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Engineering
Architecture
Landscape Architecture
Construction Administration
Surveying
Planning

SFN 7731043

Wooster Road over Hudson Run

BAR - 11 - 0270

2011 Bridge Load Rating Report

Prepared for:

Summit County Engineer
538 E. South Street
Akron, Ohio, 44311-1843

LOAD RATINGS OF SUM-11-0270

Wooster Road over Hudson Run

Introduction

The existing structure is a 3 span continuous concrete slab bridge. The bridge has spans of 20'-0", 25'-0", and 20'-0". The substructures are capped pile abutments and piers. The bridge was built in 1964 with rehab work done in 1989. The structure received a 2010 general appraisal of 7A. Bridge plan dimensions were field verified. No section loss observed. There is efflorescence at the construction joints with some rust staining. The overlay on the deck is failing and filled with failing patches and should be repaired.

The Load Ratings for the existing structure were done in accordance with the Section 900 of ODOT Bridge Design Manual. In addition to HS20, following Live Loads (Ohio Legal Loads) were also considered for load rating:

BRIDGE LOAD RATING REPORT
OFFICE OF STRUCTURAL ENGINEERING
OHIO DEPARTMENT OF TRANSPORTATION

SFN	BRIDGE NUMBER	DISTRICT
7731043	SUM-011-0270	4
ORIGINAL CONSTRUCTION YEAR	**REHABILITATION YEAR**	**OVERALL STRUCTURE LENGTH (FT.)**
1964	1989	67

FEATURE INTERSECTED:	HUDSON RUN
SPECIAL ASSUMPTIONS & COMMENTS:	ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989 PER CONDITION OBSERVED ON 6-28-11 FIELD VIEW

RATING & ANALYSIS OPTION: SELECT FROM LIST ON THE LEFT WHERE APPROPRIATE

LOAD RATING PURPOSE:	1- Initial Load Rating
RATING SOFTWARE:	1- BARS
BASIS OF ANALYSIS:	1- Plan Information Available
METHOD OF ANALYSIS:	2- Load Factor (LF)
DESIGN LOADING (ORIGINAL):	5- HS-20

STATE OF OHIO
DAVID F. TRAINI #48751
REGISTERED PROFESSIONAL ENGINEER

David F. Traini

STRUCTURE RATING SUMMARY

LOADING TYPE	RATING FACTOR - RF (Number up to 2-Decimals)	RATING LOAD
INVENTORY CURRENT DESIGN	0.98	HS-20-44
OPERATING CURRENT DESIGN	1.63	HS-20-44
OHIO LEGAL - 2F1	3.08	OHIO LEGAL LOADS OVERALL MINIMUM RATING FACTOR
OHIO LEGAL - 3F1	2.31	*150%*
OHIO LEGAL - 4F1	2.06	OHIO LEGAL LOADS OVERALL CONTROLLING TRUCK
OHIO LEGAL - 5C1	2.42	*OHIO LEGAL - 4F1*

RATED BY, PE#	REVIEWED BY, PE#	REPORT DATE
ABC/JDH 69952	DFT 48751	9/12/2011
AGENCY/FIRM	**PHONE NUMBER**	**EMAIL**
E.L.ROBINSON ENG OF OHIO	614-586-0642	dtraini@elrobinson.com

```
                                    RECORD                                                  REC.NO.
01      071411ABC                              2F1 3F1 4F1        *LF*    POST              100
03      1 2F10210.0    10    20.0                                                            200
03      1 3F10312.0    10    17.0     4    17.0                                             300
03      1 4F10412.0    10    14.0     4    14.0     4    14.0                               400
03      1SPEC0512.0    12    17.0     4    17.0    31    17.0     4                         500
03      2SPEC  17.0                                                                          600
02773104ABC/ELROBINSON                  112   64    67        48    03                      100
057731047731043 DSUM011     0270    01188847                   LF                           200
067731041SFN: 7731043 BAR-011-0270 WOOSTER RD WEST OVER HUDSON RUN                           300
067731042PID: 90189 3 SPAN CONTINUOUS RC SLAB                                                400
067731043BRIDGE DESIGNED FOR HS20-44 LOADING                                                 500
067731044ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989/NO REMAINING                         600
067731045STRUCTURE FROM 1964                                                                 700
08773104S01 03   x   201442x   251790x   201442 RC600004500 0.192                            800
10773104S01 01                 W0058      X   201442                                         900
10773104S01 02                 W0058      X   251790                                        1000
10773104S01 03                 W0058      X   201442                                        1100
11773104S01 0101X   14644201                                                                1200
11773104S01 0102X    55   0202                                                              1300
11773104S01 0201X    55   02                                                                1400
11773104S01 0202X   14179001                                                                1500
11773104S01 0203X    55   0202                                                              1600
11773104S01 0301X    55   02                                                                1700
11773104S01 0302X   14644101                                                                1800
13773104S01  01   12.75          12.00     01 0.6002.9375                                   1900
13773104S01  01                             02 1.11511.25                                   2000
13773104S01  02   12.75          12.00     01 1.2002.9375                                   2100
13773104S01  02                             02 1.11511.25                                   2200
```

THE FOLLOWING STRUCTURES WERE SELECTED

773104

STRUCTURE I.D. = 773-104

```
*****************************************************************************************************************
*                                          STRUCTURE HEADER AND DESCRIPTION                                     *
*****************************************************************************************************************

   100-- 2    ABC/ELROBINSON    EA/I/O/P =              FILE REQUESTS AND OUTPUT DATA EXCEPTIONS
                     TYPE =  112      YEAR =   64  LEN =   67.00 FT.       WIDTH =   48.00 FT.       3 SPANS SP.LOAD =
                     INV.LL.TRK.=       OP.LL.TRK.=


*****************************************************************************************************************
*                                STRUCTURE LOCATION AND PERMANENT IDENTIFICATION FACTORS                        *
*****************************************************************************************************************

   200-- 5    BRIDGE=7731043    DIST./CO.= D   SUM  CONST. ROUTE = 011        CONST. SECT.= 0270       CONST. STA.= 118+88.47
              MICROFILM REEL NO.   DESIGN PLANS=           COMPUTATIONS=           CORRESPONDENCE=      L
                  ROUTE I.D.= F          MARKED ROUTE =


*****************************************************************************************************************
*                                                        COMMENTS                                               *
*****************************************************************************************************************

   300-- 6    1  SFN: 7731043 BAR-011-0270 WOOSTER RD WEST OVER HUDSON RUN
   400-- 6    2  PID: 90189 3 SPAN CONTINUOUS RC SLAB
   500-- 6    3  BRIDGE DESIGNED FOR HS20-44 LOADING
   600-- 6    4  ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989/NO REMAINING
   700-- 6    5  STRUCTURE FROM 1964


*****************************************************************************************************************
*                           MEMBER SPECIFICATIONS AND REQUIRED ANALYSIS-GIRDER,STRINGER AND FLOOR BEAM            *
*****************************************************************************************************************

          MEMBER SPANS  STIFF. SPAN 1     SPAN 2     SPAN 3   MATL   ALLOWABLE STRESS   LL DIST.  END  THRU  MAX  IMPACT  FACTOR
           ID       SYMM CODE (SPAN 4)   (SPAN 5)   (SPAN 6)  CODE     FY    FB FC* FC**  FACTOR  FL.BM DECK  INV  OP.  POST  SPEC

   800-- 8   S 1    3           20.144     25.179     20.144    RC  60000.00   4500.00     .192              .00  .00  .00   .00


*****************************************************************************************************************
*                                SUPERIMPOSED DEAD LOADS-GIRDERS,STRINGERS AND FLOOR BEAMS                        *
*****************************************************************************************************************

             MEMBER SYMM. SPAN   DISTANCE FR. LOAD          LOAD             LENGTH
               ID          NO.    LEFT SUPP.  TYPE  P OR W(L)     W(R)

   900--10    S 1          1          .000FT.   W       58.0        .0        20.144FT.
  1000--10    S 1          2          .000FT.   W       58.0        .0        25.179FT.
  1100--10    S 1          3          .000FT.   W       58.0        .0        20.144FT.
```

SECTION RANGE SPECIFICATIONS

MEMBER ID	SYMM.	SPAN NO.	RANGE NO.	RANGE LENGTH	SECTION NO. LEFT	SECTION NO. RIGHT	SEC. VAR.	HINGE CODE	HINGE 1 DIST.	HINGE 2 DIST.	HYBRID GIRDER CODE	FY	CODE	FY
1200--11	S 1	1	1	14.644FT.	1	0			.000FT.	.000FT.		0.		0.
1300--11	S 1	1	2	5.500FT.	2	2			.000FT.	.000FT.		0.		0.
1400--11	S 1	2	1	5.500FT.	2	0			.000FT.	.000FT.		0.		0.
1500--11	S 1	2	2	14.179FT.	1	0			.000FT.	.000FT.		0.		0.
1600--11	S 1	2	3	5.500FT.	2	2			.000FT.	.000FT.		0.		0.
1700--11	S 1	3	1	5.500FT.	2	0			.000FT.	.000FT.		0.		0.
1800--11	S 1	3	2	14.644FT.	1	0			.000FT.	.000FT.		0.		0.

SECTION PROPERTIES (REINFORCED CONCRETE) - GIRDERS, STRINGERS, FLOOR BEAMS

MEMBER ID	SECT. NO.	SAME AS ADR	BFL	H	A	B	B*	T	I R	AS	D	COMP CODE
1900--13	S 1	1	0	12.75	.00	.00	12.00	.00	1	.60	2.94	
2000--13	S 1	1	0	.00	.00	.00	.00	.00	2	1.12	11.25	
2100--13	S 1	2	0	12.75	.00	.00	12.00	.00	1	1.20	2.94	
2200--13	S 1	2	0	.00	.00	.00	.00	.00	2	1.12	11.25	

SUMMARY OF RATING CALCULATIONS------STRUCTURE MEMBER S 1 BARS-PC RELEASE 5.5
INVENTORY AND/OR OPERATING ANALYSIS

INPUT CODING -- STRUCTURE 7731043 D/P STR. I.D.-- 773-104

DATE 7/14/11
BY ABC/ELROBINSON

INVENTORY		OPERATING	
LIVE LOAD	RATING	LIVE LOAD	RATING
HS20	HS 19.50	HS20	HS 32.50

STRUCTURE DESCRIPTION --

IDENTIFICATION	7731043
TYPE	112
YEAR OF CONSTR.	1964
LENGTH	67.00 FEET
ROADWAY WIDTH	48.00 FEET
NUMBER OF SPANS	3

LOCATION --

DISTRICT	D
COUNTY	SUM
CONSTR. RTE.	011
CONSTR. SEC.	0270
CONSTR. STA.	118+88.47
KEY RTE.	F
MARKED RTE.	

MICROFILM REEL NUMBERS --

DESIGN PLANS	
COMPUTATIONS	
CORRESPONDENCE	L

ANALYST REMARKS --

SFN: 7731043 BAR-011-0270 WOOSTER RD WEST OVER HUDSON RUN
PID: 90189 3 SPAN CONTINUOUS RC SLAB
BRIDGE DESIGNED FOR HS20-44 LOADING
ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989/NO REMAINING
STRUCTURE FROM 1964

INVENTORY RATING SUMMARY --

MEMBER ID.	S 1
SPAN	3
CRITICAL C.P. DIST.	.0 FEET
LIVE LOAD DESIGNATION	HS20

	SHEAR (KIPS)
MEMBER CAPACITY	-48.8
DL EFFECT	-11.3
CAPACITY FOR (LL+I)	-15.7
ACTUAL (LL+I)	-16.1
INVENTORY RATING	HS 19.50

OPERATING RATING SUMMARY --

MEMBER ID.	S 1
SPAN	3
CRITICAL C.P. DIST.	.0 FEET
LIVE LOAD DESIGNATION	HS20

	SHEAR (KIPS)
MEMBER CAPACITY	-48.8
DL EFFECT	-11.3
CAPACITY FOR (LL+I)	-26.2
ACTUAL (LL+I)	-16.1
OPERATING RATING	HS 32.50

SUMMARY OF RATING CALCULATIONS------STRUCTURE MEMBER S 1 BARS-PC RELEASE 5.5
POSTING ANALYSIS

INPUT CODING -- STRUCTURE 7731043 D/P STR. I.D.-- 773-104

DATE 7/14/11
BY ABC/ELROBINSON

INVENTORY LIVE LOAD	INVENTORY RATING	OPERATING LIVE LOAD	OPERATING RATING	POSTING TRUCK TYPE	POSTING GROSS TONS
HS20	HS 19.50	HS20	HS 32.50	VEH. 2F1	46.20
				VEH. 3F1	53.02
				VEH. 4F1	55.61

STRUCTURE DESCRIPTION --

IDENTIFICATION	7731043
TYPE	112
YEAR OF CONSTR.	1964
LENGTH	67.00 FEET
ROADWAY WIDTH	48.00 FEET
NUMBER OF SPANS	3

LOCATION --

DISTRICT	D
COUNTY	SUM
CONSTR. RTE.	011
CONSTR. SEC.	0270
CONSTR. STA.	118+88.47
KEY RTE.	F
MARKED RTE.	

MICROFILM REEL NUMBERS --

DESIGN PLANS	
COMPUTATIONS	
CORRESPONDENCE	L

ANALYST REMARKS --

SFN: 7731043 BAR-011-0270 WOOSTER RD WEST OVER HUDSON RUN
PID: 90189 3 SPAN CONTINUOUS RC SLAB
BRIDGE DESIGNED FOR HS20-44 LOADING
ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989/NO REMAINING
STRUCTURE FROM 1964

TRUCK TYPE VEH. 2F1		TRUCK TYPE VEH. 3F1		TRUCK TYPE VEH. 4F1	
MEMBER ID.	S 1	MEMBER ID.	S 1	MEMBER ID.	S 1
SPAN	2	SPAN	2	SPAN	3
CRITICAL C.P. DIST.	12.6 FEET	CRITICAL C.P. DIST.	12.6 FEET	CRITICAL C.P. DIST.	.0 FEET
	SHEAR (KIPS)		SHEAR (KIPS)		SHEAR (KIPS)
MEMBER CAPACITY	52.8	MEMBER CAPACITY	52.8	MEMBER CAPACITY	-48.8
DL EFFECT	5.9	DL EFFECT	5.9	DL EFFECT	-11.3
CAPACITY FOR (LL+I)	34.7	CAPACITY FOR (LL+I)	34.7	CAPACITY FOR (LL+I)	-26.2
ACTUAL (LL+I)	11.3	ACTUAL (LL+I)	15.0	ACTUAL (LL+I)	-12.7
POSTING GROSS TONNAGE	46.2	POSTING GROSS TONNAGE	53.0	POSTING GROSS TONNAGE	55.6

SUMMARY OF RATING CALCULATIONS------STRUCTURE MEMBER S 1 BARS-PC RELEASE 5.5
SPECIAL LOAD ANALYSIS

INPUT CODING -- STRUCTURE 7731043 D/P STR. I.D.-- 773-104

		INVENTORY		OPERATING		SPECIAL LOAD	
DATE	7/14/11						
BY	ABC/ELROBINSON	LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
		HS20	HS 19.50	HS20	HS 32.50		
						VEH.SPEC	96.85

STRUCTURE DESCRIPTION --

IDENTIFICATION	7731043
TYPE	112
YEAR OF CONSTR.	1964
LENGTH	67.00 FEET
ROADWAY WIDTH	48.00 FEET
NUMBER OF SPANS	3

LOCATION --

DISTRICT	D
COUNTY	SUM
CONSTR. RTE.	011
CONSTR. SEC.	0270
CONSTR. STA.	118+88.47
KEY RTE.	F
MARKED RTE.	

MICROFILM REEL NUMBERS --

DESIGN PLANS	
COMPUTATIONS	
CORRESPONDENCE	L

ANALYST REMARKS --

SFN: 7731043 BAR-011-0270 WOOSTER RD WEST OVER HUDSON RUN
PID: 90189 3 SPAN CONTINUOUS RC SLAB
BRIDGE DESIGNED FOR HS20-44 LOADING
ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989/NO REMAINING
STRUCTURE FROM 1964

TRUCK TYPE VEH. SPEC	
MEMBER ID.	S 1
SPAN	2
CRITICAL C.P. DIST.	.0 FEET

	SHEAR (KIPS)
MEMBER CAPACITY	-48.8
DL EFFECT	-11.3
CAPACITY FOR (LL+I)	-26.2
ACTUAL (LL+I)	-10.8
POSTING GROSS TONNAGE	96.8

*** FINAL SUMMARY OF RATING RESULTS FOR --- STRUCTURE ID. 773-104 BARS-PC RELEASE 5.5
INVENTORY AND/OR OPERATING ANALYSIS

STRUCTURE 7731043 D/P STR. ID-- 773-104

INPUT CODING--

	INVENTORY		OPERATING	
	LIVE LOAD	RATING	LIVE LOAD	RATING
DATE 7/14/11	HS20	HS 19.5	HS20	HS 32.5
BY ABC/ELROBINSON				

STRUCTURE DESCRIPTION--

IDENTIFICATION	7731043
TYPE	112
YEAR OF CONSTR.	1964
LENGTH	67.00 FEET
ROADWAY WIDTH	48.00 FEET
NUMBER OF SPANS	3

LOCATION--

DISTRICT	D
COUNTY	SUM
CONSTR. RTE.	011
CONSTR. SEC.	0270
CONSTR. STA.	118+88.47
KEY RTE.	F
MARKED RTE.	

MICROFILM REEL NUMBERS--

DESIGN PLANS	
COMPUTATIONS	
CORRESPONDENCE	L

ANALYST REMARKS--

SFN: 7731043 BAR-011-0270 WOOSTER RD WEST OVER HUDSON RUN
PID: 90189 3 SPAN CONTINUOUS RC SLAB
BRIDGE DESIGNED FOR HS20-44 LOADING
ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989/NO REMAINING
STRUCTURE FROM 1964

INVENTORY RATING SUMMARY

MEMBER I.D.	S 1
SPAN	3
CRITICAL C.P. DIST.	.0 FEET
LIVE LOAD DESIGNATION	HS20

	SHEAR (KIPS)
MEMBER CAPACITY	-48.8
DL EFFECT	-11.3
CAPACITY FOR (LL+I)	-15.7
ACTUAL (LL+I)	-16.1

INVENTORY RATING HS 19.50

OPERATING RATING SUMMARY

MEMBER I.D.	S 1
SPAN	3
CRITICAL C.P. DIST.	.0 FEET
LIVE LOAD DESIGNATION	HS20

	SHEAR (KIPS)
MEMBER CAPACITY	-48.8
DL EFFECT	-11.3
CAPACITY FOR (LL+I)	-26.2
ACTUAL (LL+I)	-16.1

OPERATING RATING HS 32.50

*** FINAL SUMMARY OF RATING RESULTS FOR --- STRUCTURE ID. 773-104 BARS-PC RELEASE 5.5
POSTING ANALYSIS

STRUCTURE 7731043 D/P STR. ID-- 773-104

INPUT CODING--

DATE 7/14/11
BY ABC/ELROBINSON

	INVENTORY LIVE LOAD	RATING	OPERATING LIVE LOAD	RATING	POSTING TRUCK TYPE	GROSS TONS
	HS20	HS 19.50	HS20	HS 32.50	VEH. 2F1	46.2
					VEH. 3F1	53.0
					VEH. 4F1	55.6

STRUCTURE DESCRIPTION--

IDENTIFICATION	7731043
TYPE	112
YEAR OF CONSTR.	1964
LENGTH	67.00 FEET
ROADWAY WIDTH	48.00 FEET
NUMBER OF SPANS	3

LOCATION--

DISTRICT	D
COUNTY	SUM
CONSTR. RTE.	011
CONSTR. SEC.	0270
CONSTR. STA.	118+88.47
KEY RTE.	F
MARKED RTE.	

MICROFILM REEL NUMBERS--

DESIGN PLANS	
COMPUTATIONS	
CORRESPONDENCE	L

ANALYST REMARKS--

SFN: 7731043 BAR-011-0270 WOOSTER RD WEST OVER HUDSON RUN
PID: 90189 3 SPAN CONTINUOUS RC SLAB
BRIDGE DESIGNED FOR HS20-44 LOADING
ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989/NO REMAINING
STRUCTURE FROM 1964

POSTING RATING SUMMARY

	VEH. 2F1	VEH. 3F1	VEH. 4F1
TRUCK TYPE	VEH. 2F1	VEH. 3F1	VEH. 4F1
MEMBER I.D.	S 1	S 1	S 1
SPAN	2	2	3
CRITICAL C.P. DIST.	12.6 FEET	12.6 FEET	.0 FEET
	SHEAR (KIPS)	SHEAR (KIPS)	SHEAR (KIPS)
MEMBER CAPACITY	52.8	52.8	-48.8
DL EFFECT	5.9	5.9	-11.3
CAPACITY FOR (LL+I)	34.7	34.7	-26.2
ACTUAL (LL+I)	11.3	15.0	-12.7
POSTING GROSS TONNAGE	46.2	53.0	55.6

*** FINAL SUMMARY OF RATING RESULTS FOR --- STRUCTURE ID. 773-104 BARS-PC RELEASE 5.5
SPECIAL LOAD ANALYSIS

STRUCTURE 7731043 D/P STR. ID-- 773-104

INPUT CODING--

	INVENTORY		OPERATING		SPECIAL LOAD	
DATE 7/14/11	LIVE LOAD	RATING	LIVE LOAD	RATING	TRUCK TYPE	GROSS TONS
BY ABC/ELROBINSON						
	HS20	HS 19.50	HS20	HS 32.50		
					VEH.SPEC	96.8

STRUCTURE DESCRIPTION--

IDENTIFICATION	7731043
TYPE	112
YEAR OF CONSTR.	1964
LENGTH	67.00 FEET
ROADWAY WIDTH	48.00 FEET
NUMBER OF SPANS	3

LOCATION--

DISTRICT	D
COUNTY	SUM
CONSTR. RTE.	011
CONSTR. SEC.	0270
CONSTR. STA.	118+88.47
KEY RTE.	F
MARKED RTE.	

MICROFILM REEL NUMBERS--

DESIGN PLANS	
COMPUTATIONS	
CORRESPONDENCE	L

ANALYST REMARKS--

SFN: 7731043 BAR-011-0270 WOOSTER RD WEST OVER HUDSON RUN
PID: 90189 3 SPAN CONTINUOUS RC SLAB
BRIDGE DESIGNED FOR HS20-44 LOADING
ASSUMING ENTIRE STRUCTURE WAS REPLACED IN 1989/NO REMAINING
STRUCTURE FROM 1964

SPECIAL LOAD SUMMARY

TRUCK TYPE	VEH.SPEC
MEMBER I.D.	S 1
SPAN	2
CRITICAL C.P. DIST.	.0 FEET

	SHEAR (KIPS)
MEMBER CAPACITY	-48.8
DL EFFECT	-11.3
CAPACITY FOR (LL+I)	-26.2
ACTUAL (LL+I)	-10.8

POSTING GROSS TONNAGE 96.8

DETAIL DATA FOR FLEXURAL MEMBER

DATE 07/14/11

NO. SPANS = 3
NOT SYMMETRICAL

D/P STRUCTURE I.D. 773-104
MEMBER I.D.--S01
MATERIAL--RC
LL DIST. FACT. = .192

SPAN NO.	LENGTH FT.	RNG. NO.	LENGTH FT.	SEC.NO. LT	SEC.NO. RT	VAR CODE S T P	VAR CODE T B	DL DUE TO MEM. WEIGHT W(LT) LBS/FT	DL DUE TO MEM. WEIGHT W(RT) LBS/FT
1	20.144	1	14.644	01	01			159.4	159.4
		2	5.500	02	02			159.4	159.4
2	25.179	1	5.500	02	02			159.4	159.4
		2	14.179	01	01			159.4	159.4
		3	5.500	02	02			159.4	159.4
3	20.144	1	5.500	02	02			159.4	159.4
		2	14.644	01	01			159.4	159.4

SUPERIMPOSED DISTRIBUTED DL(S)
LENGTH DISTRIBUTED**********
DIST. FROM LT SUPPORT***

SPAN NO.	W(LT) LBS/FT	W(RT) LBS/FT	* FT.	* FT.
1	58.0	58.0	.000	20.144
2	58.0	58.0	20.144	25.179
3	58.0	58.0	45.323	20.144

SUPERIMPOSED CONCENTRATED DL(S)
DIST. FROM LT SUPPORT****

STIFF TRANS.	SPAN LONG.	SPAN NO.	P KIPS	* FT.

CHECK POINTS RATED--

SPAN NO.	DIS FRM LT SPRT FT.	FUNC M	FUNC VL	FUNC VR	SPAN NO.	DIS FRM LT SPRT FT.	FUNC M	FUNC VL	FUNC VR
1	.000			X					
1	8.058	X	X	X					
1	20.144	X	X	X					
2	.000	X	X	X					
2	12.590	X	X	X					
2	25.179	X	X	X					
3	.000	X	X	X					
3	12.087	X	X	X					
3	20.144		X						

DETAIL DATA AT MOMENT CHECK POINT FOR
REINFORCED CONCRETE FLEXURAL MEMBER

BARS RELEASE 5.5

DATE 07/14/11

D/P STRUCTURE I.D. 773-104
MEMBER I.D.--S01
C.P. LOCATION 1.40

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 1

H IN.	B IN.	T IN.	BP IN.		AREA SQ.IN.	IX IN**4	AS SQ.IN.	D IN.	ASP SQ.IN.	DP IN.	A IN.	K	J
12.75	12.00	.00	12.00	+BEND	153.0	2072.7	1.12	11.25	.00	2.94	1.00	.000	.000
				-BEND	153.0	2072.7	.60	9.81	.00	1.50	1.00	.000	.000

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	.000	.000	.000	.000	.000	.000
E 1	1.017	-.435	.092	.000	.000	.000
N 2	2.045	-.711	.155	.000	.000	.000
T 3	3.096	-.852	.192	.000	.000	.000
H 4	4.183	-.881	.207	.000	.000	.000
5	3.301	-.821	.202	.000	.000	.000
P 6	2.478	-.695	.181	.000	.000	.000
O 7	1.725	-.527	.147	.000	.000	.000
I 8	1.053	-.340	.103	.000	.000	.000
N 9	.474	-.156	.053	.000	.000	.000
T 0	.000	.000	.000	.000	.000	.000
POS AREA	39.0	.0	2.7	.0	.0	.0
NEG AREA	.0	13.6	.0	.0	.0	.0

***** ALLOWABLE STRESS

	REINF. STEEL PSI	CONC PSI
INVENTORY	33000.0	1800.0
OPERATING	45000.0	2454.5
POST VEH1	45000.0	2454.5
POST VEH2	45000.0	2454.5
POST VEH3	45000.0	2454.5
POST SPEC	45000.0	2454.5

***** MOMENT CAPACITY

CONC + BEND FT-KIPS	REINF - BEND FT-KIPS	REINF + BEND FT-KIPS	CONC - BEND FT-KIPS
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4

***** TOTAL DL MOMENT EFFECT FT-KIPS

AREA TOTALS	41.7
	13.6
	6.1

***** AVAIL.CAPAC.FOR LL+IMPACT

	TOP +BEND F-KPS	TOP -BEND F-KPS	BOT +BEND F-KPS	BOT -BEND F-KPS
INVENTORY	20.7	15.4	20.7	15.4
OPERATING	34.5	25.6	34.5	25.6
VEH. 1	34.5	25.6	34.5	25.6
VEH. 2	34.5	25.6	34.5	25.6
VEH. 3	34.5	25.6	34.5	25.6
SPECIAL	34.5	25.6	34.5	25.6

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .300 FOR +BEND AND = .300 FOR -BEND)

LIVE LOAD		TRUCK LOAD LL+IMP FT-KIPS	TRUCK LOAD LL FT-KIPS	TRUCK LOAD LOC.NO. 1 WHEEL FT.	DIR	AXLE SPACE FT.	LANE LOAD LL+IMP FT-KIPS	LANE LOAD LL FT-KIPS	LOC.CONC LOAD FT.	LOC.CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
INV HS20	+BEND	16.7	12.8	-19.942	L	.0	12.7	9.8	8.058		1.241	44.7	HS 24.8
	-BEND	4.3	3.3	53.181	R	.0	3.1	2.4	30.216	.000			
OPER HS20	+BEND	16.7	12.8	-19.942	L	.0	12.7	9.8	8.058		2.068	74.5	HS 41.4
	-BEND	4.3	3.3	53.181	R	.0	3.1	2.4	30.216	.000			
POST 2F1	+BEND	11.1	8.5	18.058	R						3.124	46.9	
	-BEND	2.8	2.1	37.698	R								
POST 3F1	+BEND	14.2	10.9	-1.943	L						2.440	56.1	
	-BEND	4.0	3.1	40.216	R								
POST 4F1	+BEND	15.3	11.7	-5.941	L						2.264	61.1	
	-BEND	4.4	3.4	43.182	R								
POST SPEC	+BEND	14.3	11.0	59.058	R						2.423	96.9	
	-BEND	3.6	2.8	-19.301	L								

DETAIL DATA AT MOMENT CHECK POINT FOR
REINFORCED CONCRETE FLEXURAL MEMBER

BARS RELEASE 5.5

DATE 07/14/11

D/P STRUCTURE I.D. 773-104
MEMBER I.D.--S01
C.P. LOCATION 2.00

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 2

H IN.	B IN.	T IN.	BP IN.		AREA SQ.IN.	IX IN**4	AS SQ.IN.	D IN.	ASP SQ.IN.	DP IN.	A IN.	K	J
12.75	12.00	.00	12.00	+BEND	153.0	2072.7	1.12	11.25	.00	2.94	1.00	.000	.000
				-BEND	153.0	2072.7	1.20	9.81	.00	1.50	1.00	.000	.000

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	.000	.000	.000	.000	.000	.000
E 1	-.480	-1.088	.230	.000	.000	.000
N 2	-.931	-1.778	.388	.000	.000	.000
T 3	-1.324	-2.131	.481	.000	.000	.000
H 4	-1.630	-2.203	.517	.000	.000	.000
5	-1.819	-2.053	.505	.000	.000	.000
P 6	-1.863	-1.738	.453	.000	.000	.000
O 7	-1.732	-1.317	.368	.000	.000	.000
I 8	-1.397	-.849	.259	.000	.000	.000
N 9	-.830	-.390	.133	.000	.000	.000
T 0	.000	.000	.000	.000	.000	.000
POS AREA	.0	.0	6.7	.0	.0	.0
NEG AREA	24.2	34.1	.0	.0	.0	.0

***** ALLOWABLE STRESS ***** MOMENT CAPACITY

	REINF. STEEL PSI	CONC PSI	CONC + BEND FT-KIPS	REINF - BEND FT-KIPS	REINF + BEND FT-KIPS	CONC - BEND FT-KIPS
INVENTORY	33000.0	1800.0	52.8	48.8	52.8	48.8
OPERATING	45000.0	2454.5	52.8	48.8	52.8	48.8
POST VEH1	45000.0	2454.5	52.8	48.8	52.8	48.8
POST VEH2	45000.0	2454.5	52.8	48.8	52.8	48.8
POST VEH3	45000.0	2454.5	52.8	48.8	52.8	48.8
POST SPEC	45000.0	2454.5	52.8	48.8	52.8	48.8

***** TOTAL DL MOMENT EFFECT

FT-KIPS
-11.3

AREA TOTALS 6.7 58.3

***** AVAIL.CAPAC.FOR LL+IMPACT

	TOP +BEND F-KPS	TOP -BEND F-KPS	BOT +BEND F-KPS	BOT -BEND F-KPS
INVENTORY	31.1	15.7	31.1	15.7
OPERATING	51.9	26.2	51.9	26.2
VEH. 1	51.9	26.2	51.9	26.2
VEH. 2	51.9	26.2	51.9	26.2
VEH. 3	51.9	26.2	51.9	26.2
SPECIAL	51.9	26.2	51.9	26.2

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .300 FOR +BEND AND = .300 FOR -BEND)

LIVE LOAD		TRUCK LOAD LL+IMP FT-KIPS	TRUCK LOAD LL FT-KIPS	LOC.NO. 1 WHEEL FT.	DIR	AXLE SPACE FT.	LANE LOAD LL+IMP FT-KIPS	LANE LOAD LL FT-KIPS	LOC.CONC LOAD FT.	LOC.CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
INV HS20	+BEND	2.1	1.6	77.352	R	.0	1.7	1.3	53.381				
	-BEND	16.1	12.4	41.698	R	.0	13.8	10.6	30.216	12.087	.975	35.1	HS 19.5
OPER HS20	+BEND	2.1	1.6	77.352	R	.0	1.7	1.3	53.381				
	-BEND	16.1	12.4	41.698	R	.0	13.8	10.6	30.216	12.087	1.625	58.5	HS 32.5
POST 2F1	+BEND	1.5	1.2	61.367	R								
	-BEND	7.0	5.4	37.698	R						3.754	56.3	
POST 3F1	+BEND	2.1	1.6	63.384	R								
	-BEND	10.8	8.3	16.117	L						2.423	55.7	
POST 4F1	+BEND	2.4	1.8	67.412	R								
	-BEND	12.7	9.8	15.180	L						2.060	55.6	
POST SPEC	+BEND	2.1	1.6	102.396	R								
	-BEND	10.8	8.3	15.699	L						2.421	96.8	

DETAIL DATA AT MOMENT CHECK POINT FOR
REINFORCED CONCRETE FLEXURAL MEMBER

BARS RELEASE 5.5

DATE 07/14/11

D/P STRUCTURE I.D. 773-104
MEMBER I.D.--S01
C.P. LOCATION 2.50

***** SECTION PROPERTIES IN RANGE 2 OF SPAN 2

H IN.	B IN.	T IN.	BP IN.		AREA SQ.IN.	IX IN**4	AS SQ.IN.	D IN.	ASP SQ.IN.	DP IN.	A IN.	K	J
12.75	12.00	.00	12.00	+BEND	153.0	2072.7	1.12	11.25	.00	2.94	1.00	.000	.000
				-BEND	153.0	2072.7	.60	9.81	.00	1.50	1.00	.000	.000

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	.000	.000	.000	.000	.000	.000
E 1	-.173	.520	-.300	.000	.000	.000
N 2	-.336	1.204	-.504	.000	.000	.000
T 3	-.478	2.053	-.625	.000	.000	.000
H 4	-.589	3.065	-.673	.000	.000	.000
5	-.657	4.242	-.657	.000	.000	.000
P 6	-.673	3.065	-.589	.000	.000	.000
O 7	-.625	2.053	-.478	.000	.000	.000
I 8	-.504	1.204	-.336	.000	.000	.000
N 9	-.300	.520	-.173	.000	.000	.000
T 0	.000	.000	.000	.000	.000	.000
POS AREA	.0	45.1	.0	.0	.0	.0
NEG AREA	8.7	.0	8.7	.0	.0	.0

***** ALLOWABLE STRESS ***** MOMENT CAPACITY

	REINF. STEEL PSI	CONC PSI	CONC + BEND FT-KIPS	REINF - BEND FT-KIPS	REINF + BEND FT-KIPS	CONC - BEND FT-KIPS
INVENTORY	33000.0	1800.0	52.8	25.4	52.8	25.4
OPERATING	45000.0	2454.5	52.8	25.4	52.8	25.4
POST VEH1	45000.0	2454.5	52.8	25.4	52.8	25.4
POST VEH2	45000.0	2454.5	52.8	25.4	52.8	25.4
POST VEH3	45000.0	2454.5	52.8	25.4	52.8	25.4
POST SPEC	45000.0	2454.5	52.8	25.4	52.8	25.4

***** TOTAL DL MOMENT EFFECT

FT-KIPS
5.9

AREA TOTALS
45.1
17.5

***** AVAIL.CAPAC.FOR LL+IMPACT

	TOP +BEND F-KPS	TOP -BEND F-KPS	BOT +BEND F-KPS	BOT -BEND F-KPS
INVENTORY	20.8	15.3	20.8	15.3
OPERATING	34.7	25.5	34.7	25.5
VEH. 1	34.7	25.5	34.7	25.5
VEH. 2	34.7	25.5	34.7	25.5
VEH. 3	34.7	25.5	34.7	25.5
SPECIAL	34.7	25.5	34.7	25.5

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .300 FOR +BEND AND = .300 FOR -BEND)

LIVE LOAD		TRUCK LOAD LL+IMP FT-KIPS	TRUCK LOAD LL FT-KIPS	TRUCK LOAD LOC.NO. 1 WHEEL FT.	DIR	AXLE SPACE FT.	LANE LOAD LL+IMP FT-KIPS	LANE LOAD LL FT-KIPS	LOC.CONC LOAD FT.	LOC.CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
INV HS20	+BEND	15.7	12.1	4.734	L	.0	13.2	10.1	32.734		1.324	47.7	HS 26.5
	-BEND	2.7	2.1	77.352	R	.0	2.9	2.2	12.087	.000			
OPER HS20	+BEND	15.7	12.1	4.734	L	.0	13.2	10.1	32.734		2.207	79.4	HS 44.1
	-BEND	2.7	2.1	77.352	R	.0	2.9	2.2	12.087	.000			
POST 2F1	+BEND	11.3	8.7	22.734	L						3.080	46.2	
	-BEND	2.0	1.5	61.367	R								
POST 3F1	+BEND	15.0	11.6	22.733	L						2.305	53.0	
	-BEND	2.8	2.1	2.086	L								
POST 4F1	+BEND	15.7	12.1	46.734	R						2.206	59.6	
	-BEND	3.1	2.4	-1.945	L								
POST SPEC	+BEND	14.2	11.0	-18.266	L						2.436	97.4	
	-BEND	4.7	3.6	2.130	L								

DETAIL DATA AT MOMENT CHECK POINT FOR
REINFORCED CONCRETE FLEXURAL MEMBER

BARS RELEASE 5.5

DATE 07/14/11

D/P STRUCTURE I.D. 773-104
MEMBER I.D.--S01
C.P. LOCATION 3.00

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 3

H IN.	B IN.	T IN.	BP IN.		AREA SQ.IN.	IX IN**4	AS SQ.IN.	D IN.	ASP SQ.IN.	DP IN.	A IN.	K	J
12.75	12.00	.00	12.00	+BEND	153.0	2072.7	1.12	11.25	.00	2.94	1.00	.000	.000
				-BEND	153.0	2072.7	1.20	9.81	.00	1.50	1.00	.000	.000

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	.000	.000	.000	.000	.000	.000
E 1	.133	-.390	-.830	.000	.000	.000
N 2	.259	-.849	-1.397	.000	.000	.000
T 3	.368	-1.317	-1.732	.000	.000	.000
H 4	.453	-1.738	-1.863	.000	.000	.000
5	.505	-2.053	-1.819	.000	.000	.000
P 6	.517	-2.203	-1.630	.000	.000	.000
O 7	.481	-2.131	-1.324	.000	.000	.000
I 8	.388	-1.778	-.931	.000	.000	.000
N 9	.230	-1.088	-.480	.000	.000	.000
T 0	.000	.000	.000	.000	.000	.000
POS AREA	6.7	.0	.0	.0	.0	.0
NEG AREA	.0	34.1	24.2	.0	.0	.0

***** ALLOWABLE STRESS

	REINF. STEEL PSI	CONC PSI
INVENTORY	33000.0	1800.0
OPERATING	45000.0	2454.5
POST VEH1	45000.0	2454.5
POST VEH2	45000.0	2454.5
POST VEH3	45000.0	2454.5
POST SPEC	45000.0	2454.5

***** MOMENT CAPACITY

CONC + BEND FT-KIPS	REINF - BEND FT-KIPS	REINF + BEND FT-KIPS	CONC - BEND FT-KIPS
52.8	48.8	52.8	48.8
52.8	48.8	52.8	48.8
52.8	48.8	52.8	48.8
52.8	48.8	52.8	48.8
52.8	48.8	52.8	48.8
52.8	48.8	52.8	48.8

***** TOTAL DL MOMENT EFFECT

FT-KIPS
-11.3

AREA TOTALS

***** AVAIL.CAPAC.FOR LL+IMPACT

	TOP +BEND F-KPS	TOP -BEND F-KPS	BOT +BEND F-KPS	BOT -BEND F-KPS
INVENTORY	31.1	15.7	31.1	15.7
OPERATING	51.9	26.2	51.9	26.2
VEH. 1	51.9	26.2	51.9	26.2
VEH. 2	51.9	26.2	51.9	26.2
VEH. 3	51.9	26.2	51.9	26.2
SPECIAL	51.9	26.2	51.9	26.2

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .300 FOR +BEND AND = .300 FOR -BEND)

LIVE LOAD		TRUCK LOAD LL+IMP FT-KIPS	TRUCK LOAD LL FT-KIPS	LOC.NO. 1 WHEEL FT.	DIR	AXLE SPACE FT.	LANE LOAD LL+IMP FT-KIPS	LANE LOAD LL FT-KIPS	LOC.CONC LOAD FT.	LOC.CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
INV HS20	+BEND	2.1	1.6	-15.913	L	.0	1.7	1.3	12.087				
	-BEND	16.1	12.4	23.771	L	.0	13.8	10.6	35.252	53.381	.975	35.1	HS 19.5
OPER HS20	+BEND	2.1	1.6	-15.913	L	.0	1.7	1.3	12.087				
	-BEND	16.1	12.4	23.771	L	.0	13.8	10.6	35.252	53.381	1.625	58.5	HS 32.5
POST 2F1	+BEND	1.5	1.2	4.102	L								
	-BEND	7.0	5.4	27.768	L						3.754	56.3	
POST 3F1	+BEND	2.1	1.6	2.086	L								
	-BEND	10.8	8.3	49.352	R						2.423	55.7	
POST 4F1	+BEND	2.4	1.8	-1.945	L								
	-BEND	12.7	9.8	50.289	R						2.060	55.6	
POST SPEC	+BEND	2.1	1.6	-36.928	L								
	-BEND	10.4	8.0	39.365	L						2.521	100.8	

DETAIL DATA AT MOMENT CHECK POINT FOR
REINFORCED CONCRETE FLEXURAL MEMBER

BARS RELEASE 5.5

DATE 07/14/11

D/P STRUCTURE I.D. 773-104
MEMBER I.D.--S01
C.P. LOCATION 3.60

***** SECTION PROPERTIES IN RANGE 2 OF SPAN 3

H IN.	B IN.	T IN.	BP IN.		AREA SQ.IN.	IX IN**4	AS SQ.IN.	D IN.	ASP SQ.IN.	DP IN.	A IN.	K	J
12.75	12.00	.00	12.00	+BEND	153.0	2072.7	1.12	11.25	.00	2.94	1.00	.000	.000
				-BEND	153.0	2072.7	.60	9.81	.00	1.50	1.00	.000	.000

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)
Y-ORDINATE

POS AREA =

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0	.000	.000	.000	.000	.000	.000
E 1	.053	-.156	.474	.000	.000	.000
N 2	.103	-.340	1.053	.000	.000	.000
T 3	.147	-.527	1.725	.000	.000	.000
H 4	.181	-.695	2.478	.000	.000	.000
5	.202	-.821	3.301	.000	.000	.000
P 6	.207	-.881	4.183	.000	.000	.000
O 7	.192	-.852	3.096	.000	.000	.000
I 8	.155	-.711	2.045	.000	.000	.000
N 9	.092	-.435	1.017	.000	.000	.000
T 0	.000	.000	.000	.000	.000	.000
POS AREA	2.7	.0	39.0	.0	.0	.0
NEG AREA	.0	13.6	.0	.0	.0	.0

***** ALLOWABLE STRESS

	REINF. STEEL PSI	CONC PSI
INVENTORY	33000.0	1800.0
OPERATING	45000.0	2454.5
POST VEH1	45000.0	2454.5
POST VEH2	45000.0	2454.5
POST VEH3	45000.0	2454.5
POST SPEC	45000.0	2454.5

***** MOMENT CAPACITY

CONC + BEND FT-KIPS	REINF - BEND FT-KIPS	REINF + BEND FT-KIPS	CONC - BEND FT-KIPS
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4
52.8	25.4	52.8	25.4

***** TOTAL DL MOMENT EFFECT

FT-KIPS
6.1

***** AVAIL.CAPAC.FOR LL+IMPACT

	TOP +BEND F-KPS	TOP -BEND F-KPS	BOT +BEND F-KPS	BOT -BEND F-KPS
INVENTORY	20.7	15.4	20.7	15.4
OPERATING	34.5	25.6	34.5	25.6
VEH. 1	34.5	25.6	34.5	25.6
VEH. 2	34.5	25.6	34.5	25.6
VEH. 3	34.5	25.6	34.5	25.6
SPECIAL	34.5	25.6	34.5	25.6

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .300 FOR +BEND AND = .300 FOR -BEND)

LIVE LOAD		TRUCK LOAD LL+IMP FT-KIPS	TRUCK LOAD LL FT-KIPS	TRUCK LOAD LOC.NO. 1 WHEEL FT.	DIR	AXLE SPACE FT.	LANE LOAD LL+IMP FT-KIPS	LANE LOAD LL FT-KIPS	LOC.CONC LOAD FT.	LOC.CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
INV HS20	+BEND	16.7	12.8	85.410	R	.0	12.7	9.8	57.410		1.241	44.7	HS 24.8
	-BEND	4.3	3.3	12.285	L	.0	3.1	2.4	35.252	.000			
OPER HS20	+BEND	16.7	12.8	85.410	R	.0	12.7	9.8	57.410		2.068	74.5	HS 41.4
	-BEND	4.3	3.3	12.285	L	.0	3.1	2.4	35.252	.000			
POST 2F1	+BEND	11.1	8.5	47.410	L						3.124	46.9	
	-BEND	2.8	2.1	27.768	L								
POST 3F1	+BEND	14.2	10.9	67.413	R						2.440	56.1	
	-BEND	4.0	3.1	25.253	L								
POST 4F1	+BEND	15.3	11.7	71.410	R						2.264	61.1	
	-BEND	4.4	3.4	22.291	L								
POST SPEC	+BEND	14.3	11.0	6.410	L						2.423	96.9	
	-BEND	3.8	2.9	23.253	L								

SUMMARY OF SHEAR ANALYSIS

DATE 07/14/11

D/P STRUCTURE I.D. 773-104

MEMB. ID	MATL	SPAN NO.	DIS FRM LT SPRT FT.	L R	DL SHEAR KIPS	SDL SHEAR KIPS	---INVENTORY--- LL+I MAX.V KIPS	T L	LL+I MIN.V KIPS	T L	---OPERATING--- LL+I MAX.V KIPS	T L	LL+I MIN.V KIPS	T L	--VEH. 1 -- LL+I MAX.V KIPS	LL+I MIN.V KIPS	--VEH. 2 -- LL+I MAX.V KIPS	LL+I MIN.V KIPS	--VEH. 3 -- LL+I MAX.V KIPS	LL+I MIN.V KIPS	--SPECIAL-- LL+I MAX.V KIPS	LL+I MIN.V KIPS
S01	RC	1	.000	L	1.2	.4	4.8	T	.5	T	4.8	T	.5	T	3.0	.3	4.1	.5	4.1	.5	3.9	.4
		1	8.058	L	.1	.0	2.1	T	2.2	T	2.1	T	2.2	T	1.4	1.2	1.8	1.5	1.5	1.3	1.8	1.7
		2	.000	L	2.0	.7	5.7	T	.4	L	5.7	T	.4	L	3.3	.3	4.6	.4	4.9	.4	4.5	.4
		2	12.590	L	.0	.0	2.2	T	2.2	T	2.2	T	2.2	T	1.3	1.3	1.7	1.7	1.6	1.6	1.8	1.8
		3	.000	L	2.0	.7	5.5	T	.1	L	5.5	T	.1	L	3.2	.1	4.5	.1	4.7	.1	4.2	.1
		3	12.087	L	.1	.0	2.2	T	2.1	T	2.2	T	2.1	T	1.2	1.4	1.5	1.8	1.3	1.7	1.7	1.8
		3	20.144	L	1.2	.4	.5	T	4.9	T	.5	T	4.9	T	.3	3.0	.5	4.1	.5	4.1	.5	3.5