	2.00	1735.52	6.38	10.64
135.540	15072.34	7491.06	2241.64	42.66	83.66	40838.18	1.31	2.18	1752.75	9.35	15.59
162.648	14692.09	7113.13	2009.42	-70.71	97.48	40838.18	1.41	2.35	1752.75	7.85	13.09
181.081	12678.16	6272.67	1851.52	-147.80	118.73	40838.18	1.79	2.98	1752.75	6.06	10.10
189.756	11243.28	5716.28	1777.21	-183.03	129.66	33918.43	1.56	2.59	1735.52	5.32	8.87
198.159	9561.84	5081.20	1705.22	-217.15	140.82	33918.43	1.95	3.25	1735.52	4.76	7.93
211.442	6329.84	3978.74	1707.50	-269.49	159.68	27107.64	2.19	3.65	1716.86	3.94	6.57
216.864	4812.64	3573.21	1848.63	-290.20	167.81	23319.85	2.20	3.67	1876.20	4.12	6.86
243.972	-4461.31	2174.21	3886.25	-394.11	207.97	23319.85	2.08	3.46	1876.20	3.02	5.04
255.900	-9435.66	1987.01	5578.88	-440.00	224.92	23319.85	0.91	1.52	1876.20	2.67	4.45
263.761	-13017.76	2071.10	6904.68	-471.38	236.19	33581.07	1.11	1.85	2330.68	3.35	5.59
271.08	-16577.79	2230.56	8271.02	-501.45	283.74	41845.72	1.13	1.88	2471.21	2.95	4.93

HS20-44 LANE:

South Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

From Rear (Ft)	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	D	M+	M-	V							
		L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	-16577.79	2230.56	8271.02	349.95	283.74	42837.54	1.19	1.98	2695.87	3.64	6.07
11.046	-12965.33	1953.03	6643.61	304.21	195.75	42837.54	1.80	3.00	2695.87	5.42	9.03
17.259	-11152.29	1975.39	5877.41	279.41	186.54	32126.60	1.38	2.30	2253.30	4.67	7.78
28.477	-8267.74	2194.13	4829.04	234.91	170.31	32126.60	2.04	3.40	2253.30	5.27	8.79
34.518	-6918.74	2376.21	4424.32	211.74	161.80	22028.52	1.36	2.26	1797.25	4.33	7.23
51.777	-3834.97	3232.37	4064.29	145.64	136.61	22028.52	1.93	3.22	1797.25	5.42	9.04
64.549	-2286.72	3665.96	3892.45	96.82	118.92	22028.52	2.26	3.76	1797.25	6.48	10.80
69.036	-1890.68	3761.06	3831.83	79.69	113.14	20473.41	2.17	3.61	1700.06	6.50	10.84
86.295	-1084.14	3844.81	3597.48	13.78	92.98	20473.41	2.28	3.81	1700.06	8.34	13.90
103.554	-1415.18	3474.49	3361.24	-52.14	109.92	20473.41	2.47	4.12	1700.06	6.84	11.41
120.813	-2883.80	2651.87	3123.10	-118.05	134.70	20473.41	2.47	4.11	1700.06	5.29	8.82
132.894	-4588.69	1814.24	2955.28	-164.19	153.81	20473.41	2.26	3.77	1700.06	4.45	7.43
138.072	-5490.05	1608.20	3145.31	-183.99	161.50	25364.79	2.67	4.45	1998.22	5.02	8.37
155.331	-9238.24	1354.46	4657.26	-250.47	188.27	25364.79	1.32	2.20	1998.22	4.09	6.82
156.021	-9412.07	1353.80	4739.81	-253.15	189.37	25364.79	1.28	2.13	1998.22	4.06	6.77
172.59	-14160.34	1760.91	7126.13	-320.07	279.13	33785.10	0.99	1.66	2504.66	3.45	5.75
0	-14160.34	1715.96	6944.24	494.16	268.72	33785.10	1.02	1.70	2504.66	3.19	5.32
10.896	-9019.71	1697.28	5155.70	449.47	210.96	33785.10	1.97	3.29	2504.66	4.19	6.99
20.954	-4697.77	1932.50	3792.40	409.96	197.11	24298.77	2.21	3.68	1935.05	3.28	5.46
41.908	3032.81	3400.53	2385.12	327.97	168.54	24298.77	2.76	4.60	1935.05	4.13	6.88
55.319	7080.62	4668.99	2204.29	275.73	148.16	24298.77	1.49	2.48	1935.05	4.90	8.17
62.862	9046.49	5283.47	2101.86	245.48	137.33	27107.64	1.34	2.23	1716.86	4.69	7.82
66.843	9992.04	5577.93	2047.58	229.52	131.79	27107.64	1.17	1.94	1716.86	4.96	8.27
81.930	12984.61	6496.60	1840.47	167.19	111.93	33918.43	1.21	2.01	1735.52	6.25	10.42
83.816	13292.35	6588.85	1814.43	159.18	109.58	40838.18	1.65	2.75	1752.75	6.50	10.84
104.770	15694.23	7260.75	1522.72	70.08	85.20	40838.18	1.30	2.16	1752.75	8.99	14.98
125.724	16229.19	7261.86	1226.73	-19.02	73.56	40838.18	1.25	2.09	1752.75	10.83	18.05
146.678	14897.22	6561.85	926.47	-108.12	98.71	40838.18	1.51	2.51	1752.75	7.53	12.55
156.945	13563.04	5954.55	777.77	-151.77	113.05	40838.18	1.80	2.99	1752.75	6.34	10.57
167.632	11705.24	5133.69	621.92	-195.92	129.55	33918.43	1.68	2.80	1735.52	5.27	8.78
171.404	10936.91	4797.44	566.65	-211.50	135.12	33918.43	1.89	3.15	1735.52	4.98	8.30
182.300	8394.36	3688.01	406.20	-255.19	151.85	27107.64	2.02	3.37	1716.86	4.20	7.01
188.586	6713.33	2953.77	313.10	-279.64	162.03	20466.60	1.83	3.05	1699.63	3.80	6.33
209.54	0.00	0.00	0.00	-361.13	198.70	20466.60	N/A	N/A	1699.63	2.85	4.76

HS20-44 LANE:

South Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	236.68	61.51	20466.60	---	N/A	1699.63	---	17.41
19.586	3903.10	928.29	148.55	161.88	53.34	20466.60	---	12.76	1699.63	---	21.47
39.172	6341.19	1575.40	297.10	87.08	45.27	20466.60	---	5.97	1699.63	---	26.96
43.481	6680.97	1681.38	329.78	70.63	43.42	20466.60	---	5.39	1699.63	---	28.49
58.758	7304.93	1955.86	445.65	11.06	36.66	24878.90	---	6.05	1711.12	---	35.60
78.344	6773.72	2090.47	594.20	-65.31	29.22	24878.90	---	5.91	1711.12	---	42.82
97.93	4746.80	2022.30	742.75	-141.67	35.42	24878.90	---	7.12	1711.12	---	33.16
98.518	4662.88	2017.54	747.21	-143.96	35.63	24878.90	---	7.17	1711.12	---	32.90
117.516	1238.49	1782.34	891.30	-216.54	42.31	21036.38	---	8.38	1735.52	---	26.44
137.102	-3735.67	1391.64	1025.45	-291.40	48.81	21036.38	---	8.94	1735.52	---	21.38
151.596	-8360.76	1071.15	1133.85	-346.83	53.36	21036.38	---	6.90	1735.52	---	18.52
156.688	-10178.11	951.58	1171.94	-366.94	54.73	28927.68	---	10.30	1808.73	---	18.72
161.585	-12022.20	833.73	1208.56	-386.30	55.81	28927.68	---	8.46	1808.73	---	18.01
172.944	-16673.94	548.50	1293.53	-432.71	58.17	37948.47	---	9.68	1904.91	---	17.75
176.274	-18138.27	461.79	1318.43	-446.88	58.82	53750.16	---	17.60	2397.00	---	23.75
187.438	-23393.70	236.90	1401.93	-494.69	60.92	53750.16	---	12.81	2397.00	---	22.15
195.86	-27717.10	247.55	1464.93	-532.03	62.47	63433.41	---	14.39	2735.49	---	25.17
0	-27717.10	248.63	1471.36	589.57	62.47	63433.41	---	14.33	2735.49	---	24.24
6.506	-23975.30	222.69	1239.76	560.73	61.55	63433.41	---	20.02	2735.49	---	25.08
18.976	-17316.55	387.74	1162.61	507.33	59.59	53322.20	---	20.39	2381.21	---	22.22
27.108	-13326.32	579.05	1112.29	474.01	58.21	39726.05	---	15.49	1978.12	---	18.00
29.548	-12182.03	635.28	1097.19	259.35	57.78	39726.05	---	16.75	1978.12	---	21.85
37.951	-8422.25	832.80	1045.20	430.80	56.22	29590.05	---	13.72	1841.75	---	17.54
54.216	-1921.47	1221.36	944.56	368.58	51.92	21173.90	---	11.76	1744.13	---	18.74
79.426	6155.92	1756.98	776.16	272.24	44.51	21173.90	---	5.77	1744.13	---	24.03
81.324	6665.41	1794.37	764.60	264.76	43.94	27107.64	---	7.91	1716.86	---	24.03
92.438	9364.70	1993.36	696.91	220.97	40.63	27107.64	---	5.76	1716.86	---	27.07
108.432	12379.47	2209.66	599.51	156.02	35.90	33918.43	---	6.21	1735.52	---	32.84
135.54	15072.34	2356.37	434.42	42.66	28.11	40838.18	---	6.94	1752.75	---	46.45
162.648	14692.09	2238.40	393.52	-70.71	35.67	40838.18	---	7.47	1752.75	---	35.82
181.081	12678.16	2001.26	465.86	-147.80	41.10	40838.18	---	9.36	1752.75	---	29.21
189.756	11243.28	1848.73	499.90	-183.03	43.69	33918.43	---	8.03	1735.52	---	26.37
198.159	9561.84	1679.13	532.87	-217.15	46.21	33918.43	---	9.84	1735.52	---	24.19
211.442	6329.84	1376.04	585.00	-269.49	50.18	27107.64	---	10.55	1716.86	---	20.95
216.864	4812.64	1243.35	606.27	-290.20	51.79	23319.85	---	10.56	1876.20	---	22.26
243.972	-4461.31	558.73	724.04	-394.11	58.38	23319.85	---	18.61	1876.20	---	17.97
255.9	-9435.66	303.37	861.48	-440.00	60.41	23319.85	---	9.87	1876.20	---	16.61
263.761	-13017.76	352.01	1129.11	-471.38	61.57	33581.07	---	11.35	2330.68	---	21.46
271.08	-16577.79	397.30	1400.32	-501.45	62.53	41845.72	---	11.15	2471.21	---	22.38

2F1:

South Girder, Pier 37 to Pier 39



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-16577.79	397.30	1400.32	349.95	62.53	42837.54	---	11.69	2695.87	---	27.57
11.046	-12965.33	365.44	1288.04	304.21	58.96	42837.54	---	15.52	2695.87	---	30.01
17.259	-11152.29	448.31	1224.63	279.41	57.09	32126.60	---	11.07	2253.30	---	25.47
28.477	-8267.74	743.69	1109.68	234.91	53.48	32126.60	---	14.82	2253.30	---	28.02
34.518	-6918.74	887.89	1047.54	211.74	51.39	22028.52	---	9.57	1797.25	---	22.78
51.777	-3834.97	1233.31	869.06	145.64	44.27	22028.52	---	10.63	1797.25	---	27.94
64.549	-2286.72	1407.14	736.08	96.82	38.53	22028.52	---	10.42	1797.25	---	33.37
69.036	-1890.68	1449.45	689.17	79.69	36.51	20473.41	---	9.56	1700.06	---	33.63
86.295	-1084.14	1517.79	507.89	13.78	29.46	20473.41	---	9.66	1700.06	---	43.92
103.554	-1415.18	1444.12	565.99	-52.14	37.42	20473.41	---	9.93	1700.06	---	33.55
120.813	-2883.80	1221.36	717.58	-118.05	45.54	20473.41	---	10.53	1700.06	---	26.12
132.894	-4588.69	990.90	824.36	-164.19	51.05	20473.41	---	11.26	1700.06	---	22.40
138.072	-5490.05	876.49	870.29	-183.99	53.03	25364.79	---	16.00	1998.22	---	25.51
155.331	-9238.24	433.93	1024.13	-250.47	59.17	25364.79	---	10.03	1998.22	---	21.74
156.021	-9412.07	414.60	1030.31	-253.15	59.40	25364.79	---	9.80	1998.22	---	21.62
172.59	-14160.34	419.48	1179.10	-320.07	64.90	33785.10	---	10.03	2504.66	---	24.75
0	-14160.34	408.78	1149.00	494.16	62.48	33785.10	---	10.29	2504.66	---	22.93
10.896	-9019.71	388.99	854.62	449.47	61.06	33785.10	---	19.86	2504.66	---	24.19
20.954	-4697.77	481.10	814.17	409.96	59.47	24298.77	---	17.19	1935.05	---	18.13
41.908	3032.81	1082.48	723.27	327.97	55.32	24298.77	---	14.47	1935.05	---	20.98
55.319	7080.62	1455.01	668.47	275.73	51.24	24298.77	---	7.98	1935.05	---	23.67
62.862	9046.49	1650.64	637.41	245.48	48.87	27107.64	---	7.15	1716.86	---	22.00
66.843	9992.04	1748.18	620.94	229.52	47.61	27107.64	---	6.21	1716.86	---	22.92
81.93	12984.61	2069.83	558.14	167.19	42.74	33918.43	---	6.33	1735.52	---	27.32
83.816	13292.35	2103.88	550.24	159.18	42.12	40838.18	---	8.61	1752.75	---	28.23
104.77	15694.23	2372.74	461.78	70.08	35.21	40838.18	---	6.63	1752.75	---	36.30
125.724	16229.19	2434.41	372.02	-19.02	31.33	40838.18	---	6.24	1752.75	---	42.43
146.678	14897.22	2261.29	280.96	-108.12	39.64	40838.18	---	7.30	1752.75	---	31.29
156.945	13563.04	2076.83	235.87	-151.77	44.04	40838.18	---	8.60	1752.75	---	27.17
167.632	11705.24	1811.38	188.60	-195.92	48.89	33918.43	---	7.94	1735.52	---	23.30
171.404	10936.91	1699.31	171.84	-211.50	50.42	33918.43	---	8.92	1735.52	---	22.29
182.3	8394.36	1320.34	123.18	-255.19	54.84	27107.64	---	9.44	1716.86	---	19.43
188.586	6713.33	1063.64	94.95	-279.64	57.43	20466.60	---	8.49	1699.63	---	17.90
209.54	0.00	0.00	0.00	-361.13	66.16	20466.60	---	N/A	1699.63	---	14.30

2F1: South Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (ft)	M+	M-	V							
	D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	236.68	93.15	20466.60	---	N/A	1699.63	---	11.49
19.586	3903.10	1403.42	227.62	161.88	80.65	20466.60	---	8.44	1699.63	---	14.20
39.172	6341.19	2376.91	455.25	87.08	68.30	20466.60	---	3.96	1699.63	---	17.87
43.481	6680.97	2535.52	505.33	70.63	65.47	20466.60	---	3.57	1699.63	---	18.89
58.758	7304.93	2943.38	682.87	11.06	55.17	24878.90	---	4.02	1711.12	---	23.66
78.344	6773.72	3165.96	910.50	-65.31	43.80	24878.90	---	3.91	1711.12	---	28.56
97.93	4746.80	3061.40	1138.12	-141.67	53.39	24878.90	---	4.70	1711.12	---	22.00
98.518	4662.88	3053.79	1144.95	-143.96	53.72	24878.90	---	4.74	1711.12	---	21.82
117.516	1238.49	2686.40	1365.75	-216.54	64.02	21036.38	---	5.56	1735.52	---	17.47
137.102	-3735.67	2088.39	1571.30	-291.40	74.10	21036.38	---	5.96	1735.52	---	14.08
151.596	-8360.76	1600.45	1737.41	-346.83	81.15	21036.38	---	4.50	1735.52	---	12.18
156.688	-10178.11	1418.29	1795.77	-366.94	83.28	28927.68	---	6.72	1808.73	---	12.30
161.585	-12022.20	1238.56	1851.89	-386.30	84.96	28927.68	---	5.52	1808.73	---	11.83
172.944	-16673.94	803.02	1982.09	-432.71	88.63	37948.47	---	6.32	1904.91	---	11.65
176.274	-18138.27	670.10	2020.25	-446.88	89.64	53750.16	---	11.49	2397.00	---	15.58
187.438	-23393.70	362.73	2148.19	-494.69	92.89	53750.16	---	8.36	2397.00	---	14.52
195.86	-27717.10	379.03	2244.72	-532.03	95.38	63433.41	---	9.39	2735.49	---	16.48
0	-27717.10	380.70	2254.57	589.57	95.38	63433.41	---	9.35	2735.49	---	15.88
6.506	-23975.30	340.98	1898.17	560.73	93.95	63433.41	---	13.08	2735.49	---	16.43
18.976	-17316.55	558.32	1780.04	507.33	90.91	53322.20	---	13.31	2381.21	---	14.57
27.108	-13326.32	853.48	1703.00	474.01	88.76	39726.05	---	10.12	1978.12	---	11.80
29.548	-12182.03	940.54	1679.88	259.35	88.09	39726.05	---	10.94	1978.12	---	14.33
37.951	-8422.25	1241.90	1600.27	430.80	85.64	29590.05	---	8.96	1841.75	---	11.51
54.216	-1921.47	1827.27	1446.19	368.58	78.98	21173.90	---	7.86	1744.13	---	12.32
79.426	6155.92	2641.45	1188.36	272.24	67.53	21173.90	---	3.84	1744.13	---	15.83
81.324	6665.41	2698.68	1170.66	264.76	66.66	27107.64	---	5.26	1716.86	---	15.84
92.438	9364.70	3005.18	1067.03	220.97	61.57	27107.64	---	3.82	1716.86	---	17.86
108.432	12379.47	3342.12	917.90	156.02	54.31	33918.43	---	4.10	1735.52	---	21.71
135.54	15072.34	3579.84	665.13	42.66	42.37	40838.18	---	4.56	1752.75	---	30.81
162.648	14692.09	3389.47	602.55	-70.71	53.96	40838.18	---	4.93	1752.75	---	23.67
181.081	12678.16	3018.53	713.30	-147.80	62.30	40838.18	---	6.21	1752.75	---	19.27
189.756	11243.28	2782.47	765.42	-183.03	66.28	33918.43	---	5.34	1735.52	---	17.38
198.159	9561.84	2521.22	815.91	-217.15	70.15	33918.43	---	6.56	1735.52	---	15.94
211.442	6329.84	2057.82	895.72	-269.49	76.27	27107.64	---	7.06	1716.86	---	13.78
216.864	4812.64	1855.94	928.30	-290.20	78.76	23319.85	---	7.07	1876.20	---	14.64
243.972	-4461.31	821.26	1108.62	-394.11	88.99	23319.85	---	12.16	1876.20	---	11.79
255.9	-9435.66	464.48	1320.40	-440.00	92.18	23319.85	---	6.44	1876.20	---	10.88
263.761	-13017.76	538.95	1730.55	-471.38	94.01	33581.07	---	7.40	2330.68	---	14.06
271.08	-16577.79	608.29	2145.59	-501.45	95.50	41845.72	---	7.28	2471.21	---	14.65

3F1:

South Girder, Pier 37 to Pier 39



**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-16577.79	608.29	2145.59	349.95	95.50	42837.54	---	7.63	2695.87	---	18.05
11.046	-12965.33	559.52	1973.56	304.21	89.54	42837.54	---	10.13	2695.87	---	19.76
17.259	-11152.29	639.80	1876.40	279.41	86.64	32126.60	---	7.23	2253.30	---	16.78
28.477	-8267.74	1093.25	1700.28	234.91	81.01	32126.60	---	9.67	2253.30	---	18.50
34.518	-6918.74	1313.86	1605.07	211.74	77.76	22028.52	---	6.25	1797.25	---	15.06
51.777	-3834.97	1845.00	1331.59	145.64	66.75	22028.52	---	7.11	1797.25	---	18.53
64.549	-2286.72	2116.01	1127.84	96.82	57.92	22028.52	---	6.93	1797.25	---	22.20
69.036	-1890.68	2182.69	1055.97	79.69	54.83	20473.41	---	6.35	1700.06	---	22.40
86.295	-1084.14	2293.59	778.21	13.78	44.03	20473.41	---	6.39	1700.06	---	29.39
103.554	-1415.18	2172.75	867.12	-52.14	56.22	20473.41	---	6.60	1700.06	---	22.33
120.813	-2883.80	1826.47	1099.35	-118.05	68.70	20473.41	---	7.04	1700.06	---	17.32
132.894	-4588.69	1472.82	1262.94	-164.19	77.20	20473.41	---	7.58	1700.06	---	14.81
138.072	-5490.05	1297.01	1333.31	-183.99	80.28	25364.79	---	10.52	1998.22	---	16.85
155.331	-9238.24	619.90	1568.99	-250.47	89.82	25364.79	---	6.55	1998.22	---	14.32
156.021	-9412.07	590.32	1578.46	-253.15	90.18	25364.79	---	6.40	1998.22	---	14.24
172.59	-14160.34	642.74	1806.41	-320.07	99.09	33785.10	---	6.55	2504.66	---	16.21
0	-14160.34	626.33	1760.30	494.16	95.39	33785.10	---	6.72	2504.66	---	15.02
10.896	-9019.71	596.01	1309.64	449.47	93.15	33785.10	---	12.96	2504.66	---	15.86
20.954	-4697.77	695.99	1247.66	409.96	90.64	24298.77	---	11.22	1935.05	---	11.90
41.908	3032.81	1605.59	1108.37	327.97	84.14	24298.77	---	9.75	1935.05	---	13.79
55.319	7080.62	2178.69	1024.38	275.73	77.81	24298.77	---	5.33	1935.05	---	15.59
62.862	9046.49	2478.10	976.78	245.48	74.16	27107.64	---	4.76	1716.86	---	14.50
66.843	9992.04	2626.96	951.55	229.52	72.21	27107.64	---	4.13	1716.86	---	15.11
81.93	12984.61	3118.91	855.31	167.19	64.70	33918.43	---	4.20	1735.52	---	18.05
83.816	13292.35	3171.98	843.20	159.18	63.75	40838.18	---	5.71	1752.75	---	18.65
104.77	15694.23	3597.05	707.64	70.08	53.11	40838.18	---	4.37	1752.75	---	24.07
125.724	16229.19	3690.01	570.09	-19.02	47.12	40838.18	---	4.12	1752.75	---	28.21
146.678	14897.22	3410.99	430.55	-108.12	59.79	40838.18	---	4.84	1752.75	---	20.74
156.945	13563.04	3136.45	361.45	-151.77	66.51	40838.18	---	5.69	1752.75	---	17.99
167.632	11705.24	2738.48	289.02	-195.92	73.91	33918.43	---	5.25	1735.52	---	15.41
171.404	10936.91	2569.94	263.34	-211.50	76.24	33918.43	---	5.90	1735.52	---	14.74
182.3	8394.36	1998.61	188.77	-255.19	83.01	27107.64	---	6.23	1716.86	---	12.83
188.586	6713.33	1610.80	145.51	-279.64	86.98	20466.60	---	5.61	1699.63	---	11.82
209.54	0.00	0.00	0.00	-361.13	100.33	20466.60	---	N/A	1699.63	---	9.43

3F1:

South Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	236.68	107.84	20466.60	---	N/A	1699.63	---	9.93
19.586	3903.10	1621.74	267.00	161.88	93.20	20466.60	---	7.30	1699.63	---	12.29
39.172	6341.19	2740.45	533.99	87.08	78.74	20466.60	---	3.43	1699.63	---	15.50
43.481	6680.97	2928.77	592.73	70.63	75.44	20466.60	---	3.09	1699.63	---	16.39
58.758	7304.93	3425.14	800.99	11.06	63.43	24878.90	---	3.45	1711.12	---	20.58
78.344	6773.72	3670.22	1067.99	-65.31	50.11	24878.90	---	3.37	1711.12	---	24.96
97.93	4746.80	3548.15	1334.98	-141.67	61.48	24878.90	---	4.06	1711.12	---	19.11
98.518	4662.88	3539.60	1342.99	-143.96	61.86	24878.90	---	4.09	1711.12	---	18.95
117.516	1238.49	3116.81	1601.98	-216.54	74.04	21036.38	---	4.79	1735.52	---	15.11
137.102	-3735.67	2416.17	1843.08	-291.40	85.99	21036.38	---	5.15	1735.52	---	12.14
151.596	-8360.76	1839.83	2037.92	-346.83	94.38	21036.38	---	3.84	1735.52	---	10.47
156.688	-10178.11	1624.36	2106.38	-366.94	96.91	28927.68	---	5.73	1808.73	---	10.57
161.585	-12022.20	1412.04	2172.20	-386.30	98.93	28927.68	---	4.71	1808.73	---	10.16
172.944	-16673.94	898.25	2324.92	-432.71	103.30	37948.47	---	5.38	1904.91	---	10.00
176.274	-18138.27	741.84	2369.68	-446.88	104.51	53750.16	---	9.79	2397.00	---	13.37
187.438	-23393.70	424.88	2519.76	-494.69	108.38	53750.16	---	7.12	2397.00	---	12.45
195.86	-27717.10	443.96	2632.98	-532.03	111.44	63433.41	---	8.01	2735.49	---	14.11
0	-27717.10	445.91	2644.53	589.57	111.44	63433.41	---	7.97	2735.49	---	13.59
6.506	-23975.30	399.40	2225.81	560.73	109.73	63433.41	---	11.15	2735.49	---	14.07
18.976	-17316.55	607.96	2087.28	507.33	106.11	53322.20	---	11.35	2381.21	---	12.48
27.108	-13326.32	952.91	1996.94	474.01	103.54	39726.05	---	8.63	1978.12	---	10.12
29.548	-12182.03	1054.64	1969.84	259.35	102.73	39726.05	---	9.33	1978.12	---	12.29
37.951	-8422.25	1412.62	1876.49	430.80	99.80	29590.05	---	7.64	1841.75	---	9.88
54.216	-1921.47	2110.21	1695.81	368.58	91.87	21173.90	---	6.81	1744.13	---	10.59
79.426	6155.92	3072.84	1393.47	272.24	78.35	21173.90	---	3.30	1744.13	---	13.65
81.324	6665.41	3139.86	1372.73	264.76	77.32	27107.64	---	4.52	1716.86	---	13.66
92.438	9364.70	3497.39	1251.20	220.97	71.33	27107.64	---	3.28	1716.86	---	15.42
108.432	12379.47	3886.67	1076.33	156.02	62.80	33918.43	---	3.53	1735.52	---	18.77
135.54	15072.34	4152.09	779.93	42.66	48.81	40838.18	---	3.94	1752.75	---	26.75
162.648	14692.09	3938.73	705.77	-70.71	62.40	40838.18	---	4.25	1752.75	---	20.47
181.081	12678.16	3511.35	835.50	-147.80	72.20	40838.18	---	5.34	1752.75	---	16.63
189.756	11243.28	3236.98	896.55	-183.03	76.87	33918.43	---	4.59	1735.52	---	14.99
198.159	9561.84	2932.09	955.69	-217.15	81.43	33918.43	---	5.64	1735.52	---	13.73
211.442	6329.84	2387.93	1049.17	-269.49	88.65	27107.64	---	6.08	1716.86	---	11.86
216.864	4812.64	2149.64	1087.33	-290.20	91.59	23319.85	---	6.11	1876.20	---	12.59
243.972	-4461.31	919.55	1298.54	-394.11	103.77	23319.85	---	10.38	1876.20	---	10.11
255.9	-9435.66	544.65	1548.50	-440.00	107.60	23319.85	---	5.49	1876.20	---	9.32
263.761	-13017.76	631.98	2029.46	-471.38	109.81	33581.07	---	6.31	2330.68	---	12.03
271.08	-16577.79	713.28	2517.38	-501.45	111.62	41845.72	---	6.20	2471.21	---	12.54

4F1:

South Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-16577.79	713.28	2517.38	349.95	111.62	42837.54	---	6.50	2695.87	---	15.44
11.046	-12965.33	656.09	2315.53	304.21	103.98	42837.54	---	8.63	2695.87	---	17.02
17.259	-11152.29	716.98	2201.54	279.41	100.51	32126.60	---	6.16	2253.30	---	14.46
28.477	-8267.74	1249.53	1994.90	234.91	93.80	32126.60	---	8.24	2253.30	---	15.97
34.518	-6918.74	1508.88	1883.19	211.74	89.92	22028.52	---	5.32	1797.25	---	13.02
51.777	-3834.97	2129.31	1562.32	145.64	76.90	22028.52	---	6.16	1797.25	---	16.08
64.549	-2286.72	2442.36	1323.26	96.82	66.50	22028.52	---	6.00	1797.25	---	19.33
69.036	-1890.68	2518.61	1238.95	79.69	62.86	20473.41	---	5.50	1700.06	---	19.54
86.295	-1084.14	2641.83	913.05	13.78	50.20	20473.41	---	5.55	1700.06	---	25.77
103.554	-1415.18	2508.20	1017.07	-52.14	64.48	20473.41	---	5.71	1700.06	---	19.47
120.813	-2883.80	2107.17	1289.46	-118.05	79.17	20473.41	---	6.11	1700.06	---	15.03
132.894	-4588.69	1692.64	1481.34	-164.19	89.22	20473.41	---	6.59	1700.06	---	12.82
138.072	-5490.05	1486.42	1563.88	-183.99	92.89	25364.79	---	8.97	1998.22	---	14.57
155.331	-9238.24	689.78	1840.32	-250.47	104.25	25364.79	---	5.58	1998.22	---	12.34
156.021	-9412.07	654.92	1851.42	-253.15	104.67	25364.79	---	5.45	1998.22	---	12.27
172.59	-14160.34	754.11	2118.80	-320.07	115.75	33785.10	---	5.58	2504.66	---	13.88
0	-14160.34	734.87	2064.71	494.16	111.43	33785.10	---	5.73	2504.66	---	12.86
10.896	-9019.71	699.29	1534.55	449.47	108.71	33785.10	---	11.06	2504.66	---	13.59
20.954	-4697.77	777.51	1461.92	409.96	105.68	24298.77	---	9.57	1935.05	---	10.21
41.908	3032.81	1857.04	1298.70	327.97	97.87	24298.77	---	8.43	1935.05	---	11.86
55.319	7080.62	2525.82	1200.30	275.73	90.36	24298.77	---	4.60	1935.05	---	13.42
62.862	9046.49	2876.79	1144.52	245.48	86.04	27107.64	---	4.10	1716.86	---	12.50
66.843	9992.04	3051.86	1114.96	229.52	83.72	27107.64	---	3.56	1716.86	---	13.03
81.93	12984.61	3629.75	1002.19	167.19	74.86	33918.43	---	3.61	1735.52	---	15.60
83.816	13292.35	3690.97	988.01	159.18	73.74	40838.18	---	4.91	1752.75	---	16.13
104.77	15694.23	4175.15	829.16	70.08	61.19	40838.18	---	3.77	1752.75	---	20.89
125.724	16229.19	4284.95	667.99	-19.02	54.13	40838.18	---	3.54	1752.75	---	24.56
146.678	14897.22	3969.89	504.49	-108.12	68.92	40838.18	---	4.16	1752.75	---	17.99
156.945	13563.04	3636.13	423.52	-151.77	76.77	40838.18	---	4.91	1752.75	---	15.59
167.632	11705.24	3164.48	338.65	-195.92	85.40	33918.43	---	4.55	1735.52	---	13.34
171.404	10936.91	2970.87	308.56	-211.50	88.14	33918.43	---	5.10	1735.52	---	12.75
182.3	8394.36	2312.76	221.19	-255.19	96.06	27107.64	---	5.39	1716.86	---	11.09
188.586	6713.33	1864.98	170.49	-279.64	100.70	20466.60	---	4.84	1699.63	---	10.21
209.54	0.00	0.00	0.00	-361.13	116.34	20466.60	---	N/A	1699.63	---	8.13

4F1: South Girder, Pier 39 to East Abutment

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge

Section I

Calculated: RAH 3/16/2012

Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (ft)	M+	M-	V							
	D	L+I	L-I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
0	0.00	0.00	0.00	236.68	140.83	20466.60	---	N/A	1699.63	---	7.60
19.586	3903.10	2082.21	384.45	161.88	119.66	20466.60	---	5.69	1699.63	---	9.57
39.172	6341.19	3520.61	768.91	87.08	99.03	20466.60	---	2.67	1699.63	---	12.32
43.481	6680.97	3763.06	853.49	70.63	94.38	20466.60	---	2.41	1699.63	---	13.10
58.758	7304.93	4364.64	1153.36	11.06	77.73	24878.90	---	2.71	1711.12	---	16.79
78.344	6773.72	4636.86	1537.81	-65.31	58.70	24878.90	---	2.67	1711.12	---	21.31
97.93	4746.80	4469.44	1922.27	-141.67	74.80	24878.90	---	3.22	1711.12	---	15.70
98.518	4662.88	4459.88	1933.80	-143.96	75.38	24878.90	---	3.25	1711.12	---	15.55
117.516	1238.49	3919.63	2306.72	-216.54	94.23	21036.38	---	3.81	1735.52	---	11.87
137.102	-3735.67	2936.21	2653.89	-291.40	113.13	21036.38	---	4.24	1735.52	---	9.23
151.596	-8360.76	2077.14	2934.45	-346.83	126.70	21036.38	---	2.67	1735.52	---	7.80
156.688	-10178.11	1748.64	3033.02	-366.94	130.93	28927.68	---	3.98	1808.73	---	7.82
161.585	-12022.20	1422.10	3127.80	-386.30	134.44	28927.68	---	3.27	1808.73	---	7.48
172.944	-16673.94	628.18	3347.69	-432.71	142.07	37948.47	---	3.74	1904.91	---	7.27
176.274	-18138.27	553.75	3412.15	-446.88	144.18	53750.16	---	6.80	2397.00	---	9.69
187.438	-23393.70	588.82	3628.25	-494.69	150.86	53750.16	---	4.95	2397.00	---	8.94
195.86	-27717.10	615.28	3791.27	-532.03	157.30	63433.41	---	5.56	2735.49	---	9.99
0	-27717.10	617.98	3807.92	589.57	157.30	63433.41	---	5.54	2735.49	---	9.63
6.506	-23975.30	553.51	3161.99	560.73	154.35	63433.41	---	7.85	2735.49	---	10.00
18.976	-17316.55	429.94	2951.14	507.33	147.95	53322.20	---	8.03	2381.21	---	8.95
27.108	-13326.32	702.41	2823.41	474.01	143.43	39726.05	---	6.10	1978.12	---	7.30
29.548	-12182.03	870.38	2785.09	259.35	142.02	39726.05	---	6.60	1978.12	---	8.89
37.951	-8422.25	1441.15	2653.11	430.80	136.98	29590.05	---	5.40	1841.75	---	7.20
54.216	-1921.47	2512.04	2397.65	368.58	124.35	21173.90	---	5.72	1744.13	---	7.83
79.426	6155.92	3924.86	1970.19	272.24	103.77	21173.90	---	2.58	1744.13	---	10.31
81.324	6665.41	4018.14	1940.85	264.76	102.24	27107.64	---	3.53	1716.86	---	10.33
92.438	9364.70	4508.22	1769.04	220.97	93.34	27107.64	---	2.55	1716.86	---	11.78
108.432	12379.47	5033.93	1521.79	156.02	80.80	33918.43	---	2.72	1735.52	---	14.59
135.54	15072.34	5345.57	1102.72	42.66	60.49	40838.18	---	3.06	1752.75	---	21.59
162.648	14692.09	5090.21	978.11	-70.71	80.20	40838.18	---	3.29	1752.75	---	15.93
181.081	12678.16	4511.62	1157.90	-147.80	94.66	40838.18	---	4.15	1752.75	---	12.68
189.756	11243.28	4132.63	1242.50	-183.03	101.61	33918.43	---	3.59	1735.52	---	11.34
198.159	9561.84	3710.25	1324.47	-217.15	108.42	33918.43	---	4.46	1735.52	---	10.31
211.442	6329.84	2935.81	1454.02	-269.49	119.33	27107.64	---	4.95	1716.86	---	8.81
216.864	4812.64	2588.34	1506.90	-290.20	123.82	23319.85	---	5.07	1876.20	---	9.31
243.972	-4461.31	719.75	1799.61	-394.11	143.33	23319.85	---	7.49	1876.20	---	7.32
255.9	-9435.66	770.06	2232.96	-440.00	150.04	23319.85	---	3.81	1876.20	---	6.69
263.761	-13017.76	893.53	2935.03	-471.38	154.06	33581.07	---	4.37	2330.68	---	8.58
271.08	-16577.79	1008.49	3643.84	-501.45	157.42	41845.72	---	4.28	2471.21	---	8.89

5C1:

South Girder, Pier 37 to Pier 39

**CUY-2-1441 Load Rating Analysis**

Main Ave Bridge  
Section I

Calculated: RAH 3/16/2012  
Checked: DBH 3/17/2012

\*Capacities taken from spreadsheet calculations

Location	Moment / Shear from CONSYS Model					RF - Moment			RF - Shear		
	Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
	From Rear (Ft)	M+	M-	V							
		D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory
0	-16577.79	1008.49	3643.84	349.95	157.42	42837.54	---	4.49	2695.87	---	10.95
11.046	-12965.33	927.63	3351.67	304.21	137.54	42837.54	---	5.96	2695.87	---	12.87
17.259	-11152.29	881.96	3186.67	279.41	131.70	32126.60	---	4.26	2253.30	---	11.04
28.477	-8267.74	1248.89	2887.56	234.91	120.63	32126.60	---	5.70	2253.30	---	12.42
34.518	-6918.74	1624.60	2725.87	211.74	114.39	22028.52	---	3.68	1797.25	---	10.23
51.777	-3834.97	2493.92	2261.42	145.64	94.48	22028.52	---	5.26	1797.25	---	13.09
64.549	-2286.72	2918.68	1915.39	96.82	79.25	22028.52	---	5.02	1797.25	---	16.22
69.036	-1890.68	3017.28	1793.34	79.69	74.03	20473.41	---	4.59	1700.06	---	16.59
86.295	-1084.14	3153.94	1321.62	13.78	56.25	20473.41	---	4.65	1700.06	---	23.00
103.554	-1415.18	3007.36	1456.31	-52.14	76.24	20473.41	---	4.77	1700.06	---	16.47
120.813	-2883.80	2464.42	1846.34	-118.05	97.60	20473.41	---	5.22	1700.06	---	12.19
132.894	-4588.69	1875.15	2121.09	-164.19	112.75	20473.41	---	5.26	1700.06	---	10.14
138.072	-5490.05	1575.22	2239.28	-183.99	118.55	25364.79	---	6.26	1998.22	---	11.41
155.331	-9238.24	601.65	2635.11	-250.47	137.06	25364.79	---	3.90	1998.22	---	9.39
156.021	-9412.07	621.18	2651.00	-253.15	137.77	25364.79	---	3.81	1998.22	---	9.32
172.59	-14160.34	1091.56	3033.85	-320.07	162.28	33785.10	---	3.90	2504.66	---	9.90
0	-14160.34	1063.70	2956.41	494.16	156.22	33785.10	---	4.00	2504.66	---	9.17
10.896	-9019.71	1012.20	2123.49	449.47	151.03	33785.10	---	7.99	2504.66	---	9.78
20.954	-4697.77	964.30	2022.99	409.96	145.49	24298.77	---	6.92	1935.05	---	7.41
41.908	3032.81	2180.34	1797.13	327.97	132.01	24298.77	---	7.18	1935.05	---	8.79
55.319	7080.62	3150.78	1660.95	275.73	120.17	24298.77	---	3.69	1935.05	---	10.09
62.862	9046.49	3643.15	1583.77	245.48	113.45	27107.64	---	3.24	1716.86	---	9.48
66.843	9992.04	3884.11	1542.87	229.52	109.88	27107.64	---	2.80	1716.86	---	9.93
81.93	12984.61	4656.10	1386.81	167.19	96.26	33918.43	---	2.81	1735.52	---	12.13
83.816	13292.35	4737.93	1367.19	159.18	94.55	40838.18	---	3.82	1752.75	---	12.58
104.77	15694.23	5347.65	1147.39	70.08	75.43	40838.18	---	2.94	1752.75	---	16.95
125.724	16229.19	5503.11	924.36	-19.02	65.68	40838.18	---	2.76	1752.75	---	20.24
146.678	14897.22	5146.92	698.10	-108.12	86.36	40838.18	---	3.21	1752.75	---	14.36
156.945	13563.04	4740.27	586.06	-151.77	97.40	40838.18	---	3.77	1752.75	---	12.28
167.632	11705.24	4127.21	468.62	-195.92	109.60	33918.43	---	3.49	1735.52	---	10.39
171.404	10936.91	3863.13	426.98	-211.50	113.52	33918.43	---	3.92	1735.52	---	9.90
182.3	8394.36	3007.55	306.07	-255.19	124.92	27107.64	---	4.14	1716.86	---	8.53
188.586	6713.33	2437.42	235.92	-279.64	131.61	20466.60	---	3.70	1699.63	---	7.81
209.54	0.00	0.00	0.00	-361.13	154.23	20466.60	---	N/A	1699.63	---	6.14

5C1: South Girder, Pier 39 to East Abutment

**Section I**

**As Inspected Ratings**



Made By RAH  
Checked By DBH

Date 3/17/2012  
Date 3/17/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER SECTION 7** From Section properties:

As Inspected:  
 Fy= 33 As Built  
 MCm = 28842.9 K-FT 30218.3 K-FT  
 VCm = 1710.3 K 2085.9 K

Aprox 26 ft from Pier 38

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Truck										
-8492.87	790.52	1632.41	424.08	139.68	30218.30	5.41	9.02	2085.90	5.06	8.44
As Inspected HS20 Truck										
-8492.87	790.52	1632.41	424.08	139.68	28842.9	5.03	8.38	1710.30	3.82	6.37
As Built HS20 Lane										
-8492.87	1323.86	4254.00	424.08	218.39	30218.30	2.08	3.46	2085.90	3.24	5.40
As Inspected HS20 Lane										
-8492.87	1323.86	4254.00	424.08	218.39	28842.90	1.93	3.21	1710.30	2.45	4.08
As Built Ohio 2F1										
-8492.87	432.27	684.02	424.08	59.27	30218.30	---	21.57	2085.90	---	19.92
As Inspected Ohio 2F1										
-8492.87	432.27	684.02	424.08	59.27	28842.90	---	20.02	1710.30	---	15.04
As Built Ohio 3F1										
-8492.87	617.80	1048.35	424.08	90.43	30218.30	---	14.07	2085.90	---	13.05
As Inspected Ohio 3F1										
-8492.87	617.80	1048.35	424.08	90.43	28842.9	---	13.06	1710.30	---	9.86
As Built Ohio 4F1										
-8492.87	690.61	1229.13	424.08	105.55	30218.30	---	12.00	2085.90	---	11.18
As Inspected Ohio 4F1										
-8492.87	690.61	1229.13	424.08	105.55	28842.9	---	11.14	1710.30	---	8.45
As Built Ohio 5C1										
-8492.87	694.23	1765.89	424.08	146.62	30218.30	---	8.35	2085.90	---	8.05
As Inspected Ohio 5C1										
-8492.87	694.23	1765.89	424.08	146.62	28842.9	---	7.75	1710.30	---	6.08

**Section I**

**As Inspected Ratings**

Made By RAH  
Checked By DBH

Date 3/17/2012  
Date 3/17/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**NORTH GIRDER SECTION 19** From Section properties:

As Inspected:

Fy= 33 As Built  
MCm = 39549 K-FT 44610.90 K-FT  
VCm = 1274.3 K **2527.00** K

location at 27 +/- from Pier 39

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Truck										
-12569.43	1234.63	2718.49	357.66	132.34	44610.90	4.79	7.99	2527.00	7.18	11.97
As Inspected HS20 Truck										
-12569.43	1234.63	2718.49	357.66	132.34	39549	3.93	6.56	1274.30	2.82	4.70
As Built HS20 Lane										
-12569.43	1845.96	6133.67	357.66	201.81	44610.90	2.12	3.54	2527.00	4.71	7.85
As Inspected HS20 Lane										
-8492.87	1323.86	4254.00	424.08	218.39	39549.00	3.09	5.15	1274.30	1.53	2.54
As Built Ohio 2F1										
-12569.43	627.07	1138.40	357.66	56.59	44610.90	---	19.10	2527.00	---	28.03
As Inspected Ohio 2F1										
-12569.43	627.07	1138.40	357.66	56.59	39549.00	---	15.68	1274.30	---	11.00
As Built Ohio 3F1										
-12569.43	927.68	1744.42	357.66	86.13	44610.90	---	12.47	2527.00	---	18.42
As Inspected Ohio 3F1										
-12569.43	927.68	1744.42	357.66	86.13	39549.00	---	10.23	1274.30	---	7.23
As Built Ohio 4F1										
-12569.43	1041.00	2046.05	357.66	100.27	44610.90	---	10.63	2527.00	---	15.82
As Inspected Ohio 4F1										
-8492.87	690.61	1229.13	424.08	105.55	39549.00	---	17.84	1274.30	---	5.27
As Built Ohio 5C1										
-12569.43	831.59	2950.16	357.66	136.35	44610.90	---	7.37	2527.00	---	11.63
As Inspected Ohio 5C1										
-12569.43	831.59	2950.16	357.66	136.35	39549	---	6.05	1274.30	---	4.57



**Section I**

**As Inspected Ratings**

Made By RAH  
Checked By DBH

Date 3/17/2012  
Date 3/17/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

CENTER GIRDER SECTION 7 From Section properties:

As Inspected:

Fy= 33 As Built  
MCm = 29170.9 K-FT 30630.5 K-FT  
VCm = 1565.4 K 1952.3 K

Aprox 26 ft from Pier 38

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Truck										
-8257.37	840.76	1727.52	383.86	117.34	30630.50	5.31	8.85	1952.30	5.71	9.51
As Inspectec HS20 Truck										
-8257.37	840.76	1727.52	383.86	117.34	29170.9	4.92	8.20	1565.40	4.19	6.98
As Built HS20 Lane										
-8257.37	965.24	3778.41	383.86	185.45	30630.50	2.43	4.05	1952.30	3.61	6.02
As Inspectec HS20 Lane										
-8257.37	965.24	3778.41	383.86	185.45	29170.90	2.25	3.75	1565.40	2.65	4.42
As Built Ohio 2F1										
-8257.37	442.12	728.17	383.86	49.85	30630.50	---	21.02	1952.30	---	22.42
As Inspectec Ohio 2F1										
-8257.37	442.12	728.17	383.86	49.85	29170.90	---	19.48	1565.40	---	16.45
As Built Ohio 3F1										
-8257.37	646.56	1115.05	383.86	76.03	30630.50	---	13.73	1952.30	---	14.70
As Inspectec Ohio 3F1										
-8257.37	646.56	1115.05	383.86	76.03	29170.9	---	12.72	1565.40	---	10.79
As Built Ohio 4F1										
-8257.37	721.46	1306.40	383.86	88.70	30630.50	---	11.72	1952.30	---	12.60
As Inspectec Ohio 4F1										
-8257.37	721.46	1306.40	383.86	88.70	29170.9	---	10.86	1565.40	---	9.25
As Built Ohio 5C1										
-8257.37	721.46	1306.40	383.86	88.70	30630.50	---	11.72	1952.30	---	12.60
As Inspectec Ohio 5C1										
-8257.37	721.46	1306.40	383.86	88.70	29170.9	---	10.86	1565.40	---	9.25



**Section I**

**As Inspected Ratings**

Made By RAH  
Checked By DBH

Date 3/17/2012  
Date 3/17/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

CENTER GIRDER SECTION 19 From Section properties:

As Inspected:

Fy=	33	As Built
MCm =	46732 K-FT	48676 K-FT
VCm =	2260.2 K	2707.9 K

Adjacent to Pier 39 approx 16 ft into span

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Truck										
-11345.32	556.18	2313.31	288.72	115.33	48676.00	6.76	11.27	2707.90	9.32	15.54
As Inspected HS20 Truck										
-11345.32	556.18	2313.31	288.72	115.33	46732	6.37	10.62	2260.20	7.53	12.56
As Built HS20 Lane										
-11345.32	1429.60	5353.97	288.72	169.21	48676.00	2.92	4.87	2707.90	6.35	10.59
As Inspected HS20 Lane										
-11345.32	1429.60	5353.97	288.72	169.21	46732	2.75	4.59	2260.20	5.13	8.56
As Built Ohio 2F1										
-11345.32	326.48	967.81	288.72	49.44	48676.00	---	26.97	2707.90	---	36.29
As Inspected Ohio 2F1										
-11345.32	326.48	967.81	288.72	49.44	46732	---	25.42	2260.20	---	29.33
As Built Ohio 3F1										
-11345.32	467.39	1483.20	288.72	75.20	48676.00	---	17.60	2707.90	---	23.86
As Inspected Ohio 3F1										
-11345.32	467.39	1483.20	288.72	75.20	46732	---	16.59	2260.20	---	19.28
As Built Ohio 4F1										
-11345.32	512.15	1739.93	288.72	87.47	48676.00	---	15.00	2707.90	---	20.51
As Inspected Ohio 4F1										
-11345.32	512.15	1739.93	288.72	87.47	46732	---	14.14	2260.20	---	16.58
As Built Ohio 5C1										
-11345.32	532.44	2519.00	288.72	117.77	48676.00	---	10.36	2707.90	---	15.24
As Inspected Ohio 5C1										
-11345.32	532.44	2519.00	288.72	117.77	46732	---	9.77	2260.20	---	12.31

**Section I**

**As Inspected Ratings**

Made By RAH  
Checked By DBH

Date 3/17/2012  
Date 3/17/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

CENTER GIRDER SECTION 26 From Section properties:

As Inspected:

Fy= 33 As Built  
MCm = 25254.2 K-FT 26944 K-FT  
VCm = 1675.7 K 2090.1 K

Adjacent to Pier 40 approx 21 ft into span

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Truck										
-5980.65	851.46	2190.72	357.86	117.30	26944.00	4.03	6.72	2090.10	6.38	10.64
As Inspectec HS20 Truck										
-5980.65	851.46	2190.72	357.86	117.30	25254.2	3.68	6.13	1675.70	4.76	7.93
As Built HS20 Lane										
-5980.65	1784.78	4124.50	357.86	171.94	26944.00	2.14	3.57	2090.10	4.35	7.26
As Inspectec HS20 Lane										
-5980.65	1784.78	4124.50	357.86	171.94	25254.2	1.95	3.26	1675.70	3.24	5.41
As Built Ohio 2F1										
-5980.65	444.92	920.82	357.86	49.94	26944.00	---	16.01	2090.10	---	25.03
As Inspectec Ohio 2F1										
-5980.65	444.92	920.82	357.86	49.94	25254.2	---	14.60	1675.70	---	18.64
As Built Ohio 3F1										
-5980.65	644.05	1411.18	357.86	76.12	26944.00	---	10.45	2090.10	---	16.42
As Inspectec Ohio 3F1										
-5980.65	644.05	1411.18	357.86	76.12	25254.2	---	9.53	1675.70	---	12.23
As Built Ohio 4F1										
-5980.65	725.53	1654.28	357.86	88.73	26944.00	---	8.91	2090.10	---	14.09
As Inspectec Ohio 4F1										
-5980.65	725.53	1654.28	357.86	88.73	25254.2	---	8.13	1675.70	---	10.49
As Built Ohio 5C1										
-5980.65	883.87	2333.95	357.86	122.32	26944.00	---	6.32	2090.10	---	10.22
As Inspectec Ohio 5C1										
-5980.65	883.87	2333.95	357.86	122.32	25254.2	---	5.76	1675.70	---	7.61

**Section I**

**As Inspected Ratings**

Made By RAH  
Checked By DBH

Date 3/17/2012  
Date 3/17/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SOUTH GIRDER SECTION 19** From Section properties:

As Inspected:

Fy= 33 As Built  
MCm = 31853.4 K-FT 33581.1 K-FT  
VCm = 1910.5 K 2330.7 K

location at 263 +/- from Pier 38

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Truck										
-13017.76	837.18	2698.48	-471.38	145.50	33581.10	2.84	4.74	2330.70	5.44	9.07
As Inspected HS20 Truck										
-13017.76	837.18	2698.48	-471.38	145.50	31853.4	2.55	4.25	1910.50	4.11	6.85
As Built HS20 Lane										
-13017.76	2071.10	6904.68	-471.38	236.19	33581.10	1.11	1.85	2330.70	3.35	5.59
As Inspected HS20 Lane										
-13017.76	2071.10	6904.68	-471.38	236.19	31853.4	1.00	1.66	1910.50	2.53	4.22
As Built Ohio 2F1										
-13017.76	352.01	1129.11	-471.38	61.57	33581.10	---	11.35	2330.70	---	21.46
As Inspected Ohio 2F1										
-13017.76	352.01	1129.11	-471.38	61.57	31853.4	---	10.17	1910.50	---	16.21
As Built Ohio 3F1										
-13017.76	538.95	1730.55	-471.38	94.01	33581.10	---	7.40	2330.70	---	14.06
As Inspected Ohio 3F1										
-13017.76	538.95	1730.55	-471.38	94.01	31853.4	---	6.64	1910.50	---	10.62
As Built Ohio 4F1										
-13017.76	631.98	2029.46	-471.38	109.81	33581.10	---	6.31	2330.70	---	12.03
As Inspected Ohio 4F1										
-13017.76	631.98	2029.46	-471.38	109.81	31853.4	---	5.66	1910.50	---	9.09
As Built Ohio 5C1										
-13017.76	893.53	2935.03	-471.38	154.06	33581.10	---	4.37	2330.70	---	8.58
As Inspected Ohio 5C1										
-13017.76	893.53	2935.03	-471.38	154.06	31853.4	---	3.91	1910.50	---	6.48

**Section I**

**As Inspected Ratings**

Made By RAH  
Checked By DBH

Date 3/17/2012  
Date 3/17/2012

Job No. P402110046  
Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

SOUTH GIRDER SECTION 28 From Section properties:

As Inspected:

Fy=	33	As Built	
MCm =	22854.4 K-FT		24298.8 K-FT
VCm =	1551.6 K		1935.1 K

location at 55 +/- from Pier 40

Unfactored Moment (k-ft)			Unfactored Shear (k)		C*	RF	RF	C*	RF	RF
M+	M-	V								
D	L+I	L+I	D	L+I	(k-ft)	Inventory	Operating	(kips)	Inventory	Operating
As Built HS20 Truck										
7080.62	3238.55	1586.84	275.73	118.93	24298.80	2.15	3.58	1935.10	6.11	10.18
As Inspected HS20 Truck										
7080.62	3238.55	1586.84	275.73	118.93	22854.4	1.94	3.24	1551.60	4.62	7.71
As Built HS20 Lane										
7080.62	4668.99	2204.29	275.73	148.16	24298.80	1.49	2.48	1935.10	4.90	8.17
As Inspected HS20 Lane										
7080.62	4668.99	2204.29	275.73	148.16	22854.4	1.35	2.25	1551.60	3.71	6.19
As Built Ohio 2F1										
7080.62	1455.01	668.47	275.73	51.24	24298.80	---	7.98	1935.10	---	23.67
As Inspected Ohio 2F1										
7080.62	1455.01	668.47	275.73	51.24	22854.4	---	7.22	1551.60	---	17.91
As Built Ohio 3F1										
7080.62	2178.69	1024.38	275.73	77.81	24298.80	---	5.33	1935.10	---	15.59
As Inspected Ohio 3F1										
7080.62	2178.69	1024.38	275.73	77.81	22854.4	---	4.82	1551.60	---	11.79
As Built Ohio 4F1										
7080.62	2525.82	1200.30	275.73	90.36	24298.80	---	4.60	1935.10	---	13.42
As Inspected Ohio 4F1										
7080.62	2525.82	1200.30	275.73	90.36	22854.4	---	4.16	1551.60	---	10.16
As Built Ohio 5C1										
7080.62	3150.78	1660.95	275.73	120.17	24298.80	---	3.69	1935.10	---	10.09
As Inspected Ohio 5C1										
7080.62	3150.78	1660.95	275.73	120.17	22854.4	---	3.33	1551.60	---	7.64

Bentley Tel:(800) 778-4277 Fax:(813) 980-3642 Net: www.bentley.com

**Structure Data**

Number of Spans: 4

Left Support: Roller Right Support: Roller

Span	Hinges (ft)
1	None
2	None
3	None
4	None

Span	Check Points (ft)						
1	0.000	13.793	27.586	41.379	55.172	68.965	82.758
	93.379	96.551	109.930	110.344	120.965	124.137	137.930
2	0.000	8.396	16.521	25.458	27.083	54.166	72.041
	81.249	84.499	102.374	108.332	135.415	162.498	167.373
	189.581	197.977	216.664	235.622	243.747	246.997	256.476
3	0.000	12.438	23.467	27.926	42.945	46.934	66.412
	70.401	93.868	117.335	140.802	164.269	177.880	187.736
	205.571	211.203	222.702	234.670			
4	0.000	9.075	21.606	22.038	43.212	64.818	65.466
	77.566	86.424	93.554	108.030	129.636	151.242	155.563
	171.984	172.848	185.163	194.454	216.060		

Span	Length (ft)	Seg	Location (ft)	Length (ft)	Elasticity (ksi)	Inertia (in4)
1	137.930	1	0.000	93.379	29000.0	534290.0
			93.379	16.552	29000.0	689859.9
		2	109.930	11.034	29000.0	1130110.0
			120.965	16.965	29000.0	1768210.0
			137.930			
2	270.830	1	0.000	8.396	29000.0	1768210.0
			8.396	8.125	29000.0	1284220.0
			16.521	8.937	29000.0	886044.0
			25.458	46.583	29000.0	534290.0
			72.041	12.458	29000.0	722148.0
			84.499	17.875	29000.0	922457.9
			102.374	64.999	29000.0	1096440.0
			167.373	18.146	29000.0	922457.9
			185.519			

Bentley Tel:(800) 778-4277 Fax:(813) 980-3642 Net: www.bentley.com

Span	Length (ft)	Seg	Location (ft)	Length (ft)	Elasticity (ksi)	Inertia (in4)	
3	234.670	9	197.977	12.458	29000.0	722148.0	
		10	235.622	37.645	29000.0	630438.0	
		11	246.997	11.375	29000.0	981287.1	
		12	256.476	9.479	29000.0	1416010.0	
		13	270.830	14.354	29000.0	1962240.0	
		1	0.000	12.438	29000.0	1997940.1	
		2	12.438	15.488	29000.0	1464380.0	
		3	27.926	15.019	29000.0	936382.0	
		4	42.945	23.467	29000.0	625860.0	
		5	66.412	111.468	29000.0	534290.0	
		6	177.880	27.691	29000.0	790350.0	
		7	205.571	17.131	29000.0	1266200.0	
		4	216.060	8	222.702	11.968	29000.0
1	0.000			9.075	29000.0	1735800.0	
2	9.075			12.964	29000.0	1265790.0	
3	22.038			43.428	29000.0	830387.0	
4	65.466			12.099	29000.0	722148.0	
5	77.566			15.988	29000.0	922457.9	
6	93.554			62.009	29000.0	1096440.0	
7	155.563			16.421	29000.0	922457.9	
8	171.984			13.180	29000.0	722148.0	
9	185.163			30.897	29000.0	534290.0	
9	216.060						

**CURRENT LOADS**

- 1.000\*(Truck) HS20
- 1.000\*(Truck) Ohio 5C1 Train Loading
- 1.000\*1.000\*(Static) Dead Loads (Self Wt) Unfactored
- 1.000\*1.000\*(Envelope) Group I: All LL and DC are Unfactored; No IM, With LL DF =[
  - 1.000\*(Combination) Grp 2 Span A Pos Moment, HS-20 Train and Truck (Inventory)
    - 0.469\*(Truck) HS20
    - 0.965\*(Truck) HS20 Truck Train A]
  - 1.000\*(Combination) Grp 3 Span A Pos Moment, Ohio 5C1 Train and Truck (Operati
    - 0.469\*(Truck) Ohio 5C1 Single
    - 0.965\*(Truck) Ohio 5C1 Single Train]
  - 1.000\*(Combination) Group 4, HS-15 Truck Fatigue: Unfactored; No IM, With LL D
    - 0.725\*(Truck) HS15]
  - 1.000\*(Combination) Group I, Dead Loads; Unfactored =[
    - 1.000\*1.000\*(Static) Dead Loads (Self Wt) Unfactored
    - 1.000\*1.000\*(Static) Dead Loads (Superstructure) Unfactored]
  - 1.000\*(Combination) Grp 2 Span B Pos Moment, HS-20 Train and Truck (Inventory)
    - 0.469\*(Truck) HS20
    - 0.965\*(Truck) HS20 Truck Train B]
  - 1.000\*(Combination) Grp 2 Span C Pos Moment, HS-20 Train and Truck (Inventory)
    - 0.469\*(Truck) HS20
    - 0.965\*(Truck) HS20 Truck Train C]
  - 1.000\*(Combination) Grp 2 Span D Pos Moment, HS-20 Train and Truck (Inventory)
    - 0.469\*(Truck) HS20
    - 0.965\*(Truck) HS20 Truck Train C]
  - 1.000\*(Combination) Grp 2 Span A & C Neg Moment, HS-20 Train and Truck (Invent
    - 0.469\*(Truck) HS20
    - 0.965\*(Truck) HS20 Truck Train B]
  - 1.000\*(Combination) Grp 2 Span B & D Neg Moment, HS-20 Train and Truck (Invent
    - 0.469\*(Truck) HS20
    - 0.965\*(Truck) HS20 Truck Train C]
  - 1.000\*(Combination) Grp 2 Pier 37 Shear, HS-20 Train and Truck (Inventory), Un
    - 0.469\*(Truck) HS20
    - 0.965\*(Truck) HS20 Truck Train A]
  - 1.000\*(Combination) Grp 2 Pier 38 Shear, HS-20 Train and Truck (Inventory), Un
    - 0.469\*(Truck) HS20
    - 0.965\*(Truck) HS20 Truck Train D]
  - 1.000\*(Combination) Grp 2 Pier 39 Shear, HS-20 Train and Truck (Inventory), Un

**CURRENT LOADS**

- 0.469\*(Truck) HS20
- 0.965\*(Truck) HS20 Truck Train E]
- 1.000\*(Combination) Grp 2 East Abut Shear, HS-20 Train and Truck (Inventory), I
- 0.469\*(Truck) HS20
- 1.000\*(Truck) HS20 Truck Train C]
- 1.000\*(Combination) Grp 3 Span B Pos Moment, Ohio 5C1 Train and Truck (Operati
- 0.469\*(Truck) Ohio 5C1
- 0.965\*(Truck) Ohio 5C1 Train Loading B]
- 1.000\*(Combination) Grp 3 Span C Pos Moment, Ohio 5C1 Train and Truck (Operati
- 0.469\*(Truck) Ohio 5C1
- 0.965\*(Truck) Ohio 5C1 Train Loading B]
- 1.000\*(Combination) Grp 3 Span D Pos Moment, Ohio 5C1 Train and Truck (Operati
- 0.469\*(Truck) Ohio 5C1
- 0.965\*(Truck) Ohio 5C1 Train Loading D]
- 1.000\*(Combination) Grp 3 Span A & C Neg Moment, Ohio 5C1 Train and Truck (Ope:
- 0.469\*(Truck) Ohio 5C1
- 0.965\*(Truck) Ohio 5C1 Train Loading B]
- 1.000\*(Combination) Grp 3 Span B & D Neg Moment, Ohio 5C1 Train and Truck (Ope:
- 0.469\*(Truck) Ohio 5C1
- 0.965\*(Truck) Ohio 5C1 Train Loading B]
- 1.000\*(Combination) Grp 3 Pier 37 Shear, Ohio 5C1 Train and Truck (Operating):
- 0.469\*(Truck) Ohio 5C1 Single
- 0.965\*(Truck) Ohio 5C1 Single Train]
- 1.000\*(Combination) Grp 3 Pier 38 Shear, Ohio 5C1 Train and Truck (Operating):
- 0.469\*(Truck) Ohio 5C1 Single
- 0.965\*(Truck) Ohio 5C1 Train Loading E]
- 1.000\*(Combination) Grp 3 Pier 39 Shear, Ohio 5C1 Train and Truck (Operating):
- 0.469\*(Truck) Ohio 5C1 Single
- 0.965\*(Truck) Ohio 5C1 Train Loading F]
- 1.000\*(Combination) Grp 3 Pier 40 Shear, Ohio 5C1 Train and Truck (Operating):
- 0.469\*(Truck) Ohio 5C1 Single
- 0.965\*(Truck) Ohio 5C1 Train Loading G]
- 1.000\*(Combination) Grp 3 East Abut Shear, Ohio 5C1 Train and Truck (Operating
- 0.469\*(Truck) Ohio 5C1 Single
- 0.965\*(Truck) Ohio 5C1 Train Loading D]
- 1.000\*(Combination) Grp 2 Pier 40 Shear, HS-20 Train and Truck (Inventory): Un:
- 0.469\*(Truck) Ohio 5C1 Single



**CURRENT LOADS**

- 0.965\*(Truck) Ohio 5C1 Train Loading G]]
- 1.000\*1.000\*(Static) Dead Loads (Superstructure) Unfactored
- 1.000\*(Truck) Ohio 5C1
- 1.000\*(Truck) HS20 Truck Train B
- 1.000\*(Truck) HS15
- 1.000\*(Truck) HS20 Truck Train C
- 1.000\*(Truck) HS20 Truck Train A
- 1.000\*(Truck) HS20 Truck Train D
- 1.000\*(Truck) HS20 Truck Train E
- 1.000\*(Truck) HS20 Truck Train F
- 1.000\*(Truck) Ohio 5C1 Train Loading E
- 1.000\*(Truck) Ohio 5C1 Train Loading B
- 1.000\*(Truck) Ohio 5C1 Train Loading D
- 1.000\*(Truck) Ohio 5C1 Train Loading F
- 1.000\*(Truck) Ohio 5C1 Train Loading G
- 1.000\*(Truck) Ohio 2F1
- 1.000\*(Truck) Ohio 3F1
- 1.000\*(Truck) Ohio 4F1
- 1.000\*(Lane) HS20 Lane Load

**Standard Mode Options**

Truck Factors		Lane Factors	
Moment	1.000	Moment	1.000
Shear	1.000	Shear	1.000
Deflection	1.000	Deflection	1.000

**Project Data**

File: Section I Center Girder Individual Trucks

Project: Main Avenue Bridge Rating

Analysis Method: AASHTO Standard Specification

User Job Number: P402110046

State: OH

State Job Number:

Date: 3/17/12/12

By: RAH

Comments:

East Approach, Lake Front Ramp Stadium Section Rating - Section I Center Girder Singl

**Structure Data**

Number of Spans: 4

Left Support: Roller Right Support: Roller

Span	Hinges (ft)
1	None
2	None
3	None
4	None

Span	Check Points (ft)						
1	0.000	16.623	33.246	49.869	66.492	83.115	99.738
	116.361	127.166	132.984	138.303	149.607	152.267	166.230
2	0.000	8.937	17.604	26.541	27.083	54.166	72.582
	81.249	83.686	97.770	108.332	116.728	135.415	162.498
	170.081	189.581	190.123	204.206	215.581	216.664	243.747
3	249.434	258.913	270.830				
	0.000	16.514	20.388	32.417	40.776	61.164	81.552
	94.193	101.940	122.328	142.716	156.172	163.104	183.492
4	185.939	203.880					
	0.000	12.536	21.248	42.496	58.007	63.744	69.056
	83.505	84.992	106.240	127.488	148.736	160.422	169.984
	174.446	185.920	191.232	212.480			

Span	Length (ft)	Seg	Location (ft)	Length (ft)	Elasticity (ksi)	Inertia (in4)
1	166.230	1	0.000			
			127.166	127.166	29000.0	534290.0
			138.303	11.137	29000.0	817735.0
			152.267	13.963	29000.0	1324139.9
			166.230	13.963	29000.0	1874340.0
2	270.830	2	0.000			
			8.937	8.937	29000.0	1874340.0
			17.604	8.667	29000.0	1324139.9
			26.541	8.937	29000.0	924207.0
			72.582	46.041	29000.0	534290.0
			83.686	11.104	29000.0	722148.0
			97.770	14.083	29000.0	922457.9
			116.728	18.958	29000.0	1132480.0
			170.081	53.354	29000.0	1278760.0
			190.123	20.041	29000.0	1132480.0

Span	Length (ft)	Seg	Location (ft)	Length (ft)	Elasticity (ksi)	Inertia (in4)	
3	203.880	10		14.083	29000.0	922457.9	
			204.206				
		11		11.375	29000.0	722148.0	
			215.581				
		12		33.854	29000.0	534290.0	
			249.434				
		13		9.479	29000.0	1140490.0	
			258.913				
		14		11.917	29000.0	1709320.0	
			270.830				
			0.000				
			1		16.514	29000.0	1709330.0
			2		15.903	29000.0	1017830.0
			3		61.776	29000.0	534290.0
4	212.480		94.193				
		4		61.980	29000.0	534290.0	
			156.172				
		5		29.766	29000.0	867451.0	
			185.939				
		6		17.941	29000.0	1327030.0	
			203.880				
			0.000				
			1		12.536	29000.0	1327030.0
			2		45.471	29000.0	863285.0
			3		58.007	29000.0	722148.0
			4		11.049	29000.0	722148.0
			5		69.056	29000.0	922457.9
			6		14.449	29000.0	922457.9
	7		83.505	29000.0	1132480.0		
	8		76.918	29000.0	1132480.0		
	9		160.422	29000.0	922457.9		
	10		14.024	29000.0	922457.9		
	11		174.446	29000.0	722148.0		
	12		11.474	29000.0	722148.0		
	13		185.920	29000.0	534290.0		
	14		26.560	29000.0	534290.0		
			212.480				

**CURRENT LOADS**

- 1.000\*(Truck) HS20
- 1.000\*(Truck) Ohio 5C1
- 1.000\*1.000\*(Static) Dead Loads (Self Wt) Unfactored
- 1.000\*1.000\*(Static) Dead Loads (Superstructure) Unfactored
- 1.000\*(Truck) HS15
- 1.000\*(Truck) Ohio 2F1
- 1.000\*(Truck) Ohio 3F1
- 1.000\*(Truck) Ohio 4F1
- 1.000\*(Lane) HS20 Lane Load

**Standard Mode Options**

Truck Factors		Lane Factors	
Moment	1.000	Moment	1.000
Shear	1.000	Shear	1.000
Deflection	1.000	Deflection	1.000

**Project Data**

File: Section I South Girder Continuous Loads\_REV 01

Project: Main Avenue Bridge Rating

Analysis Method: AASHTO Standard Specification

User Job Number: P402110046

State: OH

State Job Number:

Date: 3/17/12

By: RAH

Comments:

East Approach, Lake Front Ramp Stadium Section Rating - Section I South Girder Truck T

**Structure Data**

Number of Spans: 4

Left Support: Roller Right Support: Roller

Span	Hinges (ft)
1	None
2	None
3	None
4	None

Span	Check Points (ft)						
1	0.000	19.586	39.172	43.481	58.758	78.344	97.930
	98.518	117.516	137.102	151.596	156.688	161.585	172.944
	176.274	187.438	195.860				
2	0.000	6.506	18.976	27.108	29.548	37.951	54.216
	79.426	81.324	92.438	108.432	135.540	162.648	181.081
	189.756	198.159	211.442	216.864	243.972	255.900	263.761
3	0.000	11.046	17.259	28.477	34.518	51.777	64.549
	69.036	86.295	103.554	120.813	132.894	138.072	155.331
	156.021	172.590					
4	0.000	10.896	20.954	41.908	55.319	62.862	66.843
	81.930	83.816	104.770	125.724	146.678	156.945	167.632
	171.404	182.300	188.586	209.540			

Span	Length (ft)	Seg	Location (ft)	Length (ft)	Elasticity (ksi)	Inertia (in4)
1	195.860	1	0.000	43.481	29000.0	534290.0
			43.481	55.037	29000.0	658341.0
			98.518	47.202	29000.0	560639.0
			145.720	15.865	29000.0	811027.0
			161.585	11.360	29000.0	1129760.0
			172.944	14.494	29000.0	1838840.0
			187.438	8.422	29000.0	2278530.0
2	271.080	1	195.860	6.506	29000.0	2278530.0
			0.000	6.506	29000.0	1812570.0
			6.506	12.470	29000.0	1226880.0
			18.976	10.572	29000.0	844446.0
			29.548	8.403	29000.0	567076.0
			37.951	41.475	29000.0	722148.0
			79.426	13.012	29000.0	
	92.438					

Span	Length (ft)	Seg	Location (ft)	Length (ft)	Elasticity (ksi)	Inertia (in4)		
3	172.590	7		15.994	29000.0	922457.9		
		8	108.432	72.649	29000.0	1132480.0		
		9	181.081	17.078	29000.0	922457.9		
		10	198.159	13.283	29000.0	722148.0		
		11	211.442	44.457	29000.0	671356.9		
		12	255.900	7.861	29000.0	1096700.0		
		13	263.761	7.319	29000.0	1455470.0		
			271.080					
			0.000	1		11.046	29000.0	1489970.0
				2	11.046	17.432	29000.0	1014850.0
				3	28.477	36.071	29000.0	607747.0
				4	64.549	68.346	29000.0	534602.0
		4	209.540	5	132.894	23.127	29000.0	777269.0
6	156.021			16.569	29000.0	1087140.0		
	172.590							
	0.000			1		10.896	29000.0	1087140.0
				2	10.896	44.422	29000.0	721276.0
				3	55.319	11.525	29000.0	722148.0
				4	66.843	15.087	29000.0	922457.9
				5	81.930	75.015	29000.0	1132480.0
				6	156.945	14.458	29000.0	922457.9
				7	171.404	10.896	29000.0	722148.0
				8	182.300	27.240	29000.0	534290.0
					209.540			



**CURRENT LOADS**

- 1.000\*(Truck) HS20
- 1.000\*(Truck) Ohio 5C1
- 1.000\*1.000\*(Static) Dead Loads (Self Wt) Unfactored
- 1.000\*1.000\*(Static) Dead Loads (Superstructure) Unfactored
- 1.000\*1.000\*(Envelope) Group I All LL and DC are Unfactored: No IM, With DF =[
  - 1.000\*(Combination) Group I, Dead Loads; Unfactored =[
    - 1.000\*1.000\*(Static) Dead Loads (Self Wt) Unfactored
    - 1.000\*1.000\*(Static) Dead Loads (Superstructure) Unfactored]
- 1.000\*(Combination) Group 4, HS-15 Truck Fatigue: Unfactored; No IM, With DF =[
  - 1.000\*(Truck) HS15]
- 1.000\*(Combination) Grp 2 Span A Pos Moment, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20
  - 1.000\*(Truck) HS20 Truck Train A]
- 1.000\*(Combination) Grp 3 Span A Pos Moment, Ohio 5C1 Train and Truck (Operating):
  - 0.615\*(Truck) Ohio 5C1
  - 1.000\*(Truck) Ohio 5C1 Train Loading D]
- 1.000\*(Combination) Grp 2 Span B Pos Moment, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20
  - 1.000\*(Truck) HS20 Truck Train B]
- 1.000\*(Combination) Grp 2 Span C Pos Moment, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20
  - 1.000\*(Truck) HS20 Truck Train A]
- 1.000\*(Combination) Grp 2 Span D Pos Moment, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20
  - 1.000\*(Truck) HS20 Truck Train C]
- 1.000\*(Combination) Grp 2 Span A & C Neg Moment, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20
  - 1.000\*(Truck) HS20 Truck Train B]
- 1.000\*(Combination) Grp 2 Span B & D Neg Moment, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20
  - 1.000\*(Truck) HS20 Truck Train A]
- 1.000\*(Combination) Grp 2 Pier 37 Shear, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20
  - 1.000\*(Truck) HS20 Truck Train A]
- 1.000\*(Combination) Grp 2 Pier 38 Shear, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20
  - 1.000\*(Truck) HS20 Truck Train D]
- 1.000\*(Combination) Grp 2 Pier 39 Shear, HS-20 Train and Truck (Inventory), Unfactored
  - 0.615\*(Truck) HS20

**CURRENT LOADS**

- 1.000\*(Truck) HS20 Truck Train E]
- 1.000\*(Combination) Grp 2 East Abut Shear, HS-20 Train and Truck (Inventory), Unfac
- 0.615\*(Truck) HS20
- 1.000\*(Truck) HS20 Truck Train C]
- 1.000\*(Combination) Grp 3 Span B Pos Moment, Ohio 5C1 Train and Truck (Operating):
- 0.615\*(Truck) Ohio 5C1
- 1.000\*(Truck) Ohio 5C1 Train Loading B]
- 1.000\*(Combination) Grp 3 Span C Pos Moment, Ohio 5C1 Train and Truck (Operating):
- 0.615\*(Truck) Ohio 5C1
- 1.000\*(Truck) Ohio 5C1 Train Loading D]
- 1.000\*(Combination) Grp 3 Span D Pos Moment, Ohio 5C1 Train and Truck (Operating):
- 0.615\*(Truck) Ohio 5C1
- 1.000\*(Truck) Ohio 5C1 Train Loading D]
- 1.000\*(Combination) Grp 3 Span A & C Neg Moment, Ohio 5C1 Train and Truck (Operatin
- 0.615\*(Truck) Ohio 5C1
- 1.000\*(Truck) Ohio 5C1 Train Loading B]
- 1.000\*(Combination) Grp 3 Span B & D Neg Moment, Ohio 5C1 Train and Truck (Operatin
- 0.615\*(Truck) Ohio 5C1
- 1.000\*(Truck) Ohio 5C1 Train Loading D]
- 1.000\*(Combination) Grp 3 Pier 37 Shear, Ohio 5C1 Train and Truck (Operating): Unfa
- 0.615\*(Truck) Ohio 5C1
- 1.000\*(Truck) Ohio 5C1 Train Loading D]
- 1.000\*(Combination) Grp 3 Pier 38 Shear, Ohio 5C1 Train and Truck (Operating): Unfa
- 1.000\*(Truck) Ohio 5C1 Train Loading E
- 0.615\*(Truck) Ohio 5C1]
- 1.000\*(Combination) Grp 3 Pier 39 Shear, Ohio 5C1 Train and Truck (Operating): Unfa
- 1.000\*(Truck) Ohio 5C1 Train Loading F
- 0.615\*(Truck) Ohio 5C1]
- 1.000\*(Combination) Grp 3 Pier 40 Shear, Ohio 5C1 Train and Truck (Operating): Unfa
- 1.000\*(Truck) Ohio 5C1 Train Loading G
- 0.615\*(Truck) Ohio 5C1]
- 1.000\*(Combination) Grp 3 East Abut Shear, Ohio 5C1 Train and Truck (Operating): Un
- 1.000\*(Truck) Ohio 5C1 Train Loading D
- 0.615\*(Truck) Ohio 5C1]
- 1.000\*(Combination) Grp 2 Pier 40 Shear, HS-20 Train and Truck (Inventory): Unfacto
- 1.000\*(Truck) HS20 Truck Train F
- 0.615\*(Truck) HS20]]
- 1.000\*(Truck) HS15
- 1.000\*(Truck) HS20 Truck Train A

**CURRENT LOADS**

- 1.000\*(Truck) HS20 Truck Train B
- 1.000\*(Truck) HS20 Truck Train C
- 1.000\*(Truck) HS20 Truck Train D
- 1.000\*(Truck) HS20 Truck Train E
- 1.000\*(Truck) HS20 Truck Train F
- 1.000\*(Truck) Ohio 5C1 Train Loading B
- 1.000\*(Truck) Ohio 5C1 Train Loading D
- 1.000\*(Truck) Ohio 5C1 Train Loading E
- 1.000\*(Truck) Ohio 5C1 Train Loading F
- 1.000\*(Truck) Ohio 5C1 Train Loading G

**Standard Mode Options**

Truck Factors		Lane Factors	
Moment	1.000	Moment	1.000
Shear	1.000	Shear	1.000
Deflection	1.000	Deflection	1.000



Made By RAH Date 3/13/2012 Job No. P402110046  
 Checked By DBH Date 3/13/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

BDM 905: Long span bridge: Any single or multi span bridge that has at least one span greater than 200 ft.

BDM SECTION 927.2: LOADS TO BE USED

Rate all bridges for Ohio legal loads (2F1, 3F1, 4F1, 5C1)

Transverse spacing of legal loads at 6'-0" (between wheel groups)

LONG SPAN BRIDGES (SPANS >200 FEET) per BDM Section 905, use the special load configurations

Per BDM Section 917. Span between Pier 38 and Pier 39 is > 200 ft for each girder.

[61 m]	SPAN 1	SPAN 2	SPAN 3	SPAN 4	
1	137.93 ft	270.83 ft	234.67 ft	216.06 ft	Section I begins at Pier 37 and continues to East Abutment
2	166.23 ft	270.83 ft	203.88 ft	212.48 ft	
3	195.86 ft	271.08 ft	172.59 ft	209.54 ft	

BDM SECTION 917: LOAD RATING OF LONG SPAN BRIDGES

BDM 917.2.2: INVENTORY & OPERATING LEVEL USING HS20 TRUCK

This truck is defined as a series of trucks simulating a train long enough to produce the maximum load effect on the component to be rated.

Truck trains to be located in the far right hand lane with one single fixed axle vehicle in the adjacent lane - similar type.

**Current configuration using the 3 girders at 19'-6" with a median barrier separating two travel lanes in each direction, no additional travel lanes exist in the same direction thus only the two vehicles above can be placed for analysis - thus no multi-presence factor can be used for the exterior girders.**

BDM 917.2.3 OPERATING LEVEL RATING USING OHIO LEGAL LOADS

BDM 927 defines the rating approach and states that the operating level rating shall apply the live loads as per BDM 917 using the truck train approach.

Due to the nonsymmetrical span arrangements, multiple truck trains shall be developed to fit into each span without extending into the adjacent span. Analysis program CONSYS will be used to move the truck trains across the bridge and back again to obtain the force effects envelop for the span and or reaction to be obtained.

Only those loading values produced by a specific load application for a specific component rating will be provided for rating.



Made By RAH Date 3/13/2012  
 Checked By DBH Date 3/13/2012

Job No. P402110046  
 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

AASHTO 3.8.2: IMPACT

$I = 50 / (L + 125)$  Less than or equal to 0.30

### MOMENT IMPACT FACTOR

L is the length of the span to produce max stress

#### North Girder

For continuous spans: length of span under consideration for positive moment and average of adjacent loaded spans for negative moment.

Span	Length	Pos Mom IM	Neg Mom IM
1	137.93	1.190	
			1.152
2	270.83	1.126	
			1.132
3	234.67	1.139	
			1.143
4	216.06	1.147	

Shear due to truck loads: length of the loaded portion of the span from point under consideration to the far reaction.

#### Center Girder

Span	Length	Pos Mom IM	Neg Mom IM
1	166.23	1.172	
			1.146
2	270.83	1.126	
			1.138
3	203.88	1.152	
			1.150
4	212.48	1.148	

#### South Girder

Span	Length	Pos Mom IM	Neg Mom IM
1	195.86	1.156	
			1.139
2	271.08	1.126	
			1.144
3	172.59	1.168	
			1.158
4	209.54	1.149	

**SECTION I**

**SPANS > 200 FT**

**LOAD APPLICATION**



Made By RAH Date 3/13/2012 Job No. P402110046  
 Checked By DBH Date 3/13/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SHEAR IMPACT FACTOR**

Use MAX value due to reversal of truck

**North Girder**

SPAN 1				SPAN 2			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	13.793	1.300	1.300	0.1	27.083	1.300	1.300
0.2	27.586	1.300	1.300	0.2	54.166	1.279	1.279
0.3	41.379	1.300	1.300	0.3	81.249	1.242	1.242
0.4	55.172	1.278	1.278	0.4	108.332	1.214	1.214
0.5	68.965	1.258	1.258	0.5	135.415	1.192	1.192
0.6	82.758	1.241	1.278	0.6	162.498	1.174	1.214
0.7	96.551	1.226	1.300	0.7	189.581	1.159	1.242
0.8	110.344	1.212	1.300	0.8	216.664	1.146	1.279
0.9	124.137	1.201	1.300	0.9	243.747	1.136	1.300
1	137.93	1.190	1.300	1	270.83	1.1263	1.3

SPAN 3				SPAN 4			
x/L	L	Shear IM	MAX IM	x/L	L	Shear IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	23.467	1.300	1.300	0.1	21.606	1.300	1.300
0.2	46.934	1.291	1.291	0.2	43.212	1.297	1.297
0.3	70.401	1.256	1.256	0.3	64.818	1.263	1.263
0.4	93.868	1.228	1.228	0.4	86.424	1.236	1.236
0.5	117.335	1.206	1.206	0.5	108.03	1.215	1.215
0.6	140.802	1.188	1.228	0.6	129.636	1.196	1.236
0.7	164.269	1.173	1.256	0.7	151.242	1.181	1.263
0.8	187.736	1.160	1.291	0.8	172.848	1.168	1.297
0.9	211.203	1.149	1.300	0.9	194.454	1.157	1.300
1	234.67	1.139	1.300	1	216.06	1.147	1.300

**SECTION I**

**SPANS > 200 FT**

**LOAD APPLICATION**



Made By RAH Date 3/13/2012 Job No. P402110046  
 Checked By DBH Date 3/13/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SHEAR IMPACT FACTOR**

**Center Girder**

Use MAX value due to reversal of truck

SPAN 1				SPAN 2			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	16.623	1.300	1.300	0.1	27.083	1.300	1.300
0.2	33.246	1.300	1.300	0.2	54.166	1.279	1.279
0.3	49.869	1.286	1.286	0.3	81.249	1.242	1.242
0.4	66.492	1.261	1.261	0.4	108.332	1.214	1.214
0.5	83.115	1.240	1.240	0.5	135.415	1.192	1.192
0.6	99.738	1.222	1.261	0.6	162.498	1.174	1.214
0.7	116.361	1.207	1.286	0.7	189.581	1.159	1.242
0.8	132.984	1.194	1.300	0.8	216.664	1.146	1.279
0.9	149.607	1.182	1.300	0.9	243.747	1.136	1.300
1	166.23	1.172	1.300	1	270.83	1.126	1.300

SPAN 3				SPAN 4			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	20.388	1.300	1.300	0.1	21.248	1.300	1.300
0.2	40.776	1.300	1.300	0.2	42.496	1.299	1.299
0.3	61.164	1.269	1.269	0.3	63.744	1.265	1.265
0.4	81.552	1.242	1.242	0.4	84.992	1.238	1.238
0.5	101.94	1.220	1.220	0.5	106.24	1.216	1.216
0.6	122.328	1.202	1.242	0.6	127.488	1.198	1.238
0.7	142.716	1.187	1.269	0.7	148.736	1.183	1.265
0.8	163.104	1.174	1.300	0.8	169.984	1.170	1.299
0.9	183.492	1.162	1.300	0.9	191.232	1.158	1.300
1	203.88	1.152	1.3	1	212.48	1.148	1.300

**SECTION I**

**SPANS > 200 FT**

**LOAD APPLICATION**



Made By RAH Date 3/13/2012 Job No. P402110046  
 Checked By DBH Date 3/13/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SHEAR IMPACT FACTOR**

**South Girder**

Use MAX value due to reversal of truck

SPAN 1				SPAN 2			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	19.586	1.300	1.300	0.1	27.108	1.300	1.300
0.2	39.172	1.300	1.300	0.2	54.216	1.279	1.279
0.3	58.758	1.272	1.272	0.3	81.324	1.242	1.242
0.4	78.344	1.246	1.246	0.4	108.432	1.214	1.214
0.5	97.93	1.224	1.224	0.5	135.54	1.192	1.192
0.6	117.516	1.206	1.246	0.6	162.648	1.174	1.214
0.7	137.102	1.191	1.272	0.7	189.756	1.159	1.242
0.8	156.688	1.178	1.300	0.8	216.864	1.146	1.279
0.9	176.274	1.166	1.300	0.9	243.972	1.136	1.300
1	195.86	1.156	1.300	1	271.08	1.126	1.300

SPAN 3				SPAN 4			
x/L	L	V IM	MAX IM	x/L	L	V IM	MAX IM
0	0	1.300	1.300	0	0	1.300	1.300
0.1	17.259	1.300	1.300	0.1	20.954	1.300	1.300
0.2	34.518	1.300	1.300	0.2	41.908	1.300	1.300
0.3	51.777	1.283	1.283	0.3	62.862	1.266	1.266
0.4	69.036	1.258	1.258	0.4	83.816	1.239	1.239
0.5	86.295	1.237	1.237	0.5	104.77	1.218	1.218
0.6	103.554	1.219	1.258	0.6	125.724	1.199	1.239
0.7	120.813	1.203	1.283	0.7	146.678	1.184	1.266
0.8	138.072	1.190	1.300	0.8	167.632	1.171	1.300
0.9	155.331	1.178	1.300	0.9	188.586	1.159	1.300
1	172.59	1.168	1.300	1	209.54	1.1495	1.300



**SECTION I**

**SPANS > 200 FT**

**LOAD APPLICATION**



Made By DBH Date 3/16/2012 Job No. P402110046  
 Checked By RAH Date 3/17/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

VARIABLE DISTRIBUTION FACTOR FOR SPAN 4

NORTH GIRDER: Due to the curvature of the bridge, the overhang varies requiring a variable DF.  
 Using long chord mid ordinate, use this as the longest point and adjust linearly in each direction.

Length:	214.0732 ft	Use DF from tangent portion of bridge
Mid Point:	107.0366 ft	as base line for adjustment: 1.6154
		Worst DF from prev.calc.: <u>1.733</u>
		Total Change; <u>0.1176</u>

Check Point along Girder	x/l	Percent increase	Applied DF
0	0.000	0.000	1.6154
9.075	0.042	0.085	1.6254
21.606	0.100	0.202	1.6391
22.038	0.102	0.206	1.6396
43.212	0.200	0.404	1.6629
64.818	0.300	0.606	1.6866
65.466	0.303	0.612	1.6873
77.566	0.359	0.725	1.7006
86.424	0.400	0.807	1.7104
93.554	0.433	0.874	1.7182
108.03	0.500	0.991	1.7319
129.636	0.600	0.789	1.7082
151.242	0.700	0.587	1.6844
155.563	0.720	0.547	1.6797
171.984	0.796	0.393	1.6616
172.848	0.800	0.385	1.6607
185.163	0.857	0.270	1.6472
194.454	0.900	0.183	1.6370
216.06	1.000		1.6154

**SECTION I**

**SPANS > 200 FT**

**LOAD APPLICATION**



Made By DBH Date 3/16/2012 Job No. P402110046  
 Checked By RAH Date 3/17/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

VARIABLE DISTRIBUTION FACTOR FOR SPAN 3 & 4

SOUTH GIRDER: Use average "UNIT" overhang to establish percent change in DF

SPAN 3					Use DF from tangent portion of bridge as base line for adjustment: 1.6154
UNIT	AVG OH L	Beg UNIT in SPAN	x/l	Applied DF	
10	7.690	0.000	0.000	1.6154	Worst DF from prev.calc.: 1.678
11	7.700	55.688	0.323	1.6356	
12	7.870	98.146	0.569	1.6510	Total Change; 0.0626
13	8.825	135.271	0.784	1.6645	
end		172.590	1.000	1.6780	

SPAN 4					Use DF from tangent portion of bridge as base line for adjustment: 1.6154
UNIT	AVG OH L	Beg UNIT in SPAN	x/l	Applied DF	
14	8.450	0.000	0.000	1.6154	Worst DF from prev.calc.: 1.733
15	6.605	32.396	0.155	1.6336	
16	5.420	69.521	0.332	1.6544	Total Change; 0.1176
17	5.685	106.646	0.509	1.6753	
18	7.245	143.771	0.686	1.6961	
19	9.660	180.896	0.863	1.7169	
end		209.540	1.000	1.7330	

**SECTION I**

**SPANS > 200 FT**

**LOAD APPLICATION**



Made By DBH Date 3/16/2012 Job No. P402110046  
 Checked By RAH Date 3/17/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SPAN 3 SOUTH GIRDER**

Use Existing Check points and interpolate for DF

	Calc DF	Interpolated DF
0.000	1.6154	
0.064		1.6194
0.100		1.6217
0.165		1.6257
0.200		1.6279
0.300		1.6342
0.323	1.6356	1.6356
0.374		1.6388
0.400		1.6404
0.500		1.6467
0.569	1.6510	1.6510
0.600		1.6530
0.700		1.6592
0.770		1.6636
0.784	1.6645	1.6645
0.800		1.6655
0.900		1.6717
0.904		1.6720
1.000	1.6780	1.6780

SPAN 3 L= #####

Use DF from tangent portion of bridge  
 as base line for adjustment: 1.6154  
 Worst DF from prev.calc.: 1.678  
 Total Change; 0.0626

SPAN 3  
 USE BELOW DF at  
 CHECK POINTS

Ck Pt

DF-M	DF-V
1.6154	1.6154
1.6194	1.6194
1.6217	1.6217
1.6257	1.6257
1.6279	1.6279
1.6342	1.6342
1.6388	1.6388
1.6404	1.6404
1.6467	1.6467
1.6530	1.6530
1.6592	1.6592
1.6636	1.6636
1.6655	1.6655
1.6717	1.6717
1.6720	1.6720
1.6780	1.6780

**SECTION I**

**SPANS > 200 FT**

**LOAD APPLICATION**



Made By DBH Date 3/16/2012 Job No. P402110046  
 Checked By RAH Date 3/17/2012 Sheet No. \_\_\_\_\_

Calculations For: **CUY-2-1441**

**SPAN 4 SOUTH GIRDER**

Use Existing Check points and interpolate for DF

	Calc DF	Interpolated DF
0.000	1.6154	
0.052		1.6215
0.100		1.6272
0.155	1.6336	1.6336
0.200		1.6389
0.264		1.6464
0.300		1.6507
0.319		1.6529
0.332	1.6544	1.6544
0.391		1.6614
0.400		1.6624
0.500		1.6742
0.509	1.6753	1.6753
0.600		1.6860
0.686	1.6961	1.6961
0.700		1.6977
0.749		1.7035
0.800		1.7095
0.818		1.7116
0.863	1.7169	1.7169
0.870		1.7177
0.900		1.7212
1.000	1.7330	1.7330

Use DF from tangent portion of bridge  
 as base line for adjustment: 1.6154  
 Worst DF from prev.calc.: 1.733  
 Total Change; 0.1176

SPAN 4  
 USE BELOW DF at  
 CHECK POINTS

Ck Pt

0.000	1.6154
0.052	1.6215
0.100	1.6272
0.200	1.6389
0.264	1.6464
0.300	1.6507
0.319	1.6529
0.391	1.6614
0.400	1.6624
0.500	1.6742
0.600	1.6860
0.700	1.6977
0.749	1.7035
0.800	1.7095
0.818	1.7116
0.870	1.7177
0.900	1.7212
1.000	1.7330

DF-M	DF-V
1.6154	1.6154
1.6215	1.6215
1.6272	1.6272
1.6389	1.6389
1.6464	1.6464
1.6507	1.6507
1.6529	1.6529
1.6614	1.6614
1.6624	1.6624
1.6742	1.6742
1.6860	1.6860
1.6977	1.6977
1.7035	1.7035
1.7095	1.7095
1.7116	1.7116
1.7177	1.7177
1.7212	1.7212
1.7330	1.7330

# PIER COLUMN SUMMARY SHEET

## East Approach - Section I

**CUY-2-1441 Load Rating Analysis**  
**Main Ave Bridge**

Calculated: RAH 3/28/2012  
Checked: DBH 3/29/2012

As-Built Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
South Col.	Pier 38	13.14	21.95	284.13	185.32	157.90	28.10	n/a

As-Inspected Rating Factor Summary								
Item	Location/Member	HS20 Inventory	HS20 Operating	2F1 Operating	3F1 Operating	4F1 Operating	5C1 Operating	Fatigue
South Col.	Pier 38	13.14	21.95	284.13	185.32	157.90	28.10	n/a

NOTE: HS-20 and OH5C1 rating factors developed using truck trains for long spans (L>200')

Overall Summary			
Case	Rating Factor	Tonnage	HS equivalent or Ohio Legal Load %
HS20 Inventory	13.14	473.04	HS262.8
HS20 Operating	21.95	790.20	HS439.0
2F1	284.13	4261.94	2810%
3F1	185.32	4262.38	
4F1	157.90	4263.30	
5C1	28.10	1124.00	
Fatigue			



**Pier 38 Rating. All deficiencies found are negligible therefore the rating results are only AS BUILT. Consider the Train HS20 (fixed axle spacing) Loading (with adjacent Single HS 20 Truck with variable axle spacing); OH2F1 (single); OH3F1 (single); OH4F1 (single) and the OH5C1 Train Loading (With Adjacent single OH 5C1) as the case scenarios for the column rating. HS20 TT will be rated under Inventory and operating; OH2F1 (single), OH3F1 (single), OH4F1 (single) & OH5C1 TT will be rated only under operating. On this spreadsheet the rating was performed on the south column of Pier 38. The longest columns are on Piers 38 and 39. See the ODOT BDM Art. 917 for details about rating for long span bridges (spans>200')**

$N_{lanes} := 4$	Number of Lanes on Super Struct.
$W_{lanes} := 12ft$	Lane Width
$W_{parapet} := 1ft + 9in$	Concrete parapet width
$W_{bridge\_out\_to\_out} := 2 \cdot \left( 3ft + 7 \frac{1}{4} \cdot in + 7ft + 7 \frac{3}{4} \cdot in + 19.5ft \right) = 61.5 \cdot ft$	Out to Out Bridge Width
$W_{Bridge\_clear} := 2 \cdot (27ft + 10.5in) = 55.75 \cdot ft$	Clear Bridge width (curb to curb).
$N_{spans} := 2$	Number of Spans adjacent to pier 38
$t_{haunch} := 1.17ft$	Haunch Thickness on Girders. Rehab Plan sheet 526.
$t_{deck} := 6.75in$	Deck thickness between exterior girders. Rehab plan sheet 526.
$t_{deck\_over} := 10in$	Deck thickness on Overhangs. Rehab Plan sheet 534.
$t_{WS} := 1.25in$	Wearing Surface thickness. Rehab Plan sheet 534.
$L_{pier\_37\_to\_pier\_38\_center\_G} := 166.23ft$	Length Between Pier 37 and Pier 38. North girder
$L_{pier\_38\_to\_pier\_39\_center\_G} := 270.83ft$	Length Between Pier 38 and Pier 39. North girder
$fascia_{spacing} := 7ft + 7.75in = 7.646 \cdot ft$	Spacing between Fascia & Exterior Girders (Unit 4)
$Girder_{spacing} := 19.5ft$	Girder Spacing
$W_{overhang} := 3ft + 7 \frac{1}{4} \cdot in = 3.604 \cdot ft$	Overhang Width.
$N_{girders} := 3$	Number of Main Girders
$Width_{Haunch\_girders} := 22in$	Haunch Width on Main Girders.



$$W_{\text{cap\_strut}} := 2 \cdot \left( 11 \frac{5}{16} \cdot \text{in} \right) = 1.885 \cdot \text{ft}$$

Width of Steel Cap Strut

$$H_{\text{cap\_strut\_midspan}} := 5 \text{ft}$$

Cap strut Height at Midbay (between columns). Rehab Plan sheet 528.

$$H_{\text{cap\_strut\_support}} := 6.5 \text{ft}$$

Cap strut Height at face of column. Rehab Plan sheet 528.

$$f_y := 33 \text{ksi}$$

Yield strength of steel component in Columns

$$\text{Pier\_Strut\_Length} := 35 \text{ft} + 2 \frac{7}{16} \cdot \text{in} = 35.203 \cdot \text{ft}$$

Pier Strut Length (Between the interior and exterior columns)

$$N_{\text{pier\_columns}} := 3$$

Number of Pier Columns

#### DESCRIPTION OF LOADS

$$\gamma_{\text{steel}} := 0.49 \frac{\text{kip}}{\text{ft}^3}$$

Unit weight of Steel

$$\gamma_{\text{concrete\_col}} := 0.15 \frac{\text{kip}}{\text{ft}^3}$$

Unit weight of Concrete (inside Columns)

$$\gamma_{\text{concr\_deck}} := 0.117 \frac{\text{kip}}{\text{ft}^3}$$

Unit weight of Concrete (deck)

$$\gamma_{\text{concr\_WS}} := 0.15 \frac{\text{kip}}{\text{ft}^3}$$

Unit weight of Wearing Surface

$$\text{Rail} := 0.462 \frac{\text{kip}}{\text{ft}}$$

Uniform Weight due to (each) Parapet (Kip per ft)

$$\text{Median} := 0.499 \frac{\text{kip}}{\text{ft}}$$

Uniform Weight due to Median Barrier (Kip per ft)

$$\text{Comp}_{\text{DC}} := 2 \cdot \text{Rail} + \text{Median} = 1.423 \cdot \text{klf}$$

DL due to the weight of both parapets + the median barrier.

$$\text{Comp}_{\text{DW}} := W_{\text{Bridge\_clear}} \cdot \gamma_{\text{concr\_WS}} = 0.871 \cdot \frac{\text{kip}}{\text{ft}}$$

Dead load due to the wearing surface between curbs (ksf)

The DL from tributary superstructure above South Girder (& South Column) on Pier 38 is the most critical (longest adjacent spans along south girder). Values obtained from Consys:



$$DL_{\text{super\_at\_pier\_38\_south\_col\_unfactored}} := 899.511 \text{ kip}$$

Tributary DL from Superstructure  
above South Girder (& south Column)  
@ Pier 38 (unfactored)

$$DL_{\text{south\_girder\_self\_at\_pier\_38\_south\_col\_unfactored}} := 222.092 \text{ kip}$$

DL from South Girder Self Weight  
above south Column @ Pier 38  
(unfactored)

$$t_{\text{strut\_plates}} := \frac{3}{8} \cdot \text{in}$$

Typical thickness of Strut steel Plates

$$A_{\text{strut\_surface\_top}} := \left(1\text{ft} + 11\frac{3}{8}\cdot\text{in}\right) \cdot \frac{28\text{ft} + 7.25\text{in} + 8\frac{7}{16}\cdot\text{in}}{2} = 28.544 \cdot \text{ft}^2$$

Strut Tributary Surface Area (top) on  
South column (Pier 38)

$$A_{\text{strut\_surface\_bot}} := \sqrt{(1.5\text{ft})^2 + \left(\frac{28\text{ft} + 7.25\text{in} + 8\frac{7}{16}\cdot\text{in}}{2}\right)^2} \cdot \left(1\text{ft} + 11\frac{3}{8}\cdot\text{in}\right) = 28.693 \cdot \text{ft}^2$$

Strut Tributary Surface Area (bot) on  
South column (Pier 38)

$$A_{\text{strut\_surface\_sides}} := 2 \cdot \left(\frac{5\text{ft} + 6.5\text{ft}}{2}\right) \cdot \left(\frac{28\text{ft} + 7.25\text{in} + 8\frac{7}{16}\cdot\text{in}}{2}\right) = 168.517 \cdot \text{ft}^2$$

Strut Tributary Surface Area (both  
sides) on South column (Pier 38)

$$DL_{\text{strut\_at\_pier\_38\_south\_col\_unfactored}} := (A_{\text{strut\_surface\_top}} + A_{\text{strut\_surface\_bot}} + A_{\text{strut\_surface\_sides}}) \cdot t_{\text{strut\_plates}} \cdot \gamma_{\text{steel}}$$

$$DL_{\text{strut\_at\_pier\_38\_south\_col\_unfactored}} = 3.457 \cdot \text{kip}$$

DL (tributary) due to Strut selfweight  
on South column (Pier 38)

$$A_{\text{column\_concrete}} := [7\text{ft} \cdot (4\text{ft} + 11\text{in})] - [4 \cdot (1\text{ft} + 3.25\text{in}) \cdot 1.5\text{ft}] = 26.792 \cdot \text{ft}^2$$

Concrete Sectional area inside steel  
column (south).

$$L_{\text{column}} := 31.3\text{ft}$$

South column length @ Pier 38 .  
Elevation at top of strut = 51.2849ft.  
Elevation at grade = 20'.

$$DL_{\text{south\_col\_concrete\_at\_pier\_38\_unfactored}} := (A_{\text{column\_concrete}}) \cdot L_{\text{column}} \cdot \gamma_{\text{concrete\_col}}$$

$$DL_{\text{south\_col\_concrete\_at\_pier\_38\_unfactored}} = 125.787 \cdot \text{kip}$$

DL due to the concrete weight @ the  
south column (pier 38).

$$N_{\text{steel\_angles}} := 12$$

Number of Steel Angles 6"X6"X0.75"  
along the south column height

$$A_{\text{WF\_24X12\_half\_each}} := 29.43\text{in}^2 \cdot 0.5 = 14.715 \cdot \text{in}^2$$

Half of the area of a WF 24X12 (2 in  
total along the column height)

$$A_{\text{6X6X0.75\_each}} := 8.46\text{in}^2$$

Cross sectional area of a single  
6"X6"X0.75" angle.





$$A_{6X6X0.75\_total} := N_{steel\_angles} \cdot A_{6X6X0.75\_each} = 101.52 \cdot in^2$$

Total Cross Sectional area of Steel angles (6"X6"X0.75") along the full height of the column (south)

$$A_{WF\_24X12\_half\_total} := 2 \cdot A_{WF\_24X12\_half\_each} = 29.43 \cdot in^2$$

Total Cross Sectional area of WF's along the full height of the column (south)

$$A_{half\_inch\_plates\_total} := 0.5in \cdot [(4 \cdot 1ft) + (4 \cdot 3.25in) + (4 \cdot 0.5ft) + [2 \cdot (1ft + 4.5in)]] = 59 \cdot in^2$$

Total Cross Sectional Area of Steel Plate (0.5" thick) surrounding the south column perimeter

$$A_{column\_steel\_total} := A_{6X6X0.75\_total} + A_{WF\_24X12\_half\_total} + A_{half\_inch\_plates\_total}$$

$$A_{column\_steel\_total} = 189.95 \cdot in^2$$

Total steel cross sectional area along the column (south) height

$$DL_{south\_col\_steel\_at\_pier\_38\_unfactored} := (A_{column\_steel\_total}) \cdot L_{column} \cdot \gamma_{steel}$$

$$DL_{south\_col\_steel\_at\_pier\_38\_unfactored} = 20.231 \cdot kip$$

DL due to the steel weight @ the south column (pier 38).

$$Fy_{col\_steel} := 33ksi$$

Existing Structural Steel @ Columns based on ODOT BDM Fig. 906.

$$fc_{col\_concrete} := 3ksi$$

Existing Concrete (CIP) strength @ Col. based on ODOT BDM Fig. 906.

$$C_{col} := 0.85 \cdot fc_{col\_concrete} \cdot A_{column\_concrete} + Fy_{col\_steel} \cdot A_{column\_steel\_total} = 16106.25 \cdot kip$$

Column Capacity assuming it is behaving as a short column (no buckling under consideration)

$$DL_{total\_unfactored\_south\_col\_pier\_38} := DL_{super\_at\_pier\_38\_south\_col\_unfactored} \dots \\ + DL_{south\_girder\_self\_at\_pier\_38\_south\_col\_unfactored} \dots \\ + DL_{strut\_at\_pier\_38\_south\_col\_unfactored} + DL_{south\_col\_concrete\_at\_pier\_38\_unfactored} \dots \\ + DL_{south\_col\_steel\_at\_pier\_38\_unfactored}$$

$$DL_{total\_unfactored\_south\_col\_pier\_38} = 1271.078 \cdot kip$$

Total Unfactored DL on south Column (Pier 38)

$$LL_{OH5C1\_train\_no\_IM\_unfactored\_no\_DF} := 251.4kip + 3.822kip = 255.222 \cdot kip$$

OH5C1 TT Reaction @ Pier 38 (south column).Unfactored (no Inv./op. factors);no distribution factors & no im. See STAAD South Girder File Under OH5C1 TT loading for LC1063+LC168

$$LL_{OH5C1\_single\_no\_IM\_unfactored\_no\_DF} := 79.772kip$$

OH5C1(single) Reaction @ Pier 38 (south column).Unfactored (no Inv./op. factors);no distribution factors & no im.



$$LL_{OH4F1\_single\_no\_IM\_unfactored\_no\_DF} := 54.164kip$$

$$LL_{OH3F1\_single\_no\_IM\_unfactored\_no\_DF} := 46.15kip$$

$$LL_{OH2F1\_single\_no\_IM\_unfactored\_no\_DF} := 30.101kip$$

$$LL_{HS20\_train\_no\_IM\_unfactored\_no\_DF} := 340.03kip + 5.259kip = 345.289 \cdot kip$$

$$LL_{HS20\_single\_no\_IM\_unfactored\_no\_DF} := 72.158kip$$

$$DF_{Train\_Truck\_adjacent} := 0.6154$$

$$DF_{Train\_Truck} := 1.0$$

$$DF_{single\_vehicle} := 1.0$$

Reactions for all single vehicles obtained thru CONSYS. Reactions for Truck Trains (HS20 & OH5C1) obtained thru LL generation using STAAD PRO (Staad Pro File for the South Girder contains the Load cases controlling the reactions at pier 38 (south column) under the HS20 TT and the OH5C1 TT (See the combined effect of LC1063+LC1681 for OH5C1 TT & LC1100+LC1769 for HS20 TT

$$IM := 1.3$$

Impact Factor (for Shear at supports)

$$LL_{HS20\_no\_IM\_unfactored\_with\_DF} := DF_{Train\_Truck} \cdot LL_{HS20\_train\_no\_IM\_unfactored\_no\_DF} + DF_{Train\_Truck\_adjacent} \cdot LL_{HS20\_single\_no\_IM\_unfactored\_no\_DF}$$

$$LL_{HS20\_no\_IM\_unfactored\_with\_DF} = 389.695 \cdot kip$$

HS20 Train Truck combined with Adjacent HS20 (single). Distribution factors included.

$$RF_{HS20\_train\_with\_single\_adjacent\_inv} := \frac{C_{col} - 1.3 \cdot DL_{total\_unfactored\_south\_col\_pier\_38}}{1.3 \cdot 1.67 \cdot (LL_{HS20\_no\_IM\_unfactored\_with\_DF}) \cdot IM}$$

$$RF_{HS20\_train\_with\_single\_adjacent\_inv} = 13.142$$

Rating Factor for HS20 TT Vehicle under inventory.



$$RF_{HS20\_train\_with\_single\_adjacent\_op} := \frac{C_{col} - 1.3 \cdot DL_{total\_unfactored\_south\_col\_pier\_38}}{1.3 \cdot 1.0 \cdot (LL_{HS20\_no\_IM\_unfactored\_with\_DF}) \cdot IM}$$

$$RF_{HS20\_train\_with\_single\_adjacent\_op} = 21.947$$

Rating Factor for HS20 TT Vehicle under operating.

$$LL_{OH5C1\_no\_IM\_unfactored\_with\_DF} := DF_{Train\_Truck} \cdot LL_{OH5C1\_train\_no\_IM\_unfactored\_no\_DF} \dots + DF_{Train\_Truck\_adjacent} \cdot LL_{OH5C1\_single\_no\_IM\_unfactored\_no\_DF}$$

$$LL_{OH5C1\_no\_IM\_unfactored\_with\_DF} = 304.314 \cdot kip$$

OH5C1 Train Truck combined with Adjacent OH5C1 (single). Distribution factors included.

$$RF_{OH5C1\_train\_with\_single\_adjacent\_op} := \frac{C_{col} - 1.3 \cdot DL_{total\_unfactored\_south\_col\_pier\_38}}{1.3 \cdot 1.0 \cdot (LL_{OH5C1\_no\_IM\_unfactored\_with\_DF}) \cdot IM}$$

$$RF_{OH5C1\_train\_with\_single\_adjacent\_op} = 28.104$$

Rating Factor for OH5C1 TT Vehicle under operating.

$$RF_{OH4F1\_single\_op} := \frac{C_{col} - 1.3 \cdot DL_{total\_unfactored\_south\_col\_pier\_38}}{1.3 \cdot 1.0 \cdot (LL_{OH4F1\_single\_no\_IM\_unfactored\_no\_DF} \cdot DF_{single\_vehicle}) \cdot IM}$$

$$RF_{OH4F1\_single\_op} = 157.901$$

Rating Factor for OH4F1 Single Vehicle under operating.

$$RF_{OH3F1\_single\_op} := \frac{C_{col} - 1.3 \cdot DL_{total\_unfactored\_south\_col\_pier\_38}}{1.3 \cdot 1.0 \cdot (LL_{OH3F1\_single\_no\_IM\_unfactored\_no\_DF} \cdot DF_{single\_vehicle}) \cdot IM}$$

$$RF_{OH3F1\_single\_op} = 185.321$$

Rating Factor for OH3F1 Single Vehicle under operating.

$$RF_{OH2F1\_single\_op} := \frac{C_{col} - 1.3 \cdot DL_{total\_unfactored\_south\_col\_pier\_38}}{1.3 \cdot 1.0 \cdot (LL_{OH2F1\_single\_no\_IM\_unfactored\_no\_DF} \cdot DF_{single\_vehicle}) \cdot IM}$$

$$RF_{OH2F1\_single\_op} = 284.129$$

Rating Factor for OH2F1 Single Vehicle under operating.

South GIRDER  
DL SELF WT.  
UNFACTORED

Id Dead Loads (Self Wt) Unfactored  
Type Static

Factors 1

Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	35.772	0	-35.772
	19.586	585.734	24.04	0.07	
	39.172	941.685	12.308	0.12	
	43.481	989.158	9.727	0.13	
	58.758	1058.518	-0.646	0.14	
	78.344	915.62	-13.945	0.11	
	97.93	512.25	-27.244	0.06	
	98.518	496.125	-27.643	0.06	
	117.516	-137.283	-39.044	-0.01	
	137.102	-1017.44	-50.839	-0.08	
	151.596	-1817.72	-59.596	-0.11	
	156.688	-2130.64	-63.308	-0.11	
	161.585	-2449.42	-66.903	-0.11	
	172.944	-3265.11	-76.735	-0.09	
	176.274	-3526.34	-80.185	-0.08	
	187.438	-4487.32	-92.048	-0.04	
	2	195.86	-5305.48	-102.272	0
0		-5305.48	119.82	0	
6.506		-4551.68	111.932	0.04	
18.976		-3238.99	98.683	0.13	
27.108		-2465.57	91.546	0.19	
29.548		-2244.8	89.432	0.22	
37.951		-1519.32	83.251	0.3	
54.216		-245.403	73.404	0.48	
79.426		1413.766	58.242	0.77	
81.324		1522.988	56.876	0.79	
92.438		2110.649	48.873	0.89	
108.432		2784.752	35.423	1	
135.54		3391.528	9.345	1.1	
162.648		3291.385	-16.733	1.06	
181.081		2819.496	-34.466	0.97	
189.756		2488.875	-41.761	0.9	
198.159		2108.239	-48.829	0.83	
211.442		1396.133	-58.392	0.69	
216.864		1070.729	-61.651	0.63	
243.972		-824.533	-78.27	0.29	
255.9		-1802.64	-85.756	0.15	
263.761	-2500.39	-91.821	0.07		
3	271.08	-3196.12	-98.32	0	-160.103
	0	-3196.12	61.783	0	
	11.046	-2570.29	51.61	-0.09	
	17.259	-2264.59	46.813	-0.14	

Pier 38

Pier 39

	28.477	-1786.77	38.432	-0.21	
	34.518	-1565.86	34.714	-0.24	
	51.777	-1057.75	24.191	-0.3	
	64.549	-797.989	16.5	-0.32	
	69.036	-729.977	13.812	-0.33	
	86.295	-580.801	3.474	-0.33	
	103.554	-610.051	-6.864	-0.32	
	120.813	-817.727	-17.202	-0.28	
	132.894	-1069.26	-24.439	-0.24	
	138.072	-1203.89	-27.572	-0.22	
	155.331	-1772.84	-38.477	-0.13	
	156.021	-1799.55	-38.928	-0.12	
4	172.59	-2556.54	-52.498	0	-146.59
	0	-2556.54	94.093	0	
	10.896	-1579.82	85.245	0.1	
	20.954	-754.784	78.828	0.2	
	41.908	759.52	65.781	0.43	
	55.319	1587.015	57.659	0.57	
	62.862	2001.475	52.227	0.63	
	66.843	2203.699	49.361	0.66	
	81.93	2852.689	36.673	0.76	
	83.816	2920.138	34.859	0.77	
	104.77	3439.372	14.701	0.83	
	125.724	3536.221	-5.457	0.82	
	146.678	3210.685	-25.615	0.72	
	156.945	2896.98	-35.492	0.65	
	167.632	2469.672	-44.479	0.55	
	171.404	2295.927	-47.651	0.51	
	182.3	1733.974	-55.497	0.39	
	188.586	1373.277	-59.262	0.3	
	209.54	0	-71.813	0	-71.813

Id Type	Dead Loads (Superstructure) Unfactored Static				
Factors	1				
Span	Location (ft)	Moment (kft)	Shear (K)	Deflect (in)	Reaction (K)
1	0	0	200.908	0	-200.908
	19.586	3317.368	137.841	0.57	
	39.172	5399.506	74.774	1	
	43.481	5691.809	60.899	1.06	
	58.758	6246.416	11.707	1.21	
	78.344	5858.097	-51.36	1.22	
	97.93	4234.549	-114.427	1.02	
	98.518	4166.757	-116.319	1.01	
	117.516	1375.771	-177.494	0.67	
	137.102	-2718.23	-240.561	0.27	
	151.596	-6543.04	-287.23	0.03	
	156.688	-8047.47	-303.628	-0.03	
	161.585	-9572.78	-319.394	-0.08	
	172.944	-13408.8	-355.973	-0.12	
	176.274	-14611.9	-366.694	-0.12	
	187.438	-18906.4	-402.643	-0.08	
	2	195.86	-22411.6	-429.761	0
0		-22411.6	469.75	0	
6.506		-19423.6	448.801	0.09	
18.976		-14077.6	408.648	0.32	
27.108		-10860.7	382.462	0.52	
29.548		-9937.23	374.606	0.59	
37.951		-6902.93	347.547	0.85	
54.216		-1676.06	295.174	1.46	
79.426		4742.149	213.997	2.45	
81.324		5142.424	207.887	2.52	
92.438		7254.053	172.099	2.88	
108.432		9594.714	120.599	3.28	
135.54		11680.81	33.311	3.64	
162.648		11400.71	-53.977	3.55	
181.081		9858.665	-113.332	3.23	
189.756		8754.407	-141.264	3.02	
198.159		7453.597	-168.324	2.77	
211.442		4933.707	-211.095	2.3	
216.864		3741.908	-228.552	2.09	
243.972		-3636.78	-315.84	0.94	
255.9	-7633.02	-354.247	0.48		
263.761	-10517.4	-379.56	0.22		
3	271.08	-13381.7	-403.128	0	-691.299
	0	-13381.7	288.171	0	
	11.046	-10395	252.604	-0.28	
	17.259	-8887.7	232.597	-0.41	

South  
GIRDER  
DL Super.  
UNFACTORED

-899.511 Pic. 38

-691.299 Pic. 39

	34.518	1307.2	50.091	0	111.029	365.675	-1697.34	0.26
	51.777	1863.534	38.225	0	90.417	571.949	-941.137	0.36
	64.549	2037.737	10.491	-13.892	77.817	662.097	-227.464	0.4
	69.036	2039.466	6.598	-19.027	73.136	680.556	-3.572	0.41
	86.295	1938.322	5.31	-20.004	54.091	1381.387	0	0.41
	103.554	1859.682	1.38	-23.003	35.492	601.99	-815.737	0.37
	120.813	1749.922	5.518	-22.083	33.733	0	-443.425	0.32
	132.894	1436.787	0	-39.693	33.733	0	-35.885	0.26
	138.072	1264.274	0	-58.424	33.733	138.776	0	0.23
	155.331	720.976	33.733	0	33.733	720.976	0	0.11
	156.021	744.264	33.733	0	33.733	744.264	0	0.11
4	172.59	1303.177	33.733	-6.219	162.495	0	-4220.57	0
	0	1303.177	33.733	-6.219	162.495	0	-4220.57	0
	10.896	1235.412	0	-6.219	151.276	0	-2747.49	0.16
	20.954	1172.859	0	-6.219	140.585	83.474	-1762.2	0.32
	41.908	1813.564	92.98	0	121.199	507.703	-13.438	0.65
	55.319	2886.639	93.788	0	107.184	1706.556	0	0.85
	62.862	3401.471	72.872	0	98.761	2302.542	0	0.94
	66.843	3638.333	68.504	0	94.152	2589.061	0	0.98
	81.93	4362.766	46.028	0	76.921	3446.596	0	1.11
	83.816	4434.375	44.212	0	74.913	3544.033	0	1.12
	104.77	5060.525	32.25	-1.521	56.158	3875.932	0	1.2
	125.724	5105.754	10.79	-13.593	39.782	3503.305	0	1.17
	146.678	4724.013	0	-54.508	26.054	2795.589	0	1.03
	156.945	4299.639	0	-65.179	19.197	2245.603	0	0.92
	167.632	3757.051	0	-63.629	12.929	1643.692	0	0.78
	171.404	3533.946	0	-67.397	10.888	1423.474	0	0.73
	182.3	2771.25	0	-95.253	7.597	694.173	-72.732	0.55
	188.586	2243.701	0	-102.128	6.378	544.377	-55.948	0.43
	209.54	0	6.012	-129.727	6.012	0	0	0

Minimums table:

Span	Location	Moment(r	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	121.421	-23.793	-23.793	0	0	0
	19.586	-466.006	0	-23.793	-23.793	0	-466.006	-0.27
	39.172	-932.013	0	-23.793	-23.793	0	-932.013	-0.53
	43.481	-1034.53	0	-23.793	-23.938	543.968	-819.994	-0.58
	58.758	-1398.02	0	-23.793	-27.409	793.267	-1108.1	-0.75
	78.344	-1864.03	0	-23.793	-41.598	2950.894	0	-0.91
	97.93	-2330.03	0	-23.793	-62.666	2320.326	0	-1.02
	98.518	-2344.01	0	-23.793	-63.254	2293.004	0	-1.02
	117.516	-2796.04	0	-23.793	-82.451	1966.854	0	-1.03
	137.102	-3262.04	0	-23.793	-104.589	695.243	-261.461	-0.94
	151.596	-3606.89	0	-23.793	-120.786	474.29	-1052.35	-0.78
	156.688	-3728.05	0	-23.793	-126.665	388.33	-1525.04	-0.71
	161.585	-3844.55	0	-23.793	-132.123	302.339	-2001.17	-0.64
	172.944	-4377.95	0	-81.358	-144.047	92.512	-3173.83	-0.45
	176.274	-4649.7	0	-82.194	-147.349	28.739	-3532.47	-0.39
	187.438	-5802.57	0	-108.1	-157.778	0	-4960.49	-0.17

2	195.86	-6789.84	141.532	-126.758	-164.853	0	-6091.16	0
	0	-6789.84	141.532	-126.758	-164.853	0	-6091.16	0
	6.506	-5876.48	138.398	0	-6.354	354.908	0	-0.11
	18.976	-4427.66	113.048	0	-6.354	275.678	0	-0.32
	27.108	-3519.12	110.212	0	-6.354	224.007	0	-0.44
	29.548	-3252.41	108.683	0	-6.354	208.505	0	-0.47
	37.951	-2797.68	16.562	0	-6.354	155.111	0	-0.59
	54.216	-2528.3	16.562	0	-6.817	492.148	0	-0.75
	79.426	-2110.76	16.562	0	-9.822	792.25	-65.503	-0.87
	81.324	-2079.33	16.562	0	-10.073	815.321	-72.788	-0.87
	92.438	-1895.26	16.562	0	-11.839	1519.83	0	-0.88
	108.432	-1630.37	16.562	0	-20.376	2306.784	0	-0.86
	135.54	-1181.4	16.562	0	-37.105	3309.596	0	-0.77
	162.648	-808.352	12.576	-2.515	-64.351	4916.375	0	-0.63
	181.081	-754.306	0	-6.354	-84.279	3977.001	0	-0.52
	189.756	-809.422	0	-6.354	-93.295	3401.832	0	-0.48
	198.159	-862.816	0	-6.354	-101.779	2770.939	0	-0.43
	211.442	-947.213	0	-6.354	-114.594	1646.24	0	-0.36
	216.864	-981.661	0	-6.354	-119.756	1520.861	0	-0.33
	243.972	-2432.04	0	-97.86	-149.048	118.631	-1462.75	-0.17
	255.9	-3717.31	0	-122.764	-161.715	0	-2978.63	-0.1
	263.761	-4777.63	0	-141.02	-169.76	0	-4108.74	-0.05
3	271.08	-5842.39	105.597	-149.648	-176.811	0	-5202.32	0
	0	-5842.39	105.597	-149.648	-176.811	0	-5202.32	0
	11.046	-4775.71	87.191	0	-24.493	658.714	0	-0.18
	17.259	-4240.3	84.985	0	-24.493	506.535	0	-0.27
	28.477	-3558.2	33.733	0	-24.493	231.766	0	-0.42
	34.518	-3354.43	33.733	0	-24.493	83.814	0	-0.48
	51.777	-2772.23	33.733	0	-24.493	0	-338.907	-0.6
	64.549	-2341.4	33.733	0	-26.949	577.586	-505.245	-0.63
	69.036	-2190.03	33.733	0	-29.569	1859.325	0	-0.63
	86.295	-1607.83	33.733	0	-48.921	1687.25	0	-0.6
	103.554	-1607.07	0	-24.493	-66.761	1141.411	0	-0.51
	120.813	-2029.79	0	-24.493	-86.323	556.681	-65.118	-0.46
	132.894	-2325.69	0	-24.493	-100.2	416.622	-775.286	-0.4
	138.072	-2452.51	0	-24.493	-105.861	343.763	-1112.48	-0.36
	155.331	-3143.17	0	-86.46	-126.765	50.299	-2357.72	-0.21
	156.021	-3202.86	0	-86.46	-127.573	37.184	-2417.41	-0.2
4	172.59	-4787.49	131.118	-106.408	-145.579	0	-4243.59	0
	0	-4787.49	131.118	-106.408	-145.579	0	-4243.59	0
	10.896	-3458.94	102.453	0	-6.219	1235.412	0	-0.06
	20.954	-2453.08	97.185	0	-6.219	1172.859	0	-0.11
	41.908	-1007.86	6.012	0	-6.84	1146.549	0	-0.19
	55.319	-927.227	6.012	0	-8.36	1289.261	0	-0.22
	62.862	-881.874	6.012	0	-9.317	1366.578	0	-0.23
	66.843	-857.937	6.012	0	-9.852	1405.819	0	-0.23
	81.93	-767.23	6.012	0	-15.859	2023.809	0	-0.23
	83.816	-755.892	6.012	0	-16.754	2106.407	0	-0.23
	104.77	-629.91	6.012	0	-28.043	2938.111	0	-0.22



125.724	-503.928	6.012	0	-41.884	3510.59	0	-0.2
146.678	-377.946	6.012	0	-61.401	4593.092	0	-0.16
156.945	-316.215	6.012	0	-73.322	4133.729	0	-0.14
167.632	-251.964	6.012	0	-84.565	3612.365	0	-0.11
171.404	-229.287	6.012	0	-88.446	3397.74	0	-0.1
182.3	-163.777	6.012	0	-99.299	2704.917	0	-0.08
188.586	-125.982	6.012	0	-105.63	2213.38	0	-0.06
209.54	0	6.012	-129.727	-129.727	0	0	0

Support	Reac. Pos	Reac. Negative
1	23.793	-121.662
2	8.377	-275.545
3	28.945	-261.708
4	39.952	-245.17
5	6.012	-129.992

Id HS20  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(n	Corr. Shear	Corr. Shear	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	67.405	-9.707	67.405	0	0	0
	19.586	1138.56	58.131	0	58.131	1138.56	0	0.24
	39.172	1919.177	48.994	0	48.994	1919.177	0	0.45
	43.481	2044.763	47.027	0	47.027	2044.763	0	0.49
	58.758	2371.069	34.259	0	40.204	2362.335	0	0.61
	78.344	2536.776	25.81	-6.19	31.878	2497.417	0	0.7
	97.93	2451.452	0	-34.393	24.168	2366.762	0	0.72
	98.518	2445.618	0	-34.628	23.948	2359.315	0	0.72
	117.516	2150.327	0	-41.89	17.282	2030.909	0	0.66
	137.102	1676.31	0	-48.506	11.376	1559.739	0	0.53
	151.596	1255.982	0	-52.76	7.62	1155.169	0	0.4
	156.688	1098.56	0	-54.13	6.402	1003.127	0	0.35
	161.585	943.767	0	-55.387	5.276	852.579	0	0.31
	172.944	568.583	0	-58.122	2.8	484.206	0	0.2
	176.274	454.702	0	-58.879	2.106	371.258	0	0.17
	187.438	305.239	1.628	0	1.628	305.239	0	0.07
2	0	318.954	1.628	-5.114	70.346	0	-348.927	0
	0	318.954	1.628	-5.114	70.346	0	-348.927	0
	6.506	285.68	0	-5.114	69.247	0	-119.357	0.06
	18.976	354.673	37.521	0	66.895	291.563	0	0.17
	27.108	604.097	36.029	0	65.226	555.213	0	0.25
	29.548	677.641	35.564	0	64.7	634.225	0	0.27
	37.951	940.481	55.873	0	62.791	906.65	0	0.35
	54.216	1449.945	51.89	0	58.646	1431.368	0	0.51
	79.426	2180.707	44.683	0	51.253	2170.373	0	0.71
	81.324	2229.497	44.102	0	50.662	2218.889	0	0.72
	92.438	2488.583	40.628	0	47.144	2474.038	0	0.78
	108.432	2769.028	35.482	0	41.963	2743.778	0	0.84
	135.54	2955.222	26.6	-5.4	33.072	2906.748	0	0.86
	162.648	2804.906	0	-35.202	24.3	2693.655	0	0.8
	181.081	2497.062	0	-41.103	18.563	2349.218	0	0.71
	189.756	2298.348	0	-43.808	15.975	2140.053	0	0.66
	198.159	2076.843	0	-46.366	13.564	1915.042	0	0.61
	211.442	1679.739	0	-50.234	9.998	1527.011	0	0.5
	216.864	1504.935	0	-51.736	8.643	1361.464	0	0.46
	243.972	586.8	0	-58.355	7.963	295.438	0	0.21
	255.9	390.417	7.963	0	7.963	390.417	0	0.11
	263.761	453.017	7.963	0	7.963	453.017	0	0.05
3	0	511.3	7.963	-3.817	68.803	0	-255.18	0
	0	511.3	7.963	-3.817	68.803	0	-255.18	0

	11.046	469.14	0	-3.817	64.984	194.624	0	0.07
	17.259	445.424	0	-3.817	62.666	425.67	0	0.11
	28.477	822.687	52.098	0	58.193	807.855	0	0.18
	34.518	1007.776	49.618	0	55.638	992.244	0	0.21
	51.777	1443.132	41.994	0	47.829	1421.939	0	0.31
	64.549	1658.184	35.961	0	41.712	1628.632	0	0.37
	69.036	1709.475	33.79	0	39.524	1676.442	0	0.38
	86.295	1785.884	5.928	-26.072	31.067	1735.979	0	0.41
	103.554	1689.739	0	-34.516	22.837	1600.873	0	0.39
	120.813	1405.894	0	-42.66	15.205	1294.503	0	0.32
	132.894	1112.079	0	-47.986	13.513	0	-14.375	0.25
	138.072	966.109	0	-50.147	13.513	55.591	0	0.21
	155.331	406.306	0	-56.769	13.513	288.811	0	0.1
	156.021	381.871	0	-57.014	13.513	298.139	0	0.1
4	0	522.03	13.513	-2.491	70.304	0	-331.641	0
	0	522.03	13.513	-2.491	70.304	0	-331.641	0
	10.896	494.885	0	-2.491	68.246	73.682	0	0.07
	20.954	476.784	59.096	0	66.038	452.271	0	0.14
	41.908	1246.222	53.893	0	60.586	1241.272	0	0.3
	55.319	1711.918	49.995	0	56.551	1710.633	0	0.39
	62.862	1952.819	47.632	0	54.121	1950.46	0	0.43
	66.843	2071.958	46.34	0	52.797	2068.16	0	0.45
	81.93	2459.241	41.218	0	47.573	2445.172	0	0.52
	83.816	2499.604	40.555	0	46.899	2483.793	0	0.52
	104.77	2807.941	32.923	0	39.164	2768.232	0	0.56
	125.724	2863.094	4.504	-27.496	31.03	2761.94	0	0.55
	146.678	2637.747	0	-35.743	22.583	2434.477	0	0.48
	156.945	2419.324	0	-46	18.35	2149.712	0	0.43
	167.632	2110.328	0	-50.356	13.886	1763.441	0	0.36
	171.404	1979.613	0	-51.909	12.298	1604.832	0	0.34
	182.3	1537.37	0	-56.438	7.71	1085.344	0	0.25
	188.586	1237.906	0	-59.077	5.439	0	-113.969	0.2
	209.54	0	5.439	-67.905	5.439	0	0	0

Minimums table:

Span	Location	Moment(nr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	67.405	-9.707	-9.707	0	0	0
	19.586	-190.113	0	-9.707	-9.707	0	-190.113	-0.11
	39.172	-380.226	0	-9.707	-14.307	1587.969	0	-0.22
	43.481	-422.05	0	-9.707	-16.338	1748.226	0	-0.24
	58.758	-570.338	0	-9.707	-23.429	2181.939	0	-0.3
	78.344	-760.451	0	-9.707	-32.2	2446.08	0	-0.37
	97.93	-950.564	0	-9.707	-40.503	2412.478	0	-0.42
	98.518	-956.267	0	-9.707	-40.744	2407.292	0	-0.42
	117.516	-1140.68	0	-9.707	-48.18	2127.268	0	-0.42
	137.102	-1330.79	0	-9.707	-55.02	1655.923	0	-0.38
	151.596	-1471.47	0	-9.707	-59.446	1231.066	0	-0.32
	156.688	-1520.9	0	-9.707	-60.874	1071.373	0	-0.29
	161.585	-1568.43	0	-9.707	-62.183	914.287	0	-0.26



	172.944	-1678.7	0	-9.707	-65.022	534.735	0	-0.18
	176.274	-1711.02	0	-9.707	-65.805	419.936	0	-0.16
	187.438	-1819.38	0	-9.707	-68.307	20.272	0	-0.07
2	0	-1901.13	50.662	-9.707	-70.042	0	-302.53	0
	0	-1901.13	50.662	-9.707	-70.042	0	-302.53	0
	6.506	-1595.51	7.963	0	-5.114	285.68	0	-0.05
	18.976	-1496.22	7.963	0	-5.114	221.905	0	-0.15
	27.108	-1431.46	7.963	0	-5.114	180.313	0	-0.21
	29.548	-1412.03	7.963	0	-5.114	167.835	0	-0.23
	37.951	-1345.11	7.963	0	-5.159	875.562	0	-0.28
	54.216	-1215.6	7.963	0	-8.646	1338.586	0	-0.36
	79.426	-1014.85	7.963	0	-15.181	2025.458	0	-0.42
	81.324	-999.735	7.963	0	-15.724	2073.552	0	-0.42
	92.438	-911.232	7.963	0	-19.016	2336.59	0	-0.42
	108.432	-783.873	7.963	0	-24.006	2641.861	0	-0.41
	135.54	-568.011	7.963	0	-32.803	2894.873	0	-0.37
	162.648	-512.897	0	-5.114	-41.688	2773.892	0	-0.3
	181.081	-607.173	0	-5.114	-47.629	2479.732	0	-0.25
	189.756	-651.538	0	-5.114	-50.363	2285.861	0	-0.25
	198.159	-694.517	0	-5.114	-52.959	2067.36	0	-0.24
	211.442	-762.452	0	-5.114	-56.908	1670.604	0	-0.23
	216.864	-790.18	0	-5.114	-58.451	1494.226	0	-0.22
	243.972	-928.822	0	-5.114	-65.337	552.352	0	-0.14
	255.9	-1113.56	0	-41.978	-67.834	139.188	0	-0.08
	263.761	-1460.2	0	-46.213	-69.287	0	-123.604	-0.04
3	0	-1810.17	13.513	-49.103	-70.471	0	-371.688	0
	0	-1810.17	13.513	-49.103	-70.471	0	-371.688	0
	11.046	-1660.91	13.513	0	-10.877	292.529	0	-0.07
	17.259	-1576.95	13.513	0	-10.877	224.947	0	-0.11
	28.477	-1425.35	13.513	0	-10.877	102.925	0	-0.17
	34.518	-1343.73	13.513	0	-10.877	37.221	0	-0.19
	51.777	-1110.51	13.513	0	-15.764	1328.608	0	-0.24
	64.549	-937.925	13.513	0	-21.44	1565.195	0	-0.25
	69.036	-877.287	13.513	0	-23.52	1626.081	0	-0.25
	86.295	-644.068	13.513	0	-31.798	1741.385	0	-0.24
	103.554	-713.685	0	-10.877	-40.257	1659.113	0	-0.21
	120.813	-901.411	0	-10.877	-48.52	1384.875	0	-0.2
	132.894	-1032.82	0	-10.877	-53.979	1094.017	0	-0.18
	138.072	-1089.14	0	-10.877	-56.205	948.352	0	-0.16
	155.331	-1276.86	0	-10.877	-63.068	385.84	0	-0.09
	156.021	-1284.37	0	-10.877	-63.324	361.22	0	-0.09
4	0	-1464.59	50.975	-10.877	-68.969	0	-275.141	0
	0	-1464.59	50.975	-10.877	-68.969	0	-275.141	0
	10.896	-1080.43	5.439	0	-2.491	494.885	0	-0.06
	20.954	-1025.72	5.439	0	-2.491	469.827	0	-0.1
	41.908	-911.751	5.439	0	-6.504	1090.287	0	-0.17
	55.319	-838.811	5.439	0	-9.945	1533.763	0	-0.2
	62.862	-797.782	5.439	0	-12.076	1771.328	0	-0.2
	66.843	-776.128	5.439	0	-13.255	1891.435	0	-0.21

81.93	-694.07	5.439	0	-18.017	2299.173	0	-0.21
83.816	-683.813	5.439	0	-18.642	2343.777	0	-0.21
104.77	-569.844	5.439	0	-25.925	2716.157	0	-0.2
125.724	-455.875	5.439	0	-33.707	2825.22	0	-0.18
146.678	-341.906	5.439	0	-41.88	2632.635	0	-0.14
156.945	-286.062	5.439	0	-46	2419.324	0	-0.12
167.632	-227.938	5.439	0	-50.356	2110.328	0	-0.1
171.404	-207.423	5.439	0	-51.909	1979.613	0	-0.09
182.3	-148.16	5.439	0	-56.438	1537.37	0	-0.07
188.586	-113.969	5.439	0	-59.077	1237.906	0	-0.05
209.54	0	5.439	-67.905	-67.905	0	0	0

Support    Reac. Pos    Reac. Negative

1	9.707	-67.5	
2	6.743	-72.158	P38
3	12.854	-74.566	
4	16.004	-73.221	
5	5.439	-67.995	



Id Ohio 2F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximumss table:

Span	Location	Moment(rr)	Corr. Shear	Corr. Shear	Shear (max)	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	29.289	-4.065	29.289	0	0	0
	19.586	497.533	25.402	0	25.402	497.533	0	0.1
	39.172	844.364	21.555	0	21.555	844.364	0	0.19
	43.481	901.164	20.726	0	20.726	901.164	0	0.21
	58.758	1048.278	17.841	-2.159	17.841	1048.278	0	0.26
	78.344	1120.423	14.301	-5.699	14.301	1120.423	0	0.3
	97.93	1083.884	2.089	-17.911	10.994	1076.651	0	0.3
	98.518	1081.336	1.991	-18.009	10.899	1073.762	0	0.3
	117.516	955.274	0	-21.02	8.004	940.583	0	0.28
	137.102	756.35	0	-23.754	5.413	742.183	0	0.22
	151.596	582.164	0	-25.5	3.771	571.679	0	0.17
	156.688	517.178	0	-26.061	3.241	507.796	0	0.15
	161.585	453.129	0	-26.578	2.752	444.733	0	0.13
	172.944	298.11	0	-27.698	1.685	291.448	0	0.09
	176.274	250.983	0	-28.009	1.387	244.518	0	0.07
	187.438	128.755	0.687	0	0.687	128.755	0	0.03
	2	0	134.54	0.687	-2.157	29.749	0	-56.123
0		134.54	0.687	-2.157	29.749	0	-56.123	0
6.506		120.504	0	-2.157	29.309	38.567	0	0.02
18.976		209.815	18.884	-1.116	28.376	205.793	0	0.07
27.108		313.338	18.261	-1.739	27.72	311.424	0	0.1
29.548		343.762	18.067	-1.933	27.515	342.742	0	0.11
37.951		450.646	26.769	0	26.769	450.646	0	0.15
54.216		660.902	25.13	0	25.13	660.902	0	0.21
79.426		965.936	22.138	0	22.138	965.936	0	0.3
81.324		986.49	21.896	0	21.896	986.49	0	0.3
92.438		1095.889	20.449	0	20.449	1095.889	0	0.33
108.432		1214.806	18.303	-1.697	18.303	1214.806	0	0.35
135.54		1295.462	14.599	-5.401	14.599	1295.462	0	0.36
162.648		1230.604	1.814	-18.186	10.917	1218.58	0	0.34
181.081		1100.232	0	-20.644	8.488	1080.412	0	0.3
189.756		1016.38	0	-21.771	7.382	994.119	0	0.28
198.159		923.138	0	-22.836	6.344	899.804	0	0.25
211.442	756.505	0	-24.444	4.793	734.606	0	0.21	
216.864	683.559	0	-25.067	4.199	663.343	0	0.19	
243.972	302.339	0	-27.8	3.348	124.222	0	0.09	
255.9	164.158	3.348	0	3.348	164.158	0	0.05	
263.761	190.479	3.348	0	3.348	190.479	0	0.02	
3	0	214.985	3.348	-1.605	29.524	0	-41.411	0
	0	214.985	3.348	-1.605	29.524	0	-41.411	0

	11.046	197.258	0	-1.605	28.005	145.635	0	0.03
	17.259	241.652	27.082	0	27.082	241.652	0	0.04
	28.477	399.867	25.304	0	25.304	399.867	0	0.07
	34.518	476.76	24.281	0	24.281	476.76	0	0.09
	51.777	659.698	21.116	0	21.116	659.698	0	0.13
	64.549	750.553	18.603	-1.397	18.603	750.553	0	0.16
	69.036	772.357	17.698	-2.302	17.698	772.357	0	0.16
	86.295	805.697	5.531	-14.469	14.161	804.873	0	0.17
	103.554	763.686	1.999	-18.001	10.663	754.836	0	0.16
	120.813	643.447	0	-21.396	7.365	629.951	0	0.13
	132.894	520.658	0	-23.603	5.657	0	-6.017	0.1
	138.072	460.026	0	-24.494	5.657	23.271	0	0.09
	155.331	226.896	0	-27.227	5.657	120.897	0	0.04
	156.021	216.753	0	-27.328	5.657	124.802	0	0.04
4	0	218.523	5.657	-1.043	29.753	0	-54.599	0
	0	218.523	5.657	-1.043	29.753	0	-54.599	0
	10.896	207.16	0	-1.043	28.967	105.126	0	0.03
	20.954	255.327	28.116	0	28.116	255.327	0	0.06
	41.908	574.831	25.974	0	25.974	574.831	0	0.12
	55.319	769.126	24.364	0	24.364	769.126	0	0.16
	62.862	870.3	23.385	0	23.385	870.3	0	0.18
	66.843	920.484	22.849	0	22.849	920.484	0	0.19
	81.93	1084.291	20.719	0	20.719	1084.291	0	0.22
	83.816	1101.427	20.444	0	20.444	1101.427	0	0.22
	104.77	1233.451	17.273	-2.727	17.273	1233.451	0	0.24
	125.724	1256.683	5.007	-14.993	13.925	1247.375	0	0.23
	146.678	1159.229	1.559	-18.441	10.436	1129.802	0	0.2
	156.945	1061.068	0	-20.174	8.686	1020.977	0	0.18
	167.632	922.199	0	-22.005	6.84	870.6	0	0.15
	171.404	864.074	0	-22.658	6.182	808.323	0	0.14
	182.3	668.984	0	-24.559	4.266	600.992	0	0.11
	188.586	537.816	0	-25.667	3.151	462.595	0	0.08
	209.54	0	2.291	-29.365	2.291	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Momr	Corr. Momr	Deflect(min)
1	0	0	29.289	-4.065	-4.065	0	0	0
	19.586	-79.618	0	-4.065	-4.065	0	-79.618	-0.05
	39.172	-159.236	0	-4.065	-7.148	795.147	0	-0.09
	43.481	-176.752	0	-4.065	-7.988	857.106	0	-0.1
	58.758	-238.854	0	-4.065	-10.912	1021.561	0	-0.13
	78.344	-318.473	0	-4.065	-14.517	1112.982	0	-0.16
	97.93	-398.091	0	-4.065	-17.911	1083.884	0	-0.17
	98.518	-400.479	0	-4.065	-18.009	1081.336	0	-0.17
	117.516	-477.709	0	-4.065	-21.02	955.274	0	-0.18
	137.102	-557.327	0	-4.065	-23.754	756.35	0	-0.16
	151.596	-616.244	0	-4.065	-25.5	582.164	0	-0.13
	156.688	-636.945	0	-4.065	-26.061	517.178	0	-0.12
	161.585	-656.849	0	-4.065	-26.578	453.129	0	-0.11



	172.944	-703.028	0	-4.065	-27.698	298.11	0	-0.08
	176.274	-716.563	0	-4.065	-28.009	250.983	0	-0.07
	187.438	-761.945	0	-4.065	-29.007	86.091	0	-0.03
2	0	-796.181	21.322	-4.065	-29.705	0	-48.101	0
	0	-796.181	21.322	-4.065	-29.705	0	-48.101	0
	6.506	-670.862	3.348	0	-2.157	120.504	0	-0.02
	18.976	-629.111	3.348	0	-2.157	93.603	0	-0.06
	27.108	-601.882	3.348	0	-2.157	76.059	0	-0.09
	29.548	-593.714	3.348	0	-2.157	70.795	0	-0.1
	37.951	-565.577	3.348	0	-2.633	447.323	0	-0.12
	54.216	-511.119	3.348	0	-4.167	646.983	0	-0.15
	79.426	-426.71	3.348	0	-7.028	943.611	0	-0.18
	81.324	-420.356	3.348	0	-7.263	964.082	0	-0.18
	92.438	-383.143	3.348	0	-8.678	1074.808	0	-0.18
	108.432	-329.593	3.348	0	-10.796	1199.32	0	-0.17
	135.54	-238.83	3.348	0	-14.488	1293.699	0	-0.16
	162.648	-216.348	0	-2.157	-18.186	1230.604	0	-0.13
	181.081	-256.115	0	-2.157	-20.644	1100.232	0	-0.11
	189.756	-274.829	0	-2.157	-21.771	1016.38	0	-0.1
	198.159	-292.958	0	-2.157	-22.836	923.138	0	-0.1
	211.442	-321.614	0	-2.157	-24.444	756.505	0	-0.1
	216.864	-333.31	0	-2.157	-25.067	683.559	0	-0.09
	243.972	-391.791	0	-2.157	-27.8	302.339	0	-0.06
	255.9	-466.167	0	-17.735	-28.766	139.478	0	-0.03
	263.761	-610.983	0	-19.529	-29.32	36.995	0	-0.02
3	0	-757.739	5.657	-20.644	-29.774	0	-60.968	0
	0	-757.739	5.657	-20.644	-29.774	0	-60.968	0
	11.046	-695.258	5.657	0	-4.562	122.683	0	-0.03
	17.259	-660.113	5.657	0	-4.562	94.34	0	-0.05
	28.477	-596.656	5.657	0	-4.562	43.166	0	-0.07
	34.518	-562.486	5.657	0	-4.592	460.811	0	-0.08
	51.777	-464.86	5.657	0	-7.624	645.62	0	-0.1
	64.549	-392.617	5.657	0	-10.072	741.163	0	-0.11
	69.036	-367.234	5.657	0	-10.961	764.923	0	-0.11
	86.295	-269.608	5.657	0	-14.469	805.697	0	-0.1
	103.554	-299.311	0	-4.562	-18.001	763.686	0	-0.09
	120.813	-378.041	0	-4.562	-21.396	643.447	0	-0.08
	132.894	-433.152	0	-4.562	-23.603	520.658	0	-0.07
	138.072	-456.771	0	-4.562	-24.494	460.026	0	-0.07
	155.331	-535.502	0	-4.562	-27.227	226.896	0	-0.04
	156.021	-538.651	0	-4.562	-27.328	216.753	0	-0.04
4	0	-614.232	21.409	-4.562	-29.554	0	-45.026	0
	0	-614.232	21.409	-4.562	-29.554	0	-45.026	0
	10.896	-455.138	2.291	0	-1.043	207.16	0	-0.02
	20.954	-432.094	2.291	0	-1.306	246.381	0	-0.04
	41.908	-384.083	2.291	0	-3.293	552.017	0	-0.07
	55.319	-353.356	2.291	0	-4.813	742.323	0	-0.08
	62.862	-336.073	2.291	0	-5.747	842.962	0	-0.09
	66.843	-326.951	2.291	0	-6.261	893.479	0	-0.09



81.93	-292.383	2.291	0	-8.323	1062.086	0	-0.09
83.816	-288.062	2.291	0	-8.591	1080.149	0	-0.09
104.77	-240.052	2.291	0	-11.698	1225.56	0	-0.08
125.724	-192.042	2.291	0	-14.993	1256.683	0	-0.08
146.678	-144.031	2.291	0	-18.441	1159.229	0	-0.06
156.945	-120.506	2.291	0	-20.174	1061.068	0	-0.05
167.632	-96.021	2.291	0	-22.005	922.199	0	-0.04
171.404	-87.379	2.291	0	-22.658	864.074	0	-0.04
182.3	-62.414	2.291	0	-24.559	668.984	0	-0.03
188.586	-48.01	2.291	0	-25.667	537.816	0	-0.02
209.54	0	2.291	-29.365	-29.365	0	0	0

Support	Reac. Pos	Reac. Negative
1	4.065	-29.329
2	2.844	-30.101
3	5.391	-31.169
4	6.699	-30.595
5	2.291	-29.403

P 38

Id Ohio 3F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	44.356	-6.229	44.356	0	0	0
	19.586	752.185	38.404	0	38.404	752.185	0	0.16
	39.172	1273.947	32.522	0	32.522	1273.947	0	0.29
	43.481	1358.954	31.254	0	31.254	1358.954	0	0.32
	58.758	1577.556	26.848	0	26.848	1577.556	0	0.39
	78.344	1696.85	5.527	-11.473	21.451	1680.576	0	0.45
	97.93	1640.809	5.98	-11.02	16.42	1608.002	0	0.46
	98.518	1636.731	5.832	-11.168	16.276	1603.459	0	0.46
	117.516	1439.823	1.273	-15.727	11.888	1397.046	0	0.42
	137.102	1135.031	0	-19.846	7.976	1093.562	0	0.34
	151.596	869.837	0	-22.471	5.497	833.276	0	0.26
	156.688	770.834	0	-23.315	4.696	735.768	0	0.23
	161.585	673.152	0	-24.091	3.957	639.443	0	0.2
	172.944	436.438	0	-25.783	2.339	404.589	0	0.13
	176.274	364.197	0	-26.253	1.887	332.559	0	0.11
	187.438	197.144	1.052	0	1.052	197.144	0	0.05
2	0	206.002	1.052	-3.303	45.42	0	-128.408	0
	0	206.002	1.052	-3.303	45.42	0	-128.408	0
	6.506	184.512	0	-3.303	44.738	17.01	0	0.04
	18.976	302.118	32.033	0	43.289	274.639	0	0.11
	27.108	461.834	31.061	0	42.268	438.049	0	0.16
	29.548	508.944	30.758	0	41.947	486.769	0	0.17
	37.951	672.016	24.349	0	40.782	654.516	0	0.23
	54.216	988.773	21.89	0	38.225	981.211	0	0.33
	79.426	1452.191	17.369	0	33.591	1451.339	0	0.46
	81.324	1483.657	17.002	0	33.218	1482.74	0	0.46
	92.438	1652.161	14.798	-2.202	30.988	1649.406	0	0.5
	108.432	1837.399	11.522	-5.478	27.69	1828.982	0	0.54
	135.54	1968.09	5.847	-11.153	22.007	1946.827	0	0.55
	162.648	1863.43	5.659	-11.341	16.372	1823.343	0	0.51
	181.081	1659.5	1.905	-15.095	12.662	1608.609	0	0.46
	189.756	1529.721	0.188	-16.812	10.978	1475.665	0	0.42
	198.159	1386.091	0	-18.431	9.4	1330.926	0	0.39
	211.442	1131.327	0	-20.868	7.049	1078.862	0	0.32
	216.864	1020.344	0	-21.809	6.151	970.51	0	0.29
	243.972	444.403	0	-25.912	5.126	190.193	0	0.14
	255.9	251.338	5.126	0	5.126	251.338	0	0.07
	263.761	291.638	5.126	0	5.126	291.638	0	0.03
3	0	329.158	5.126	-2.457	44.892	0	-95.338	0
	0	329.158	5.126	-2.457	44.892	0	-95.338	0



	11.046	302.017	0	-2.457	42.531	191.318	0	0.04
	17.259	344.87	25.028	0	41.097	338.566	0	0.07
	28.477	587.822	22.344	0	38.332	581.413	0	0.11
	34.518	705.487	20.804	0	36.743	699.517	0	0.14
	51.777	986.892	16.018	-0.982	31.842	978.631	0	0.2
	64.549	1128.658	12.198	-4.802	27.968	1115.857	0	0.24
	69.036	1163.067	10.817	-6.183	26.574	1148.479	0	0.25
	86.295	1217.517	11.119	-5.881	21.15	1194.835	0	0.27
	103.554	1149.006	5.72	-11.28	15.81	1115.011	0	0.25
	120.813	962.239	0.564	-16.436	10.803	922.118	0	0.2
	132.894	773.882	0	-19.77	8.667	0	-9.22	0.16
	138.072	680.737	0	-21.117	8.667	35.656	0	0.14
	155.331	324.136	0	-25.231	8.667	185.241	0	0.07
	156.021	308.624	0	-25.383	8.667	191.224	0	0.06
4	0	334.825	8.667	-1.598	45.425	0	-125.099	0
	0	334.825	8.667	-1.598	45.425	0	-125.099	0
	10.896	317.415	0	-1.598	44.189	123.716	0	0.05
	20.954	369.372	26.405	0	42.851	357.823	0	0.09
	41.908	852.624	39.506	0	39.506	852.624	0	0.19
	55.319	1151.671	37.002	0	37.002	1151.671	0	0.25
	62.862	1306.58	35.483	0	35.483	1306.58	0	0.28
	66.843	1383.195	34.653	0	34.653	1383.195	0	0.29
	81.93	1633.854	15.256	-1.744	31.364	1631.673	0	0.33
	83.816	1660.597	14.837	-2.163	30.939	1657.495	0	0.34
	104.77	1869.902	10.007	-6.993	26.052	1853.986	0	0.36
	125.724	1904.847	10.462	-6.538	20.898	1867.948	0	0.35
	146.678	1748.615	0	-27.817	15.534	1679.145	0	0.31
	156.945	1602.435	0	-30.468	12.844	1507.805	0	0.28
	167.632	1394.201	0	-33.268	10.006	1272.418	0	0.23
	171.404	1306.775	0	-34.266	8.996	1175.193	0	0.22
	182.3	1012.647	0	-37.175	6.053	852.171	0	0.16
	188.586	814.477	0	-38.87	4.34	636.943	0	0.13
	209.54	0	3.511	-44.533	3.511	0	0	0

Minimums table:

Span	Location	Moment(nr	Corr. Shear	Corr. Shear	Shear (mir	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	44.356	-6.229	-6.229	0	0	0
	19.586	-121.999	0	-6.229	-6.229	0	-121.999	-0.07
	39.172	-243.999	0	-6.229	-10.419	1157.774	0	-0.14
	43.481	-270.839	0	-6.229	-11.71	1254.949	0	-0.15
	58.758	-365.998	0	-6.229	-16.209	1514.453	0	-0.2
	78.344	-487.998	0	-6.229	-21.761	1662.95	0	-0.24
	97.93	-609.997	0	-6.229	-26.997	1624.929	0	-0.27
	98.518	-613.657	0	-6.229	-27.149	1621.188	0	-0.27
	117.516	-731.996	0	-6.229	-31.81	1431.599	0	-0.27
	137.102	-853.996	0	-6.229	-36.058	1127.13	0	-0.24
	151.596	-944.275	0	-6.229	-38.78	858.554	0	-0.2
	156.688	-975.995	0	-6.229	-39.655	758.191	0	-0.19
	161.585	-1006.5	0	-6.229	-40.459	659.311	0	-0.17

	172.944	-1077.26	0	-6.229	-42.204	420.525	0	-0.12
	176.274	-1098	0	-6.229	-42.687	348.05	0	-0.1
	187.438	-1167.53	0	-6.229	-44.235	94.863	0	-0.05
2	0	-1219.99	32.474	-6.229	-45.315	0	-110.814	0
	0	-1219.99	32.474	-6.229	-45.315	0	-110.814	0
	6.506	-1027.14	5.126	0	-3.303	184.512	0	-0.03
	18.976	-963.216	5.126	0	-3.303	143.321	0	-0.1
	27.108	-921.527	5.126	0	-3.303	116.458	0	-0.14
	29.548	-909.02	5.126	0	-3.303	108.399	0	-0.15
	37.951	-865.941	5.126	0	-3.806	646.199	0	-0.18
	54.216	-782.562	5.126	0	-6.116	948.47	0	-0.23
	79.426	-653.325	5.126	0	-10.442	1398.865	0	-0.27
	81.324	-643.597	5.126	0	-10.799	1430.113	0	-0.27
	92.438	-586.621	5.126	0	-12.952	1599.803	0	-0.27
	108.432	-504.632	5.126	0	-16.186	1792.516	0	-0.26
	135.54	-365.667	5.126	0	-21.838	1942.664	0	-0.24
	162.648	-331.263	0	-3.303	-27.512	1851.698	0	-0.2
	181.081	-392.153	0	-3.303	-31.291	1655.278	0	-0.16
	189.756	-420.808	0	-3.303	-33.025	1527.926	0	-0.16
	198.159	-448.566	0	-3.303	-34.667	1385.807	0	-0.16
	211.442	-492.443	0	-3.303	-37.153	1130.405	0	-0.15
	216.864	-510.352	0	-3.303	-38.119	1018.05	0	-0.14
	243.972	-599.896	0	-3.303	-42.377	427.483	0	-0.09
	255.9	-714.494	0	-26.735	-43.893	173.12	0	-0.05
	263.761	-936.437	0	-29.628	-44.765	13.169	0	-0.03
3	0	-1161.02	8.667	-32.095	-45.477	0	-139.151	0
	0	-1161.02	8.667	-32.095	-45.477	0	-139.151	0
	11.046	-1065.29	8.667	0	-6.989	187.954	0	-0.05
	17.259	-1011.44	8.667	0	-6.989	144.532	0	-0.07
	28.477	-914.209	8.667	0	-6.989	66.131	0	-0.11
	34.518	-861.854	8.667	0	-6.989	23.915	0	-0.12
	51.777	-712.269	8.667	0	-11.189	945.51	0	-0.15
	64.549	-601.576	8.667	0	-14.908	1093.691	0	-0.16
	69.036	-562.684	8.667	0	-16.263	1130.889	0	-0.16
	86.295	-413.099	8.667	0	-21.622	1196.778	0	-0.15
	103.554	-458.552	0	-6.989	-27.042	1135.833	0	-0.14
	120.813	-579.168	0	-6.989	-32.276	953.88	0	-0.13
	132.894	-663.6	0	-6.989	-35.697	765.951	0	-0.11
	138.072	-699.785	0	-6.989	-37.081	673.034	0	-0.1
	155.331	-820.401	0	-6.989	-41.331	314.942	0	-0.06
	156.021	-825.226	0	-6.989	-41.488	299.321	0	-0.06
4	0	-941.018	32.753	-6.989	-44.959	0	-103.587	0
	0	-941.018	32.753	-6.989	-44.959	0	-103.587	0
	10.896	-697.467	3.511	0	-1.598	317.415	0	-0.04
	20.954	-662.153	3.511	0	-1.785	336.601	0	-0.07
	41.908	-588.58	3.511	0	-4.766	798.905	0	-0.11
	55.319	-541.494	3.511	0	-7.058	1088.563	0	-0.13
	62.862	-515.008	3.511	0	-8.47	1242.327	0	-0.13
	66.843	-501.029	3.511	0	-9.248	1319.674	0	-0.13



81.93	-448.057	3.511	0	-12.377	1579.399	0	-0.14
83.816	-441.435	3.511	0	-12.785	1607.409	0	-0.14
104.77	-367.863	3.511	0	-17.519	1835.413	0	-0.13
125.724	-294.29	3.511	0	-22.549	1889.955	0	-0.12
146.678	-220.718	3.511	0	-27.817	1748.615	0	-0.09
156.945	-184.667	3.511	0	-30.468	1602.435	0	-0.08
167.632	-147.145	3.511	0	-33.268	1394.201	0	-0.07
171.404	-133.902	3.511	0	-34.266	1306.775	0	-0.06
182.3	-95.644	3.511	0	-37.175	1012.647	0	-0.04
188.586	-73.573	3.511	0	-38.87	814.477	0	-0.03
209.54	0	3.511	-44.533	-44.533	0	0	0

Support    Reac. Pos    Reac. Negative

1	6.229	-44.417	
2	4.355	-46.148	P38
3	8.259	-47.771	
4	10.265	-46.911	
5	3.511	-44.591	

Id Ohio 4F1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	51.354	-7.306	51.354	0	0	0
	19.586	869.2	44.379	0	44.379	869.2	0	0.18
	39.172	1468.793	37.496	0	37.496	1468.793	0	0.34
	43.481	1569.721	23.389	0	36.013	1565.899	0	0.37
	58.758	1835.76	18.196	0	30.866	1813.604	0	0.46
	78.344	1967.117	11.824	-2.176	24.57	1924.887	0	0.53
	97.93	1901.69	0	-18.294	18.717	1832.976	0	0.54
	98.518	1897.108	0	-18.47	18.55	1827.505	0	0.54
	117.516	1670.507	0	-23.879	13.468	1582.656	0	0.5
	137.102	1313.177	0	-28.788	8.953	1227.5	0	0.4
	151.596	999.94	0	-31.926	6.091	923.325	0	0.3
	156.688	882.835	0	-32.936	5.166	809.396	0	0.27
	161.585	767.437	0	-33.864	4.31	696.449	0	0.23
	172.944	488.196	0	-35.882	2.434	420.898	0	0.15
	176.274	403.189	0	-36.442	1.907	336.226	0	0.13
	187.438	230.918	1.232	0	1.232	230.918	0	0.05
	2	0	241.293	1.232	-3.869	53.064	0	-204.805
0		241.293	1.232	-3.869	53.064	0	-204.805	0
6.506		216.121	0	-3.869	52.253	0	-33.534	0.04
18.976		328.98	25.954	0	50.526	270.778	0	0.13
27.108		515.641	24.828	0	49.305	464.892	0	0.19
29.548		570.687	24.477	0	48.92	522.89	0	0.2
37.951		764.398	34.203	0	47.524	722.994	0	0.27
54.216		1141.879	31.261	0	44.468	1111.797	0	0.39
79.426		1689.356	25.891	0	38.971	1666.107	0	0.54
81.324		1726.205	25.457	0	38.53	1702.789	0	0.54
92.438		1922.765	22.855	0	35.9	1896.892	0	0.59
108.432		2136.777	18.998	0	32.02	2103.958	0	0.63
135.54		2282.695	12.333	-1.667	25.348	2234.738	0	0.65
162.648		2165.4	0	-18.787	18.746	2082.589	0	0.6
181.081		1930.439	0	-23.208	14.412	1827.02	0	0.54
189.756		1779.595	0	-25.233	12.45	1670.306	0	0.5
198.159		1611.977	0	-27.146	10.616	1500.495	0	0.46
211.442	1312.814	0	-30.034	7.894	1206.416	0	0.38	
216.864	1181.81	0	-31.152	6.856	1080.486	0	0.34	
243.972	497.587	0	-36.057	6.011	223.021	0	0.16	
255.9	294.72	6.011	0	6.011	294.72	0	0.09	
263.761	341.975	6.011	0	6.011	341.975	0	0.04	
3	0	385.972	6.011	-2.881	52.199	0	-151.791	0
	0	385.972	6.011	-2.881	52.199	0	-151.791	0



	11.046	354.146	0	-2.881	49.389	184.496	0	0.05
	17.259	386.476	34.789	0	47.678	357.724	0	0.08
	28.477	671.852	31.589	0	44.383	643.132	0	0.13
	34.518	810.208	29.753	0	42.49	781.894	0	0.16
	51.777	1138.97	24.072	0	36.68	1107.525	0	0.24
	64.549	1302.729	19.558	0	32.108	1265.838	0	0.28
	69.036	1342.07	17.93	0	30.467	1303.048	0	0.29
	86.295	1402.376	1.871	-12.129	24.101	1352.905	0	0.31
	103.554	1326.396	0	-18.476	17.869	1255.317	0	0.29
	120.813	1110.12	0	-24.571	12.057	1027.052	0	0.24
	132.894	889.384	0	-28.533	10.169	0	-10.818	0.19
	138.072	780.144	0	-30.135	10.169	41.834	0	0.16
	155.331	360.674	0	-35.043	10.169	217.339	0	0.08
	156.021	342.396	0	-35.225	10.169	224.359	0	0.08
4	0	392.843	10.169	-1.875	53.06	0	-198.449	0
	0	392.843	10.169	-1.875	53.06	0	-198.449	0
	10.896	372.416	0	-1.875	51.57	98.763	0	0.05
	20.954	412.638	36.624	0	49.958	378.296	0	0.11
	41.908	986.15	32.781	0	45.952	965.09	0	0.22
	55.319	1335.163	29.89	0	42.969	1317.222	0	0.29
	62.862	1516.787	28.132	0	41.165	1498.673	0	0.33
	66.843	1606.918	27.169	0	40.18	1588.017	0	0.34
	81.93	1901.463	23.344	0	36.29	1875.972	0	0.39
	83.816	1932.298	22.849	0	35.788	1905.681	0	0.39
	104.77	2170.426	17.146	0	30.019	2128.496	0	0.42
	125.724	2211.966	0.941	-13.059	23.944	2135.196	0	0.41
	146.678	2035.131	0	-19.265	17.628	1902.445	0	0.36
	156.945	1857.724	0	-22.386	14.462	1695.49	0	0.32
	167.632	1611.083	0	-38.443	11.122	1412.914	0	0.27
	171.404	1510.643	0	-39.612	9.933	1296.533	0	0.25
	182.3	1171.817	0	-43.018	6.472	910.685	0	0.19
	188.586	943	0	-45.003	4.458	654.101	0	0.15
	209.54	0	4.114	-51.641	4.114	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Mom	Corr. Mom	Deflect(min)
1	0	0	51.354	-7.306	-7.306	0	0	0
	19.586	-143.101	0	-7.306	-7.306	0	-143.101	-0.08
	39.172	-286.202	0	-7.306	-11.528	1279.71	0	-0.16
	43.481	-317.685	0	-7.306	-13.048	1396.62	0	-0.18
	58.758	-429.303	0	-7.306	-18.348	1710.826	0	-0.23
	78.344	-572.405	0	-7.306	-24.897	1896.063	0	-0.28
	97.93	-715.506	0	-7.306	-31.084	1860.17	0	-0.31
	98.518	-719.799	0	-7.306	-31.263	1856.001	0	-0.31
	117.516	-858.607	0	-7.306	-36.789	1638.624	0	-0.32
	137.102	-1001.71	0	-7.306	-41.846	1282.27	0	-0.29
	151.596	-1107.6	0	-7.306	-45.101	965.052	0	-0.24
	156.688	-1144.81	0	-7.306	-46.147	846.511	0	-0.22
	161.585	-1180.58	0	-7.306	-47.109	729.473	0	-0.2

	172.944	-1263.58	0	-7.306	-49.191	447.629	0	-0.14
	176.274	-1287.91	0	-7.306	-49.768	362.06	0	-0.12
	187.438	-1369.48	0	-7.306	-51.609	64.193	0	-0.05
2	0	-1431.01	37.801	-7.306	-52.891	0	-177.302	0
	0	-1431.01	37.801	-7.306	-52.891	0	-177.302	0
	6.506	-1204.43	6.011	0	-3.869	216.121	0	-0.04
	18.976	-1129.47	6.011	0	-3.869	167.874	0	-0.11
	27.108	-1080.59	6.011	0	-3.869	136.409	0	-0.16
	29.548	-1065.92	6.011	0	-3.869	126.969	0	-0.17
	37.951	-1015.41	6.011	0	-4.174	708.382	0	-0.21
	54.216	-917.635	6.011	0	-6.836	1058.721	0	-0.27
	79.426	-766.091	6.011	0	-11.834	1581.38	0	-0.32
	81.324	-754.684	6.011	0	-12.247	1617.836	0	-0.32
	92.438	-687.874	6.011	0	-14.751	1816.707	0	-0.32
	108.432	-591.733	6.011	0	-18.526	2044.856	0	-0.31
	135.54	-428.782	6.011	0	-25.148	2227.961	0	-0.28
	162.648	-388.013	0	-3.869	-31.813	2128.684	0	-0.23
	181.081	-459.335	0	-3.869	-36.26	1902.673	0	-0.19
	189.756	-492.898	0	-3.869	-38.305	1754.875	0	-0.19
	198.159	-525.412	0	-3.869	-40.242	1589.262	0	-0.18
	211.442	-576.805	0	-3.869	-43.185	1289.829	0	-0.17
	216.864	-597.782	0	-3.869	-44.331	1157.527	0	-0.16
	243.972	-702.666	0	-3.869	-49.414	456.921	0	-0.1
	255.9	-837.925	0	-31.813	-51.239	152.545	0	-0.06
	263.761	-1098.18	0	-34.293	-52.292	0	-39.219	-0.03
3	0	-1362.2	10.169	-37.208	-53.15	0	-221.022	0
	0	-1362.2	10.169	-37.208	-53.15	0	-221.022	0
	11.046	-1249.88	10.169	0	-8.197	220.457	0	-0.05
	17.259	-1186.7	10.169	0	-8.197	169.526	0	-0.08
	28.477	-1072.62	10.169	0	-8.197	77.567	0	-0.13
	34.518	-1011.2	10.169	0	-8.197	28.051	0	-0.14
	51.777	-835.69	10.169	0	-12.495	1053.777	0	-0.18
	64.549	-705.816	10.169	0	-16.815	1229.714	0	-0.19
	69.036	-660.185	10.169	0	-18.393	1274.383	0	-0.19
	86.295	-484.68	10.169	0	-24.654	1356.061	0	-0.18
	103.554	-537.85	0	-8.197	-31.017	1289.054	0	-0.16
	120.813	-679.325	0	-8.197	-37.196	1078.789	0	-0.15
	132.894	-778.358	0	-8.197	-41.255	858.864	0	-0.13
	138.072	-820.8	0	-8.197	-42.902	749.68	0	-0.12
	155.331	-962.275	0	-8.197	-47.968	328.626	0	-0.07
	156.021	-967.934	0	-8.197	-48.156	310.218	0	-0.07
4	0	-1103.75	38.383	-8.197	-52.305	0	-164.813	0
	0	-1103.75	38.383	-8.197	-52.305	0	-164.813	0
	10.896	-817.243	4.114	0	-1.875	372.416	0	-0.04
	20.954	-775.863	4.114	0	-1.875	353.559	0	-0.08
	41.908	-689.656	4.114	0	-5.237	877.948	0	-0.13
	55.319	-634.484	4.114	0	-7.878	1214.97	0	-0.15
	62.862	-603.449	4.114	0	-9.508	1394.635	0	-0.15
	66.843	-587.07	4.114	0	-10.408	1485.228	0	-0.16



81.93	-525.001	4.114	0	-14.037	1791.28	0	-0.16
83.816	-517.242	4.114	0	-14.512	1824.5	0	-0.16
104.77	-431.035	4.114	0	-20.028	2098.38	0	-0.15
125.724	-344.828	4.114	0	-25.903	2171.088	0	-0.13
146.678	-258.621	4.114	0	-32.063	2015.522	0	-0.11
156.945	-216.38	4.114	0	-35.165	1849.487	0	-0.09
167.632	-172.414	4.114	0	-38.443	1611.083	0	-0.08
171.404	-156.897	4.114	0	-39.612	1510.643	0	-0.07
182.3	-112.069	4.114	0	-43.018	1171.817	0	-0.05
188.586	-86.207	4.114	0	-45.003	943	0	-0.04
209.54	0	4.114	-51.641	-51.641	0	0	0

Support	Reac. Pos	Reac. Negative
1	7.306	-51.425
2	5.101	-54.164
3	9.687	-56.054
4	12.044	-55.039
5	4.114	-51.708

Id Ohio 5C1  
Type Truck

Factors: Moment 1  
Shear 1  
Deflection 1

Maximums table:

Span	Location	Moment(r	Corr. Shee	Corr. Shee	Shear (ma	Corr. Morr	Corr. Morr	Deflect(max)
1	0	0	67.06	-10.52	67.06	0	0	0
	19.586	1115.994	56.979	0	56.979	1115.994	0	0.26
	39.172	1886.928	39.846	0	47.155	1847.162	0	0.48
	43.481	2016.878	37.697	0	45.056	1959.073	0	0.53
	58.758	2339.301	30.263	0	37.827	2222.633	0	0.65
	78.344	2485.204	6.04	-10.96	29.164	2284.831	0	0.74
	97.93	2395.474	1.918	-15.082	21.36	2091.815	0	0.76
	98.518	2390.346	1.652	-15.348	21.141	2082.762	0	0.76
	117.516	2100.793	0	-23.576	14.55	1709.878	0	0.7
	137.102	1595.819	0	-31.177	8.694	1191.95	0	0.56
	151.596	1128.917	0	-36.152	4.894	741.913	0	0.43
	156.688	950.377	0	-37.774	3.648	571.526	0	0.38
	161.585	772.903	0	-39.273	2.49	402.371	0	0.33
	172.944	341.412	0	-42.538	1.707	295.276	0	0.22
	176.274	300.961	1.707	0	1.707	300.961	0	0.18
	187.438	320.022	1.707	0	1.707	320.022	0	0.08
2	0	334.401	1.707	-5.362	74.906	0	-898.153	0
	0	334.401	1.707	-5.362	74.906	0	-898.153	0
	6.506	299.516	0	-5.362	73.5	0	-622.623	0.06
	18.976	232.652	0	-5.362	70.453	0	-112.496	0.18
	27.108	380.091	42.775	0	68.301	216.113	0	0.27
	29.548	470.982	42.172	0	67.63	313.652	0	0.29
	37.951	779.838	40.008	0	65.229	644.865	0	0.38
	54.216	1359.317	51.188	0	60.186	1258.125	0	0.55
	79.426	2157.771	42.923	0	51.616	2055.092	0	0.77
	81.324	2209.056	42.267	0	50.945	2104.613	0	0.78
	92.438	2478.488	22.779	0	46.977	2359.066	0	0.85
	108.432	2767.507	17.067	0	41.196	2610.356	0	0.91
	135.54	2938.839	7.254	-9.746	31.415	2706.984	0	0.93
	162.648	2798.447	0.245	-16.755	21.976	2403.305	0	0.87
	181.081	2480.354	0	-23.32	16.011	2007.285	0	0.77
	189.756	2271.999	0	-41.954	13.396	1781.527	0	0.72
	198.159	2039.787	0	-44.844	11.004	1545.352	0	0.66
	211.442	1614.023	0	-49.254	8.499	38.853	0	0.55
	216.864	1422.991	0	-50.984	8.499	84.932	0	0.5
	243.972	389.471	0	-42.836	8.499	315.323	0	0.23
	255.9	416.695	8.499	0	8.499	416.695	0	0.12
	263.761	483.508	8.499	0	8.499	483.508	0	0.06
3	0	545.714	8.499	-4.074	70.088	0	-607.036	0
	0	545.714	8.499	-4.074	70.088	0	-607.036	0

	11.046	500.716	0	-4.074	65.332	0	-97.267	0.07
	17.259	475.405	0	-4.074	62.471	163.336	0	0.11
	28.477	671.506	49.66	0	57.075	582.657	0	0.18
	34.518	872.343	46.77	0	54.052	779.692	0	0.22
	51.777	1334.002	23.128	0	45.067	1219.508	0	0.33
	64.549	1556.792	16.451	-0.549	38.266	1411.721	0	0.38
	69.036	1607.789	14.069	-2.931	35.882	1451.078	0	0.4
	86.295	1674.22	11.322	-5.678	26.895	1468.07	0	0.42
	103.554	1590.367	2.138	-14.862	18.469	1283.56	0	0.4
	120.813	1298.327	0	-23.86	14.719	0	-193.485	0.33
	132.894	985.284	0	-44.901	14.719	0	-15.658	0.26
	138.072	826.755	0	-47.411	14.719	60.554	0	0.22
	155.331	314.592	14.719	0	14.719	314.592	0	0.11
	156.021	324.754	14.719	0	14.719	324.754	0	0.1
4	0	568.631	14.719	-2.714	74.391	0	-779.369	0
	0	568.631	14.719	-2.714	74.391	0	-779.369	0
	10.896	539.062	0	-2.714	71.646	0	-278.575	0.08
	20.954	511.768	0	-2.714	68.78	177.982	0	0.15
	41.908	1157.837	53.183	0	61.981	1082.523	0	0.32
	55.319	1665.522	48.602	0	57.144	1586.959	0	0.42
	62.862	1920.852	45.864	0	54.28	1834.506	0	0.46
	66.843	2045.132	44.376	0	52.732	1953.117	0	0.49
	81.93	2439.12	23.094	0	46.665	2315.89	0	0.55
	83.816	2480.405	22.347	0	45.887	2350.846	0	0.56
	104.77	2779.942	13.757	-3.243	37.001	2567.014	0	0.6
	125.724	2840.8	9.005	-7.995	27.736	2442.519	0	0.59
	146.678	2638.528	0	-32.264	18.165	1949.097	0	0.51
	156.945	2421.842	0	-36.785	13.384	1565.643	0	0.46
	167.632	2101.223	0	-41.575	9.014	1145.991	0	0.39
	171.404	1964.347	0	-43.285	7.591	992.452	0	0.36
	182.3	1523.851	0	-55.941	5.693	0	-155.08	0.27
	188.586	1232.451	0	-58.817	5.693	0	-119.292	0.21
	209.54	0	5.693	-68.457	5.693	0	0	0

Minimums table:

Span	Location	Moment(kr)	Corr. Shear	Corr. Shear	Shear (mir)	Corr. Morr	Corr. Morr	Deflect(min)
1	0	0	67.06	-10.52	-10.52	0	0	0
	19.586	-206.054	0	-10.52	-10.52	0	-206.054	-0.12
	39.172	-412.108	0	-10.52	-10.52	0	-412.108	-0.23
	43.481	-457.44	0	-10.52	-10.829	1159.847	0	-0.26
	58.758	-618.163	0	-10.52	-18.231	1691.401	0	-0.33
	78.344	-824.217	0	-10.52	-28.24	2117.102	0	-0.4
	97.93	-1030.27	0	-10.52	-37.819	2192.816	0	-0.45
	98.518	-1036.45	0	-10.52	-38.098	2190.071	0	-0.45
	117.516	-1236.33	0	-10.52	-46.818	1961.427	0	-0.46
	137.102	-1442.38	0	-10.52	-55.052	1482.395	0	-0.41
	151.596	-1594.86	0	-10.52	-60.545	1011.279	0	-0.34
	156.688	-1648.43	0	-10.52	-62.347	827.997	0	-0.31
	161.585	-1699.95	0	-10.52	-64.017	644.646	0	-0.28



	172.944	-1819.46	0	-10.52	-67.654	197.254	0	-0.2
	176.274	-1854.49	0	-10.52	-68.658	61.277	0	-0.17
	187.438	-1971.94	0	-10.52	-71.838	0	-408.076	-0.08
2	0	-2060.54	54.923	-10.52	-74.02	0	-780.53	0
	0	-2060.54	54.923	-10.52	-74.02	0	-780.53	0
	6.506	-1711.02	51.779	0	-5.362	299.516	0	-0.06
	18.976	-1596.92	8.499	0	-5.362	232.652	0	-0.16
	27.108	-1527.81	8.499	0	-5.362	189.045	0	-0.23
	29.548	-1507.07	8.499	0	-5.362	175.963	0	-0.24
	37.951	-1435.65	8.499	0	-5.362	130.902	0	-0.3
	54.216	-1297.42	8.499	0	-6.349	982.665	0	-0.38
	79.426	-1083.15	8.499	0	-12.758	1689.232	0	-0.45
	81.324	-1067.02	8.499	0	-13.293	1738.424	0	-0.45
	92.438	-972.564	8.499	0	-16.573	2011.622	0	-0.45
	108.432	-836.633	8.499	0	-21.69	2344.787	0	-0.44
	135.54	-606.242	8.499	0	-31.099	2674.822	0	-0.39
	162.648	-537.736	0	-5.362	-40.89	2622.76	0	-0.32
	181.081	-636.578	0	-5.362	-47.54	2351.186	0	-0.27
	189.756	-683.092	0	-5.362	-50.63	2159.308	0	-0.26
	198.159	-728.152	0	-5.362	-53.583	1937.121	0	-0.25
	211.442	-799.377	0	-5.362	-58.129	1520.001	0	-0.24
	216.864	-828.448	0	-5.362	-59.929	1329.421	0	-0.23
	243.972	-973.804	0	-5.362	-68.252	252.944	0	-0.14
	255.9	-1208.3	0	-45.755	-71.445	0	-251.331	-0.09
	263.761	-1588.21	0	-50.91	-73.361	0	-581.757	-0.04
3	0	-1971.76	14.719	-53.954	-74.963	0	-896.613	0
	0	-1971.76	14.719	-53.954	-74.963	0	-896.613	0
	11.046	-1809.17	14.719	0	-11.737	315.666	0	-0.08
	17.259	-1717.72	14.719	0	-11.737	242.739	0	-0.12
	28.477	-1552.59	14.719	0	-11.737	111.066	0	-0.18
	34.518	-1463.68	14.719	0	-11.737	40.165	0	-0.21
	51.777	-1209.64	14.719	0	-11.737	0	-162.41	-0.26
	64.549	-1021.65	14.719	0	-16.974	1231.526	0	-0.27
	69.036	-955.601	14.719	0	-19.076	1307.11	0	-0.28
	86.295	-701.562	14.719	0	-27.624	1478.594	0	-0.26
	103.554	-770.133	0	-11.737	-36.675	1441.393	0	-0.23
	120.813	-972.708	0	-11.737	-45.852	1186.953	0	-0.22
	132.894	-1114.51	0	-11.737	-52.135	888.321	0	-0.19
	138.072	-1175.28	0	-11.737	-54.754	732.97	0	-0.17
	155.331	-1377.86	0	-11.737	-63.067	107.247	0	-0.1
	156.021	-1385.96	0	-11.737	-63.383	79.283	0	-0.1
4	0	-1580.43	55.264	-11.737	-70.457	0	-648.809	0
	0	-1580.43	55.264	-11.737	-70.457	0	-648.809	0
	10.896	-1130.89	5.693	0	-2.714	539.062	0	-0.06
	20.954	-1073.63	5.693	0	-2.714	511.768	0	-0.11
	41.908	-954.338	5.693	0	-4.037	676.67	0	-0.18
	55.319	-877.991	5.693	0	-7.278	1122.398	0	-0.2
	62.862	-835.045	5.693	0	-9.318	1366.813	0	-0.21
	66.843	-812.38	5.693	0	-10.459	1492.474	0	-0.22

81.93	-726.489	5.693	0	-15.153	1933.609	0	-0.22
83.816	-715.753	5.693	0	-15.777	1983.599	0	-0.22
104.77	-596.461	5.693	0	-23.22	2432.803	0	-0.21
125.724	-477.169	5.693	0	-31.429	2634.235	0	-0.19
146.678	-357.877	5.693	0	-40.177	2525.592	0	-0.15
156.945	-299.423	5.693	0	-44.618	2346.638	0	-0.13
167.632	-238.584	5.693	0	-49.332	2067.422	0	-0.11
171.404	-217.112	5.693	0	-51.017	1945.614	0	-0.1
182.3	-155.08	5.693	0	-55.941	1523.851	0	-0.07
188.586	-119.292	5.693	0	-58.817	1232.451	0	-0.06
209.54	0	5.693	-68.457	-68.457	0	0	0

Support    Reac. Pos    Reac. Negative

1	10.52	-67.15
2	7.069	-79.772
3	13.871	-81.738
4	17.433	-80.235
5	5.693	-68.556

P38



Made By: RAH Date: 3/12/2012  
 Checked By: DBH Date: 3/13/2012

Job No.: P402110046  
 Sheet No.: \_\_\_\_\_

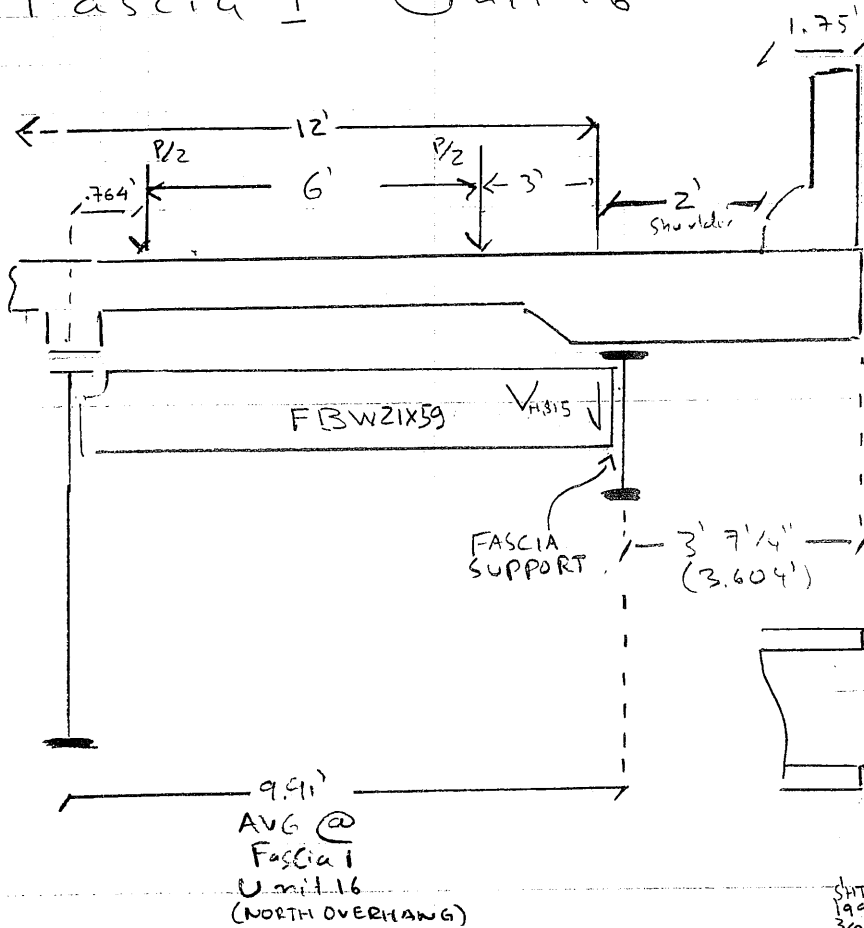
Calculations For: **CUY-2-1441**

**Section I - Fascia Fatigue Summary**

Redundant? no →  $f = 1.0$  (Calculate SAFE Life per ODOT BDM 402.2.6)  
 $R_s = 1.75$   
 Present ADTT ( $T_p$ ) = 257 →  $T_N = 580$  (Future ADTT, assuming growth rate of 1%/year)  
 Weight Ratios = 1.0 ( $W_p/W, W_N/W$  equal to unity per ODOT BDM 402.2.6)  
 $C = 2.00$  (Cycles per truck passage)  
 Impact\* = 1.15 (Per ODOT BDM 402.2.6)  
 $Y_p^{**} = 18$  (Present age of the bridge in years)  $Y_{f,MIN} = 948$  years  
 \* Impact is applied in calculation of stress range,  $S_r$ . Do not include in service moment range.  
 \*\* Fascia Stringers Connecting Plates (to floor beams) have a  $Y_p$  of 18 years.

GIRDER LOCATION	Service $M_r$	$S_x$	* $S_r$	Cat.	K (Detail Constant)	C	$Y_p$	$Y_f$	$Y_N$	$Y_f$
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
Fascia 1, Unit 16 Connecting PL @ Fascia's Web (5/16" Fillet Weld on Both Sides)	2.95	40.64	1.00	D	6	2.0	18	2158.07	956.02	948.05

Fascia 1 - Unit 16



Distribution Factors;  
(AASHTO FATIGUE MANUAL 2.6.1)  
D = 17 (FASCIA Supports @ ±6.7)

$$DF_{int} = \frac{d}{D} = \frac{9.91}{17} = .583$$

$$P = \frac{1.75' + 2' + 6' - 3'7/4''}{9.91'} = .62'$$

$$\therefore DF_{ext} = .7 - (.4)(.62) = 0.452$$

but  $DF_{ext} \geq DF_{int}$   
 $\therefore DF_{ext} = 0.583$

H&S15 REACTION @ FASCIA SUPPORT: 24.32 Kip (UNFACTORED NO IM NO DF)

$$M_{H\&S15} = \underbrace{(1.5)}_{IM} \underbrace{(24.32 \text{ Kip})}_{DF_{ext}} \underbrace{(0.583)}_{DF_{ext}} \underbrace{(2.5')}_{12} = 3.397 \text{ Kip-ft} \quad (2.954 \text{ Kip-ft})$$

FATIGUE MOMENT (LL+IM) DUE TO H&S15

MOM. W/ IM      MOM. W/O IM

$$S_x = \frac{(3/8'')(2.25')(12) - (2)(3/4'')^2}{6} = 40.64 \text{ in}^3$$

SECTION MODULUS OF PL CONNECTING FASCIA W/ FLOOR BEAM

C = 2.0 (Section 3.3 AASHTO Fatigue Manual value for the number of stress cycles per truck passage for transverse members spaced < 20')



Made By: RAH Date: 3/12/2012  
 Checked By: DBH Date: 3/13/2012

Job No.: P402110046  
 Sheet No.: \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Section I - Cantiliver Floor Beams Fatigue Summary**

Redundant? no →  $f = 1.0$  (Calculate SAFE Life per ODOT BDM 402.2.6)  
 $R_s = 1.75$   
 Present ADTT ( $T_p$ ) = 257 →  $T_N = 580$  (Future ADTT, assuming growth rate of 1%/year)  
 Weight Ratios = 1.0 ( $W_p/W$ ,  $W_N/W$  equal to unity per ODOT BDM 402.2.6)  
 $C = 2.00$  (Cycles per truck passage)  
 Impact\* = 1.15 (Per ODOT BDM 402.2.6)  
 $Y_p^{**} = 71$  (Present age of the bridge in years)  $Y_{f,MIN} = -30$  years  
 \* Impact is applied in calculation of stress range,  $S_r$ . Do not include in service moment range.  
 \*\* Floor Beams  $Y_p = 71$  years.

GIRDER LOCATION	Service $M_r$	$S_x$	* $S_r$	Cat.	K (Detail Constant)	C	$Y_p$	$Y_f$	$Y_N$	$Y_f$
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
FB 99 North Overhang (W18X55)	110.53	182.97	8.34	D	6	2.0	71	3.76	1.67	-29.79
FB 112 North Overhang (W21X59)	77.80	296.29	3.62	D	6	2.0	71	45.78	20.28	-11.17
FB 127 North Overhang (W21X59)	167.76	462.81	5.00	D	6	2.0	71	17.40	7.71	-23.74
FB 107 South Overhang (W18X55)	140.41	459.05	4.22	D	6	2.0	71	28.96	12.83	-18.62





Made By: RAH Date: 3/12/2012  
 Checked By: DBH Date: 3/13/2012

Job No.: P402110046  
 Sheet No.: \_\_\_\_\_

Calculations For: **CUY-2-1441**

**Section I - Interior Floor Beams Fatigue Summary**

Redundant? no →  $f = 1.0$  (Calculate SAFE Life per ODOT BDM 402.2.6)  
 $R_s = 1.75$   
 Present ADTT ( $T_p$ ) = 257 →  $T_N = 580$  (Future ADTT, assuming growth rate of 1%/year)  
 Weight Ratios = 1.0 ( $W_p/W$ ,  $W_N/W$  equal to unity per ODOT BDM 402.2.6)  
 $C = 2.00$  (Cycles per truck passage)  
 Impact\* = 1.15 (Per ODOT BDM 402.2.6)  
 $Y_p^{**} = 71$  (Present age of the bridge in years)  $Y_{f,MIN} = -29$  years  
 \* Impact is applied in calculation of stress range,  $S_r$ . Do not include in service moment range.  
 \*\* Floor Beams  $Y_p = 71$  years.

GIRDER LOCATION	Service $M_r$	$S_x$	* $S_r$	Cat.	K (Detail Constant)	C	$Y_p$	$Y_f$	$Y_N$	$Y_f$
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
FB 40 Between North Girder and Stringer 1 (Double MC18X42.7)	62.57	123.11	7.01	D	6	2.0	71	6.31	2.80	-28.66
FB 46 Between North & Central Girders (W18X55)	62.49	171.75	5.02	D	6	2.0	71	17.21	7.62	-23.83
FB 68 Between Central Girder and Stringer 3 (W18X55)	68.96	166.47	5.72	D	6	2.0	71	11.66	5.16	-26.29
FB 131 Between Stringer 2 & Central Girder (W21X59)	62.52	181.22	4.76	D	6	2.0	71	20.19	8.94	-22.51



Made By: RAH Date: 3/12/2012  
 Checked By: DBH Date: 3/13/2012

Job No.: P402110046  
 Sheet No.: 1 of 2

Calculations For: CUY-2-1441

Section I - North Girder Fatigue Summary

Redundant? no → f = 1.0 (Calculate SAFE Life per ODOT BDM 402.2.6)

R<sub>s</sub> = 1.75

Present ADTT (T<sub>P</sub>) = 257 → T<sub>N</sub> = 580 (Future ADTT, assuming growth rate of 1%/year)

Weight Ratios = 1.0 (W<sub>p</sub>/W, W<sub>N</sub>/W equal to unity per ODOT BDM 402.2.6)

C = Varies (Cycles per truck passage)

Impact\* = 1.15 (Per ODOT BDM 402.2.6)

Y<sub>P</sub>\*\* = 71 (Present age of the bridge in years)

Y<sub>I,MN</sub> = **267 years**

\* Impact is applied in calculation of stress range, S<sub>r</sub>. Do not include in service moment range.

GIRDER LOCATION	Service M <sub>r</sub>	S <sub>x</sub>	*S <sub>r</sub>	Cat.	K (Detail Constant)	C	Y <sub>P</sub>	Y <sub>I</sub>	Y <sub>N</sub>	Y <sub>I</sub>
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
North Girder Span 1 Segment 1, Cover plates	127.86	7442.40	0.24	D	6	1.0	71	326913.09	144821.52	144790.07
North Girder Span 1 Segment 2, Cover plates	662.77	10679.74	0.86	D	6	1.0	71	6935.32	3072.32	3040.87
North Girder Span 1 Segment 3, Cover plates	979.62	13374.89	1.01	D	6	1.0	71	4218.60	1868.83	1837.37
North Girder Span 1 Segment 4, Cover plates	1117.01	18252.44	0.84	D	6	1.1	71	6317.14	2798.47	2767.02
North Girder Span 2 Segment 5, Cover plates	856.25	18252.44	0.65	D	6	1.5	71	10869.93	4815.35	4783.89
North Girder Span 2 Segment 6, Cover plates	623.95	14372.15	0.60	D	6	1.5	71	13714.25	6075.37	6043.92
North Girder Span 2 Segment 7, Cover plates	398.71	10488.34	0.52	D	6	1.5	71	20426.94	9049.07	9017.62
North Girder Span 2 Segment 8, Cover plates	866.81	7442.40	1.61	D	6	1.00	71	1049.14	464.77	433.31
North Girder Span 2 Segment 9, Cover plates	1156.195	9857.33	1.62	D	6	1.00	71	1027.19	455.04	423.59
North Girder Span 2 Segment 10, Cover plates	1486.265	12334	1.66	D	6	1	71	947.30	419.65	388.20
North Girder Span 2 Segment 11, Cover plates	1238.36	14424.2	1.18	D	6	1	71	2619.41	1160.39	1128.94
North Girder Span 2 Segment 12, Cover plates	797.83	12334	0.89	D	6	1	71	6124.13	2712.97	2681.52
North Girder Span 2 Segment 13, Cover plates	590.113	9857.33	0.83	D	6	1	71	7725.71	3422.47	3391.01
North Girder Span 2 Segment 14, Cover plates	520.331	8180.07	0.88	D	6	1	71	6440.19	2852.99	2821.53
North Girder Span 2 Segment 15, Cover plates	812.516	11707.1	0.96	D	6	1.4771	71	3356.71	1487.01	1455.56
North Girder Span 2 Segment 16, Cover plates	855.085	15644.7	0.75	D	6	1.4771	71	6872.93	3044.69	3013.23
North Girder Span 2 Segment 17, Cover plates	922.283	20052.5	0.63	D	6	1.4771	71	11533.96	5109.51	5078.06
North Girder Span 3 Segment 18, Cover plates	906.734	20417.4	0.61	D	6	1.3867	71	13647.44	6045.77	6014.32
North Girder Span 3 Segment 19, Cover plates	737.12	14381.4	0.71	D	6	1	71	12310.04	5453.31	5421.86
North Girder Span 3 Segment 20, Cover plates	287.042	11517.6	0.34	D	6	1	71	107082.35	47437.16	47405.71
North Girder Span 3 Segment 21, Cover plates	327.539	8146.03	0.55	D	6	1	71	25498.60	11295.80	11264.35
North Girder Span 3 Segment 22, Cover plates	192.182	7442.4	0.36	D	6	1	71	96264.85	42645.04	42613.59
North Girder Span 3 Segment 23, Cover plates	567.103	9312.47	0.84	D	6	1	71	7339.66	3251.45	3220.00
North Girder Span 3 Segment 24, Cover plates	643.867	13811.1	0.64	D	6	1.3867	71	11797.37	5226.20	5194.75
North Girder Span 3 Segment 25, Cover plates	900.122	17861.4	0.70	D	6	1.3867	71	9339.70	4137.46	4106.01



Made By: RAH Date: 3/12/2012

Job No.: P402110046

Checked By: DBH Date: 3/13/2012

Sheet No.: 2 of 2

Calculations For: CUY-2-1441

**Section I - North Girder Fatigue Summary**

Redundant? no →  $f = 1.00$  (Calculate SAFE Life per ODOT BDM 402.2.6)

$R_s = 1.75$

Present ADTT (TP) = 257 →  $TN = 580$  (Future ADTT, assuming growth rate of 1%/year)

Weight Ratios = 1 (WP/W, WN/W equal to unity per ODOT BDM 402.2.6)

$C = \text{Varies}$  (Cycles per truck passage)

Impact\* = 1.15 (Per ODOT BDM 402.2.6)

$YP^{**} = 71$  (Present age of the bridge in years)

**$Yf, MIN = 267$  years**

\* Impact is applied in calculation of stress range, Sr. Do not include in service moment range.

GIRDER LOCATION	Service $M_r$	$S_x$	* $S_r$	Cat.	K (Detail Constant)	C	$Y_p$	$Y_t$	$Y_n$	$Y_f$
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
North Girder Span 4 Segment 26, Cover plates	862.317	17476.1	0.68	D	6	1.3402	71	10295.54	4560.89	4529.44
North Girder Span 4 Segment 27, Cover plates	810.11	13514.7	0.83	D	6	1	71	7695.77	3409.20	3377.75
North Girder Span 4 Segment 28, Cover plates	473.16	9581.02	0.68	D	6	1	71	13761.88	6096.47	6065.02
North Girder Span 4 Segment 29, Cover plates	784.889	9857.33	1.10	D	6	1	71	3283.37	1454.52	1423.07
North Girder Span 4 Segment 30, Cover plates	1116.147	12334	1.25	D	6	1	71	2236.72	990.86	959.41
North Girder Span 4 Segment 31, Cover plates	1469.763	14424.2	1.41	D	6	1	71	1566.76	694.07	662.62
North Girder Span 4 Segment 32, Cover plates	1260.438	12334	1.41	D	6	1	71	1553.14	688.04	656.58
North Girder Span 4 Segment 33, Cover plates	1004.596	9857.33	1.41	D	6	1	71	1565.92	693.70	662.25
North Girder Span 4 Segment 34, Cover plates	1004.596	7442.4	1.86	D	6	1	71	673.96	298.56	267.11



Made By: RAH Date: 3/12/2012  
 Checked By: DBH Date: 3/13/2012

Job No.: P402110046  
 Sheet No.: 1 of 2

Calculations For: CUY-2-1441

Section I - Center Girder Fatigue Summary

Redundant? no → f = 1.0 (Calculate SAFE Life per ODOT BDM 402.2.6)  
 Present ADTT (T<sub>P</sub>) = 257 → T<sub>N</sub> = 580 (Future ADTT, assuming growth rate of 1%/year)  
 Weight Ratios = 1.0 (W<sub>P</sub>/W, W<sub>N</sub>/W equal to unity per ODOT BDM 402.2.6)  
 C = Varies (Cycles per truck passage)  
 Impact\* = 1.15 (Per ODOT BDM 402.2.6)  
 Y<sub>P</sub>\*\* = 71 (Present age of the bridge in years) Y<sub>f,MIN</sub> = **212 years**  
 \* Impact is applied in calculation of stress range, S<sub>r</sub>. Do not include in service moment range.

GIRDER LOCATION	Service M <sub>r</sub>	S <sub>x</sub>	*S <sub>r</sub>	Cat.	K (Detail Constant)	C	Y <sub>P</sub>	Y <sub>f</sub>	Y <sub>N</sub>	Y <sub>f</sub>
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
Center Girder Span 1 Segment 1, Cover plates	303.02	7442.40	0.56	D	6	1	71	24558.91	10879.53	10848.07
Center Girder Span 1 Segment 2, Cover plates	489.68	10396.48	0.65	D	6	1	71	15863.43	7027.45	6996.00
Center Girder Span 1 Segment 3, Cover plates	1004.53	14817.99	0.94	D	6	1.2156	71	4376.86	1938.94	1907.48
Center Girder Span 1 Segment 4, Cover plates	1096.65	19286.34	0.78	D	6	1.2156	71	7417.06	3285.73	3254.28
Center Girder Span 2 Segment 5, Cover plates	806.91	19286.34	0.58	D	6	1.4771	71	15322.59	6787.86	6756.41
Center Girder Span 2 Segment 6, Cover plates	633.07	14817.99	0.59	D	6	1.4771	71	14390.68	6375.03	6343.57
Center Girder Span 2 Segment 7, Cover plates	541.14	10607.60	0.70	D	6	1.4771	71	8452.63	3744.49	3713.04
Center Girder Span 2 Segment 8, Cover plates	807.782	7442.4	1.50	D	6	1	71	1296.35	574.28	542.83
Center Girder Span 2 Segment 9, Cover plates	1081.168	9857.33	1.51	D	6	1	71	1256.22	556.50	525.05
Center Girder Span 2 Segment 10, Cover plates	1372.2	12334	1.54	D	6	1	71	1203.71	533.24	501.79
Center Girder Span 2 Segment 11, Cover plates	1649.505	14850.2	1.53	D	6	1	71	1209.50	535.81	504.35
Center Girder Span 2 Segment 12, Cover plates	1432.216	16555.6	1.19	D	6	1	71	2560.23	1134.17	1102.72
Center Girder Span 2 Segment 13, Cover plates	1043.544	14850.2	0.97	D	6	1	71	4776.78	2116.10	2084.65
Center Girder Span 2 Segment 14, Cover plates	688.124	12334	0.77	D	6	1	71	9544.99	4228.40	4196.95
Center Girder Span 2 Segment 15, Cover plates	361.254	9857.33	0.51	D	6	1	71	33674.87	14917.87	14886.42
Center Girder Span 2 Segment 16, Cover plates	614.897	7442.4	1.14	D	6	1.4771	71	1989.74	881.45	850.00
Center Girder Span 2 Segment 17, Cover plates	645.783	12878.2	0.69	D	6	1.4771	71	8899.52	3942.46	3911.01
Center Girder Span 2 Segment 18, Cover plates	904.611	17700.4	0.71	D	6	1.4771	71	8406.73	3724.16	3692.70
Center Girder Span 3 Segment 19, Cover plates	861.891	16993.4	0.70	D	6	1.3097	71	9700.23	4297.17	4265.72
Center Girder Span 3 Segment 20, Cover plates	436.685	12073.9	0.50	D	6	1	71	35035.61	15520.67	15489.22
Center Girder Span 3 Segment 21, Cover plates	892.196	7442.4	1.65	D	6	1	71	962.11	426.21	394.76
Center Girder Span 3 Segment 22, Cover plates	71.41	7442.4	0.13	D	6	1	71	1876414.35	831245.95	831214.50
Center Girder Span 3 Segment 23, Cover plates	661.488	9825.02	0.93	D	6	1.3097	71	4146.96	1837.09	1805.64
Center Girder Span 3 Segment 24, Cover plates	702.645	14186.8	0.68	D	6	1.3097	71	10416.90	4614.65	4583.20
Center Girder Span 4 Segment 25, Cover plates	661.189	14186.8	0.64	D	6	1.3312	71	12299.79	5448.77	5417.32



Made By: RAH Date: 3/12/2012 Job No.: P402110046  
 Checked By: DBH Date: 3/13/2012 Sheet No.: 2 of 2

Calculations For: CUY-2-1441

**Section I - Center Girder Fatigue Summary**

Redundant? no → f = 1.00 (Calculate SAFE Life per ODOT BDM 402.2.6)

Rs = 1.75

Present ADTT (TP) = 257 → TN = 580 (Future ADTT, assuming growth rate of 1%/year)

Weight Ratios = 1 (WP/W, WN/W equal to unity per ODOT BDM 402.2.6)

C = Varies (Cycles per truck passage)

Impact\* = 1.15 (Per ODOT BDM 402.2.6)

YP\*\* = 71 (Present age of the bridge in years)

**Yf,MIN = 212 years**

\* Impact is applied in calculation of stress range, Sr. Do not include in service moment range.

GIRDER LOCATION	Service $M_f$	$S_x$	* $S_r$	Cat.	K (Detail Constant)	C	$Y_p$	$Y_1$	$Y_N$	$Y_f$
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
Center Girder Span 4 Segment 26, Cover plates	455.667	17476.1	0.36	D	6	1	71	93510.54	41424.89	41393.44
Center Girder Span 4 Segment 27, Cover plates	753.135	13514.7	0.77	D	6	1	71	9577.80	4242.94	4211.48
Center Girder Span 4 Segment 28, Cover plates	1080.465	9581.02	1.56	D	6	1	71	1155.77	512.00	480.55
Center Girder Span 4 Segment 29, Cover plates	1425.083	9857.33	2.00	D	6	1	71	548.56	243.01	211.56
Center Girder Span 4 Segment 30, Cover plates	1188.734	12334	1.33	D	6	1	71	1851.49	820.21	788.75
Center Girder Span 4 Segment 31, Cover plates	922.501	14424.2	0.88	D	6	1	71	6336.43	2807.02	2775.57
Center Girder Span 4 Segment 32, Cover plates	922.501	12334	1.03	D	6	1	71	3961.64	1755.00	1723.54



Made By: RAH Date: 3/12/2012  
 Checked By: DBH Date: 3/13/2012

Job No.: P402110046  
 Sheet No.: 1 of 2

Calculations For: CUY-2-1441

Section I - South Girder Fatigue Summary

Redundant? no → f = 1.0 (Calculate SAFE Life per ODOT BDM 402.2.6)  
 Present ADTT (T<sub>P</sub>) = 257 → R<sub>s</sub> = 1.75  
 T<sub>N</sub> = 580 (Future ADTT, assuming growth rate of 1%/year)  
 Weight Ratios = 1.0 (W<sub>P</sub>/W, W<sub>Q</sub>/W equal to unity per ODOT BDM 402.2.6)  
 C = Varies (Cycles per truck passage)  
 Impact\* = 1.15 (Per ODOT BDM 402.2.6)  
 Y<sub>P</sub>\*\* = 71 (Present age of the bridge in years) Y<sub>f,MIN</sub> = **193 years**  
 \* Impact is applied in calculation of stress range, S<sub>r</sub>. Do not include in service moment range.

GIRDER LOCATION	Service M <sub>r</sub>	S <sub>x</sub>	*S <sub>r</sub>	Cat.	K (Detail Constant)	C	Y <sub>P</sub>	Y <sub>r</sub>	Y <sub>N</sub>	Y <sub>f</sub>
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
South Girder Span 1 Segment 1, Cover plates	1105.25	7442.401	2.05	D	6	1	71	506.08	224.19	192.74
South Girder Span 1 Segment 2, Cover plates	969.66	9046.872	1.48	D	6	1	71	1346.20	596.36	564.91
South Girder Span 1 Segment 3, Cover plates	268.27	7649.594	0.48	D	6	1	71	38429.14	17023.99	16992.54
South Girder Span 1 Segment 4, Cover plates	580.77	10519.16	0.76	D	6	1	71	9849.11	4363.12	4331.67
South Girder Span 1 Segment 5, Cover plates	952.52	13799.44	0.95	D	6	1	71	5040.02	2232.71	2201.26
South Girder Span 1 Segment 6, Cover plates	1121.45	19545.51	0.79	D	6	1.2897	71	6804.54	3014.39	2982.94
South Girder Span 1 Segment 7, Cover plates	1171.84	23066.69	0.70	D	6	1.2897	71	9802.76	4342.59	4311.14
South Girder Span 2 Segment 8, Cover plates	959.26	23066.69	0.57	D	6	1.4777	71	15596.32	6909.12	6877.67
South Girder Span 2 Segment 9, Cover plates	932.811	19389.89	0.66	D	6	1.4777	71	10074.55	4463.00	4431.54
South Girder Span 2 Segment 10, Cover plates	663.816	14445.84	0.63	D	6	1	71	17082.51	7567.50	7536.05
South Girder Span 2 Segment 11, Cover plates	405.802	10760.02	0.52	D	6	1	71	30900.33	13688.75	13657.30
South Girder Span 2 Segment 12, Cover plates	775.008	7699.6	1.39	D	6	1	71	1625.37	720.03	688.58
South Girder Span 2 Segment 13, Cover plates	1071.375	9857.325	1.50	D	6	1	71	1290.98	571.90	540.45
South Girder Span 2 Segment 14, Cover plates	1359.173	12333.97	1.52	D	6	1	71	1238.66	548.72	517.27
South Girder Span 2 Segment 15, Cover plates	1299.764	14850.25	1.21	D	6	1.4777	71	1672.97	741.12	709.67
South Girder Span 2 Segment 16, Cover plates	935.399	12333.97	1.05	D	6	1.4777	71	2571.57	1139.20	1107.75
South Girder Span 2 Segment 17, Cover plates	595.178	9857.325	0.83	D	6	1.4777	71	5095.86	2257.45	2226.00
South Girder Span 2 Segment 18, Cover plates	537.029	8479.945	0.87	D	6	1.4777	71	4416.38	1956.44	1924.99
South Girder Span 2 Segment 19, Cover plates	748.7	11583.06	0.89	D	6	1.4777	71	4153.62	1840.04	1808.59
South Girder Span 2 Segment 20, Cover plates	966.333	15216.63	0.88	D	6	1.4777	71	4379.81	1940.24	1908.79
South Girder Span 3 Segment 21, Cover plates	886.652	15577.29	0.79	D	6	1.2315	71	7298.90	3233.39	3201.94
South Girder Span 3 Segment 22, Cover plates	549.37	11682.4	0.65	D	6	1	71	15939.26	7061.05	7029.59
South Girder Span 3 Segment 23, Cover plates	413.444	8010.37	0.71	D	6	1	71	12055.20	5340.42	5308.96
South Girder Span 3 Segment 24, Cover plates	40.688	7444.876	0.08	D	6	1	71	10154067.61	4498221.60	4498190.15
South Girder Span 3 Segment 25, Cover plates	724.171	9223.56	1.08	D	6	1.2315	71	2781.08	1232.01	1200.56



Made By: RAH Date: 3/12/2012 Job No.: P402110046  
 Checked By: DBH Date: 3/13/2012 Sheet No.: 2 of 2

Calculations For: CUY-2-1441

**Section I - South Girder Fatigue Summary**

Redundant? NO → f = 1.00 (Calculate SAFE Life per ODOT BDM 402.2.6)  
 Present ADTT (TP) = 257 → TN = 580 (Future ADTT, assuming growth rate of 1%/year)  
 Weight Ratios = 1.0 (WP/W, WN/W equal to unity per ODOT BDM 402.2.6)  
 C = Varies (Cycles per truck passage)  
 Impact\* = 1.15 (Per ODOT BDM 402.2.6)  
 YP\*\* = 71 (Present age of the bridge in years) **Yf,MIN = 193 years**  
 \* Impact is applied in calculation of stress range, Sr. Do not include in service moment range.

GIRDER LOCATION	Service $M_f$	$S_x$	* $S_r$	Cat.	K (Detail Constant)	C	$Y_p$	$Y_f$	$Y_N$	$Y_f$
	(k-ft)	(in <sup>3</sup> )	(ksi)				(years)	(years)	(years)	(years)
South Girder Span 3 Segment 26, Cover plates	691.021	12285.49	0.78	D	6	1.2315	71	7563.88	3350.78	3319.33
South Girder Span 4 Segment 27, Cover plates	413.849	12285.49	0.46	D	6	1.3239	71	32755.16	14510.44	14478.98
South Girder Span 4 Segment 28, Cover plates	572.574	8310.679	0.95	D	6	1	71	5068.52	2245.34	2213.89
South Girder Span 4 Segment 29, Cover plates	878.697	9857.325	1.23	D	6	1	71	2340.06	1036.64	1005.19
South Girder Span 4 Segment 30, Cover plates	1211.021	12333.97	1.35	D	6	1	71	1751.14	775.75	744.30
South Girder Span 4 Segment 31, Cover plates	1487.392	14850.25	1.38	D	6	1	71	1649.65	730.79	699.34
South Girder Span 4 Segment 32, Cover plates	1232.211	12333.97	1.38	D	6	1	71	1662.34	736.41	704.96
South Girder Span 4 Segment 33, Cover plates	971.527	9857.325	1.36	D	6	1	71	1731.33	766.97	735.52
South Girder Span 4 Segment 34, Cover plates	971.527	7442.401	1.80	D	6	1	71	745.15	330.10	298.64