2018 UPDATE TO 2017 PHYSICAL CONDITION INSPECTION REPORT

Bridge CUY-490-0100

SFN 1811991

I-490 Bridge over the Cuyahoga River Valley

Dates of Inspection June 30 through September 27, 2018

ODOT, DISTRICT 12
5500 TRANSPORTATION BOULEVARD
GARFIELD HEIGHTS, OHIO 44125

JANUARY 2, 2019

614 W. Superior Avenue, Suite 1000 | Cleveland, Ohio 44113 | 216.771.1090 | DLZ Job No. 1622-1002

2018 UPDATE TO THE 2017 PHYSICAL CONDITION INSPECTION REPORT

ODOT BRIDGE NO. CUY-490-0100
OVER THE CUYAHOGA RIVER VALLEY
SFN 1811991

Prepared by

Ian M. Foye, PE

Reviewed by

Matt J. Lawler, PE

Project Manager

Inspected June 30 thru September 27, 2018

Inspected by:

Ian Foye, PE	DLZ Ohio, Inc.
Ann M. Griessmann, PE	HDR Engineering, Inc.
Karl Hartline, PE	HDR Engineering, Inc.

Prepared for

Ohio Department of Transportation
District 12

DRAFT Report Submitted 11/29/2018
FINAL Report Submitted 1/02/2019

614 W Superior Ave, Ste 1000, Cleveland, OH 44113-1397 | OFFICE 216.771.1090 | ONLINE WWW.DLZ.COM

EXECUTIVE SUMMARY

The Interstate 490 Bridge over the Cuyahoga Valley serves as a critical part of the Greater Cleveland area commuter system carrying an estimated 61,890 vehicles per day. The bridge is owned and maintained by the Ohio Department of Transportation (ODOT) and the annual bridge inspection is performed by ODOT or consultants to confirm the condition state of the bridge. DLZ Ohio, Inc. (DLZ) and HDR, Inc. (HDR) were contracted by ODOT to **perform fracture critical and element level inspection services on this bridge in 2018**.

The overall condition of the bridge (SFN 1811991) is rated a 6, meaning that it is in satisfactory condition. Significant findings justifying the general appraisal rating include the following results:

- The deck floor exhibits numerous spalls with exposed reinforcing steel and deep transverse cracks at transverse deck construction joints. The deck spalls and cracks exhibit leaching and saturation.
- The wearing surface exhibits several patches of concrete and asphalt which are deteriorating and leaving potholes and debris in active traffic lanes.
- The concrete parapets and vandal protection fence have several areas which are deteriorating and in poor condition.
- The Forward Abutment Expansion Joints are in poor condition and are leaking to the abutments below. The backwalls, abutment seats and structural steel are actively deteriorating as a result.
- There are multiple locations where the transverse drainage troughs beneath the expansion joints are torn open and debris and water are leaking onto the steel framework and piers below. Several of the drainage pipes are completely clogged and misaligned.
- The hinges and girders below some of the torn troughs at the expansion joints exhibit surface corrosion due to the debris and leaking drainage.
- The exterior girders exhibit areas of PCS failure with surface rust along the bottom flanges and at the expansion joints. PCS failure with steel corrosion is also common on the crossframes and girder ends near the Forward Abutments and on the inspection manhole systems.
- A stringer near Pier 7L is completely separated from the floorbeam and a ½" gap exists between the top flange of Floorbeam 6 and Stringer 5.
- The floorbeams have several locations with loose bolts, missing bolts or misdrilled holes.
- Heavy rusting is common to the bearings near the drainage systems and at the Forward Abutment
- **Three (3) bearings** at the West Abutment are loose and appear to be floating.
- The abutment walls and backwalls exhibit heavy vertical cracking and spalling with exposed reinforcing steel at the mainline Forward Abutments and at Ramp C-B.
- There are large spalls with exposed and corroded reinforcing steel located at the top of Pier 7R and throughout Pier 9R.

Inspection findings were documented with field notes, sketches, pictures and measurements. Detailed discussion of all related issues can be found in pertinent sections of this routine inspection report.

Table of Contents

1.0 Bridge Description

ODOT Bridge No. CUY-490-0100 over the Cuyahoga River Valley is located on Interstate 490 in the City of Cleveland. The bridge was originally built in 1990 and has undergone minor rehabilitation projects in 2001 and 2007. The bridge carries five lanes of traffic Eastbound and four lanes Westbound over CSX Railroad, Norfolk Southern Railroad, Quigley Road, West 3rd Street, Independence Road and the Cuyahoga River.

The existing bridge is 3,462'(±) long and divided into six (6) unit superstructures with five (5) groups of seated hinges. The bridge is further divided into an Eastbound (right) superstructure and a Westbound (left) superstructure which consist of twenty-five (25) and twenty-four (24) spans, respectively. Unit 1 is 240'(±) long with four (4) spans of continuous steel beams; Unit 2L is 688'(±) long with four (4) spans of continuous welded steel girders, a floor system of stringers on floorbeams with a single cantilever near Expansion Joint 1; Unit 2R is 739'(±) long with five (5) spans of continuous welded steel girders, a floor system of stringers on floorbeams with a single cantilever near Expansion Joint 1; Unit 3L is 781'(±) long and Unit 3R is 766'(±) long, both with three (3) spans of continuous welded steel girders, a floor system of stringers on floorbeams with two cantilevers near Expansion Joint 2 and 3; Unit 4L is 527'(±) long and Unit 4R is 491'(±) long, both with three (3) spans of continuous welded steel girders, a floor system of stringers on floorbeams with a single cantilever near Expansion Joint 4; Unit 5, Unit 6, and Ramp C-B are 659'(±), 562'(±) and 583'(±) long respectively, each with five (5) spans of continuous multiple welded steel girders; Unit 5 has a single cantilever near Expansion Joint 5.

The deck consists of a variable width reinforced concrete deck with a varying thickness and a 1½" latex modified concrete overlay. Concrete New Jersey shaped safety barriers with vandal protection fence are located on each side of the deck. Concrete New Jersey shaped safety barriers are also set back-to-back with a 2" open joint in the median to separate the Eastbound and Westbound superstructures. Steel finger-type deck expansion joints are located at the hinges, elastomeric strip seal expansion joints at the mainline Rear Abutments and Ramp B-C, and sliding plate type expansion joints are located at the mainline Forward Abutments and Ramp C-B. The intermediate stringers in Units 2, 3 and 4 are supported by K-frame truss, steel floorbeams between the steel plate girders. The superstructure members are ASTM A572, grade 50 steel.

The superstructure is supported on reinforced concrete capped column piers with spill through abutments. There is one exception at Pier 9L which is a tee type pier. The current traffic on the bridge is estimated at 61,890 vehicles per day with 6% trucks.

2.0 Bridge History

The bridge was designed by HNTB and opened to traffic in 1990. The following table defines the projects and repairs which took place on the bridge since the opening of the bridge in 1990:

Date	Project
1995	**Steel Truck Accident:** A roll of steel fell onto the deck near the beginning of the C-B ramp on Eastbound I-490. The steel punctured three (3) holes in the concrete deck and also damaged the barrier wall, fence and overhead sign support. The damage was fully repaired.
1998	**Overlay Repaired:** A portion of the latex modified concrete overlay in Unit 3 Span 3 and Unit 5 Span 4 were repaired. The concrete abutment faces were also sealed.
2001	**Parapets Sealed:** The concrete parapets were sealed with epoxy-urethane (Project 296-01).
Ongoing	**Maintenance:** Several maintenance projects have been completed to clean, repair and maintain the drainage system.
Current	**Bridge Inspection:** The structure is inspected annually by ODOT or consultants. **The 2018 inspection was a fracture critical element level inspection** with quantities performed by DLZ Ohio.

3.0 General

The data for this Physical Condition Inspection Report was obtained for the bridge between July 30 through September 27, 2018. The bridge inspection was performed by inspectors from DLZ and HDR. The bridge inspection was performed in accordance with the following documents:

Version	Document
2014	Manual of Bridge Inspection, Ohio Department of Transportation (ODOT)
2010	Manual for Bridge Evaluation, American Association of State Highway and Transportation Officials (AASHTO)
2012	Bridge Inspector's Reference Manual, Federal Highway Association
1986	Inspection of Fracture Critical Bridge Members, U.S. Department of Transportation
1988	National Bridge Inspection Standards, U.S. Department of Transportation

The Scope of Services directed DLZ and HDR to perform an in-depth condition including an "arm's length" inspection of all fracture critical components of the structure, and report the findings in a formal report. The inspectors used several different access methods for the superstructure, including walking the deck, climbing the girders with fall protection, and using manlifts and snoopers. A&A Safety (A&A) provided traffic control July 30th through August 7th to safely inspect portions of the bridge. The substructure was visually inspected, and suspect areas sounded from the ground or from the snooper. DLZ and HDR collected photographs, field notes and sketches while carrying out the bridge inspection. No destructive testing was performed.

The Condition ratings used in this report are based on the 2014 ODOT Manual of Bridge Inspection Condition Rating Guidelines.

Condition Rating Guide

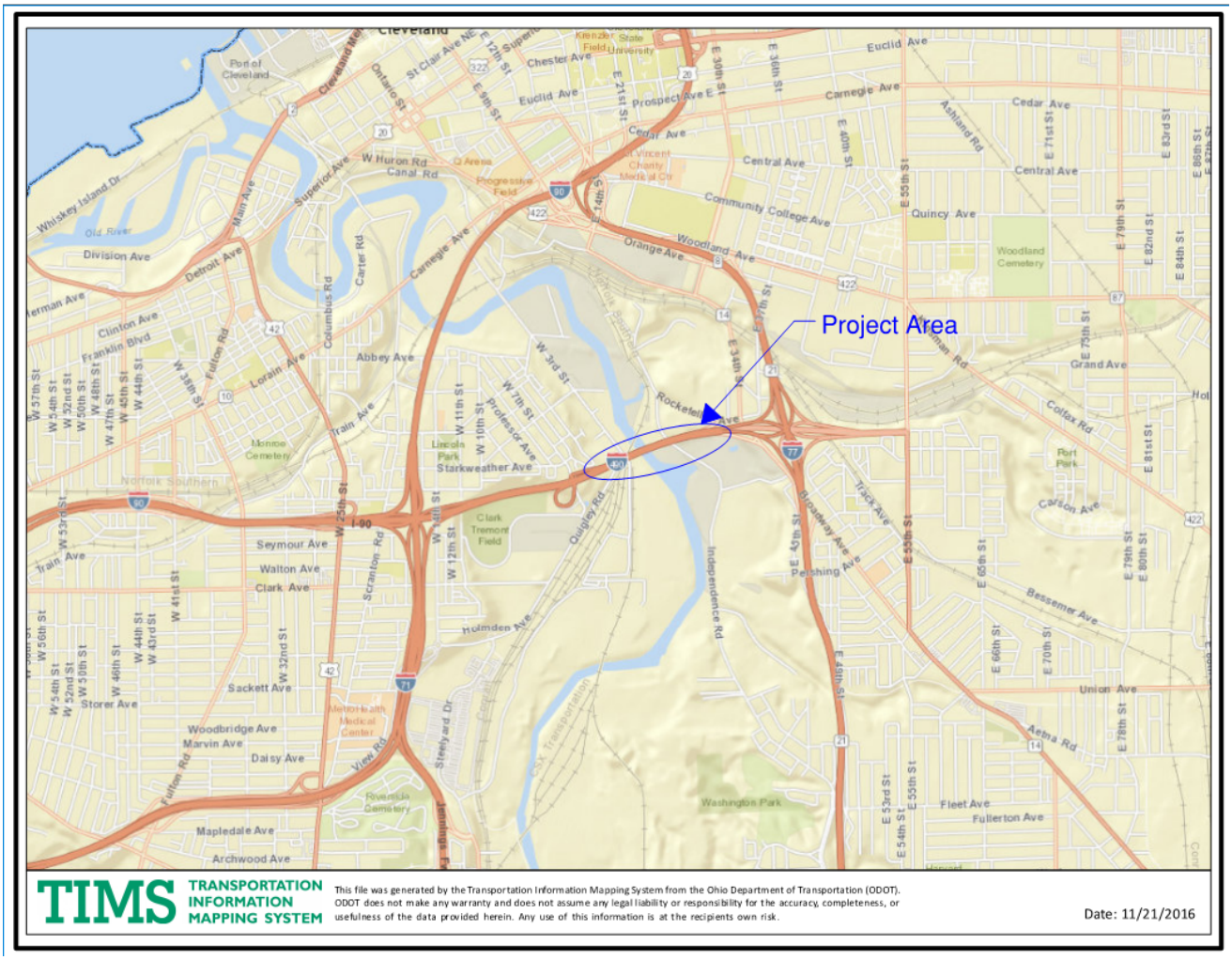
1-4 Individual Component	9-0 NBIS Summary		Inspector Guidelines (Quantitative comments include the Location, Extent & Severity of the deficiency)	
1-GOOD	9 - Excellent	No problems noted: no section loss, general deterioration.	Make brief comments as necessary. Communicate the predominant deficiency.	
	8 - Very Good			
	7 - Good	Some minor problems (ex. extent of concrete deterioration is up to 1% spalling or up to 5% saturation)		
2-FAIR	6 – Satisfactory	**Structural elements show some minor deterioration** (ex. extent of concrete deterioration is up to 5% spalling or up to 10% saturation)		
	5 -Fair	**Structural elements show deterioration but are sound** (ex. extent of concrete deterioration is up to 10% spalling or up to 20% saturation)	Document deficiencies quantitatively. Consider taking photos or making sketches.	
3-POOR	4 - Poor	Advanced* (ex. extent of concrete deterioration is more than 10% spalling or more than 20% saturation). Usually the load path appears to be affected for primary members or there are obvious structural changes since the as-built condition that are advanced.	Candidate to establish monitoring benchmarks to track the rate-of -change. Take photos, make sketches and document quantitatively in order to determine if a re-load rating is possible. Include in-service conditions to verify capacity	Poor Structurally Deficient**
	3 - Serious	4-Poor. . . *And* **local failures possible.**	*Above*. . . *And* discuss the deficiency immediately with Control Authority.	
4-CRITICAL	2 - Critical	3-Serious. . . *And* Unless closely monitored it **may be necessary to close the bridge** until corrective action is taken.	*Above*. . . *And* the bridge is a candidate to dispatch road closure and/or immediate repairs and/or increased monitoring (Interim Inspections). Confirm in writing, critical finding.	
	1 -Imminent Failure	2-Critical. . . *And* Major deterioration is affecting stability. Bridge or lane(s) **shall be closed** to traffic but corrective action may put bridge back into light service.	*Above*. . . *And* Dispatch immediate lane or bridge closure. Contact the Control Authority. Stay at the bridge until the safety of the traveling public is achieved. Confirm in writing.	
	0 - Failed	1-Imm Failure. . . *And* Out of service - beyond corrective action.		

* *Advanced* –widespread deficiencies **or** a likely reduction to capacity **(more examples on following page).**

** ***Structurally Deficient (SD)*** –Bridge Deck, Superstructure, or Substructure Summary rated 4-Poor or below. A bridge can also be classified as structurally deficient if its load carrying capacity is significantly below current design standards or if a waterway below frequently overtops the bridge during floods.

Table 34 - Condition

4.0 Location Map



5.0 General Appraisal and Operating Status

The overall condition rating of the bridge is **6**, indicating that it is in satisfactory condition.

The following is a summary of the field inspection recently performed on **July 30 to September 27, 2018**:

Item	Rating
Approach Summary	5
Deck Summary	7
Superstructure Summary	6
Substructure Summary	7
Channel Summary	8

5.1 Approach Items

The Approach overall rating is a **5**, indicating that it is in **Fair** condition.

The following items are rated as follows:

APPROACH ITEMS

	QTY.	condition state 1	2	3	4	cr TR
c1. Approach Wearing Surface (EA)	7	0	5	2	0	2.71
c2. Approach Slabs (SF)	11834.4	1117	448	211	0	1.32
c3. Relief Joint (LF)	461.3	283.3 5.4	178	0	0	1.49
c4. Embankment (EA) d	8	8	0	0	0	1.00
c5. Guardrail (EA)	10	3	6	1	0	2.29
N36. Safety Features: Tr, Gr, Tm						
c6. Approach Summary	36)B 1	36)C 1	36)D 1	(9-0)		5

5.1.1 APPROACH WEARING SURFACE

The approach pavement is in **fair** condition. The approach wearing surface is asphalt concrete. All of the mainline and ramp approaches have concrete and asphalt patches throughout. About 10% of the approach wearing surfaces have existing patches or need to be patched; these areas are exposing the underlying base. The approach wearing surfaces typically have potholes and patched areas that are unsound and breaking apart (see Photo 1). Longitudinal and transverse cracks are also common throughout all approach wearing surfaces.

Photo 1 – Typical approach wearing surface condition

5.1.2 APPROACH SLABS

The approach slabs are in **fair** condition. Approximately 10% of the mainline approach slabs have been patched or are in a distressed state and need to be patched. Several concrete patched areas have completely deteriorated and are filled with asphalt concrete (see Photo 2). The approach slabs of Ramp C-B, Ramp B-C and Ramp C-7 are in good condition. None of the approach slabs appear to be settling and there is no evidence of undermining.

Photo 2 – Typical area of deteriorating patches on the approach

5.1.3 RELIEF JOINT

The pavement relief joints are in **fair** condition. The Eastbound Rear Abutment relief joint is heavily cracked and deteriorated in the shoulder and the remaining relief joint has moderate transverse cracks throughout. **The Westbound forward relief joint is deteriorating in the shoulder** (see Photo 3). The Eastbound Ramp C-B relief joint is heavily cracked and appears to be settling throughout. The Westbound Rear Abutment relief joint has minor transverse cracks throughout and one large crack in the Southern two lanes. The relief joints at the Westbound Forward Abutment, Ramp B-C, and Ramp C-7 are in good condition with only hairline transverse cracks present.

Photo 3 – The Westbound mainline forward relief joint which is deteriorating in the shoulder

5.1.4 EMBANKMENT

The embankments are in **good** condition. No settlement, erosion or any other significant deficiencies were noted in the embankment.

5.1.5 GUARDRAIL

The guardrail is in **poor** condition. There are locations with minor cracking with rust staining at the guardrail connections to the concrete parapet. Two locations have sustained collision damage and are in serious condition. The guardrail on the North side of Ramp C-B is severely damaged and four (4) posts are bent and misaligned (see Photo 4). The guardrail on the South side of the Eastbound Forward Abutment is severely damaged with multiple posts that are missing or are damaged and the guardrail thrie-beam is misaligned and bent (see Photo 5). The remaining five (5) guardrail runs are in good condition exhibiting only minor scrapes and dents throughout. The concrete parapets on all of the approach slabs are in good condition with minor vertical cracks and minor spalls throughout. Minor map cracking is present at the Eastbound Mainline Forward Abutment parapet faces. There is one (1) significant spall with exposed reinforcing steel and cracking throughout the parapet faces at the Westbound mainline, South side (see Photo 6).

Photo 4 – Collision damage at the North side of the Eastbound Ramp C-B guardrail

Photo 5 – Eastbound Mainline West Abutment, South shoulder guardrail damage

Photo 6 – Westbound median at the Rear Abutment

5.2 Deck Items

The Deck overall rating is a **7**, indicating that it is in **good** condition. The bridge deck varies from a 7¾ inch to 8¼ inch thick reinforced concrete slab with a 1¼ inch latex-modified concrete overlay wearing surface.

The following items are rated as follows:

DECK ITEMS

	condition state				cr
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	518996	497603	14019	7373	1	1.26
c7.2 Edge of Floor/Slab (LF)	15139	15016	123	0	0	1.01
c8. Wearing Surface (SF)	518995	516495	1973	526	1	1.02
c9. Curb/Sidewalk/Walkway (LF)						
c10. Median (LF)	6914	6668	246	0	0	1.05
c11. Railing (LF)	8192	7653	459	80	0	1.24
N36. Safety Features: Rail						
36)A 1						
c12. Drainage (EA) d	35	19	12	2	2	2.78
c13. Expansion Joint (LF) d	1256	1030	96	130	0	2.06
N58. Deck Summary					(9-0)	7

5.2.1 FLOOR/SLAB

The floor is in **good** condition. There is map cracking, transverse and longitudinal cracks, spalling with exposed reinforcing steel, delaminations, and efflorescence located throughout the deck. The bridge deck was in generally worse condition near the expansion joints; however, other areas of poor deck conditions were spread sporadically throughout the floor.

Cracking is most common in the middle of the bays between girders and stringers; some of these cracks exhibit minor rust staining and efflorescence. There are several locations near the middle of a few spans where a single transverse crack stretched all the way across the deck floor (see Photo 7). These areas often have smaller cracks and delaminations propagating from them. These large transverse cracks were most likely caused by deck pour construction joints. **There are also areas were the concrete around the cracks is saturated or efflorescent** (see Photos 7 and 8).

Photo 7 – Transverse deck crack with saturated concrete in Unit 6 Span 4

Photo 8 – Typical efflorescent transverse deck crack

The concrete around the pier access manholes is damp and saturated in most locations (see Photo 9). The concrete appears to have minor cracks and rust staining in these areas. There is an open deck core just West of Pier 10 between Girder 3-F and Stringer 3-5. The open core is allowing water to leak through the deck and saturate the concrete around the core (see Photo 10).

Photo 9 – Manhole at Pier 14R with saturated concrete and minor rust staining

Photo 10 – Open deck core with saturated concrete West of Pier 10

5.2.2 EDGE OF FLOOR/SLAB

The Edge of Floor/Slab is in **good** condition. The edges of deck were inspected from a snooper. The transverse deck cracks which extend the width of the bridge at deck pour construction joints also extend through the edge of the deck. Throughout the bridge fascia there are minor vertical cracks; **these are located approximately every 5 to 10 feet and reflect cracking in the parapets.** There is also rust staining present on the edge of floor slab which appears to be leakage from the bridge railing. Larger cracks and spalling were noted near the expansion joints. Several spalls exist on the interior median joint in Unit 5 and Unit 6 (see Photo 11).

Photo 11 – Deck overhang spalls with exposed reinforcing near Pier

5.2.3 WEARING SURFACE

The Wearing Surface is in **good** condition. The wearing surface was visually inspected by walking the deck during the lane closures used for the snooper inspection and an additional lane closure on the median sides. The wearing surface has transverse and longitudinal cracks throughout, which is allowing water to seep into the concrete deck and promoting deterioration of the floor. Most of the raised pavement markers are missing leaving approximately 6 inch by 6 inch by 1-inch-deep crevices in the deck where water ponds during rainy weather conditions. There are multiple locations of patches, some of which are concrete and some of which are asphalt concrete. In most cases, the patches seem to be performing and are in good condition; however, there are locations where patches are deteriorated. In some of these areas, asphalt patches have been placed over concrete patches (see Photo 12). These patches are common along the transverse deck pour construction joints.

Photo 12 – Deteriorated concrete patch filled with asphalt

5.2.4 MEDIAN

The reinforced concrete median parapets are in **fair** condition. There are multiple locations of cracking, mostly vertical, and spalls on the parapet faces. There are locations where the neoprene cover is missing from on top of the median, most notably on Span 13 and Span 14 (see Photo 13). **There is significant cracking and spalling with exposed reinforcing steel at the expansion joint plates and at sign support plates** (see Photo 14).

Photo 13 – Neoprene cover missing from the top of the median

Photo 14 – Spalled and cracked median with exposed reinforcing steel at sign support plates

5.2.5 RAILING

The reinforced concrete parapets are in **fair** condition. The parapets are 42-inch tall reinforced concrete New Jersey type parapets topped with a 4'-0" vandal protection fence. Both the Eastbound and Westbound parapets are cracking with rust staining and exhibit spalling throughout. The majority of the cracks are vertical cracks, which extend the entire length of the bridge and are typically spaced 15 feet to 20 feet apart. The parapet vandal protection fence is in poor condition with several deficiencies throughout. The following sections describe the inspection findings in greater detail.

Spalling

Large spalls with exposed and corroded rebar exist on both faces of the concrete parapet (see Photo 15). There are locations of spalling on the exterior side of the parapet which fully expose the vandal protection fence posts (see Photo 16). The majority of spalling occurs near fence posts. It is likely caused by the fence post anchors being drilled after the parapets were poured. In doing so the rebar in the parapet can be impacted and propagate a crack in the concrete. As water intrudes the crack and the freeze-thaw cycle continues, the crack expands and develops into a spall.

Photo 15 - Spall on Eastbound railing, deteriorating steel at Span 11

Photo 16 - Spall on North exterior rail, exposing fence post, E.J. 4

Parapet Fence

The fence on top of the parapet is in poor condition with many deficiencies throughout the length of the bridge. There are several locations on the Eastbound side where the fence fabric has been damaged and the fence posts are bent. At random locations throughout the bridge, the pack rust around the fence is prying up the fence base plate; this has also caused deterioration of the caulk around the base plates (see Photo 17). Many of the fence gates are unlocked. There are multiple locations where the horizontal rail splices are broken due to heavy corrosion. The East half of the exterior Eastbound fence has multiple locations where the horizontal rail to post connection has failed or is badly deteriorated due to heavy corrosion at the down-slope end of the rail (see Photo 18).

Photo 17 – Fence base plate separating from concrete in Span 5

Photo 18 – Bottom railing failed due to corrosion at Span 14

There are long stretches of fence with damaged diamond mesh fabric and with broken, missing or bent fence posts. 120 feet of damaged fence with a bent post is located on Westbound Span 16. Westbound Span 14 has 20 feet of damaged fabric with a broken post. Westbound Span 7 has over 40 feet of damaged and loose fabric. Eastbound Span 1 has one (1) fence post missing, effectively doubling the fabric span length (see Photo 19).

Photo 19 – Damaged fabric with a broken post in Westbound Span 14

5.2.6 DRAINAGE

The drainage system is in **poor** condition. The current drainage system removes water on the bridge by means of scuppers with downspouts and there is no evidence of pooling or stagnated water on the bridge deck. Despite this, several areas of the drainage system exhibit deficiencies.

The bridge drainage system consists of a longitudinal grade, deck crown, scuppers, neoprene drainage troughs and downspouts connected to the piers to outlet water to the ground below. Scuppers are located in the shoulders near the Rear Abutment, above Pier 4, Pier 9, Pier 12, Pier 15 and Pier 20. There are 35 scuppers total with 18 located in the Eastbound shoulder and 17 located in the Westbound shoulder. There are five (5) drainage troughs, located at each finger joint. The scuppers and troughs drain into the downspouts at Pier 4, Pier 9, Pier 12, Pier 15 and Pier 20.

Only one (1) scupper on the deck flows freely, without debris, on the Eastbound structure and no scuppers flow freely on the Westbound structure. Most of the scuppers are partially clogged with six (6) scuppers being completely plugged and not conveying any water (see Photo 20). Loose trash and debris on the deck is accumulating near the scuppers. There is a loose scupper grate in the right exit lane on the Eastbound direction, it is the first scupper west of Expansion Joint 4. This scupper makes a loud banging noise when driven over.

Photo 20 – Typical fully clogged scupper packed with debris

The neoprene drainage troughs run transversely below the finger expansion joints, they are mostly clogged and overflowing with debris. There are multiple locations were the neoprene troughs are torn open, leaking debris and water onto the steel framing below (see Photo 21). There are also several locations where the troughs are full of debris and missing bolts. Because the drainage troughs are full of debris or broken, drainage from the finger joint spills out of the drainage system and onto the piers and structural steel below. This spillage is causing adverse effects to the structural steel and to the piers adjacent to the expansion joints. Another problematic area of the drainage system is the drain from the scuppers to the collector pipe. Many of the couplers are misaligned (see Photo 22). Several connections to the hoppers are also misaligned and filled with debris, slowing any flow of water. The owner of a local truck garage informed HDR & DLZ inspectors that the Pier 9 drainage system does not properly drain. The water spills out of the drainage system onto his property below and leaves a sheet of ice during the winter months where he turns his truck around. This is also located over the Norfolk Southern Railroad tracks and may cause problems to their rail system. Below is a list of the drainage trough deficiencies:

Expansion Joint	Girders	Comments
1L	F-G	Gap between drainage trough and joint armor; neoprene is also torn allowing water to leak through; trough half full of debris.
1R	All	Drainage trough is completely full of debris; neoprene beginning to rip; neoprene torn near the end.
2L	G	Neoprene is ripped open.
2R	K-H	The neoprene trough is torn and water is leaking through; joint armor has laminar corrosion with 1/8” section loss.
3L	A, C, D, E	The neoprene is torn over hinge A and debris is spilling onto Girder A; joint armor at Girder C has heavy corrosion; neoprene ripped open between Girders C & D; partially ripped between Girders D & E.
3R	G	The trough is torn through at Girder G and stretched and full throughout the rest of the trough
4L	A, D, E	The trough is torn through at Girder A, the remaining trough is full of debris; trough is torn between Girders D & E (see Photo 23)
4R	All	The neoprene sheeting is torn in multiple locations and water is leaking through; partially full between Girders J & K
5L	All	The entire drainage trough is completely filled with debris and stretched; trough torn near Girder A & Girder H
5R	P-X	Trough armor is broken and steel is hanging below trough The rest of the trough is completely filled with debris

Photo 21 – Torn neoprene sheeting causing debris to spill onto the steel below

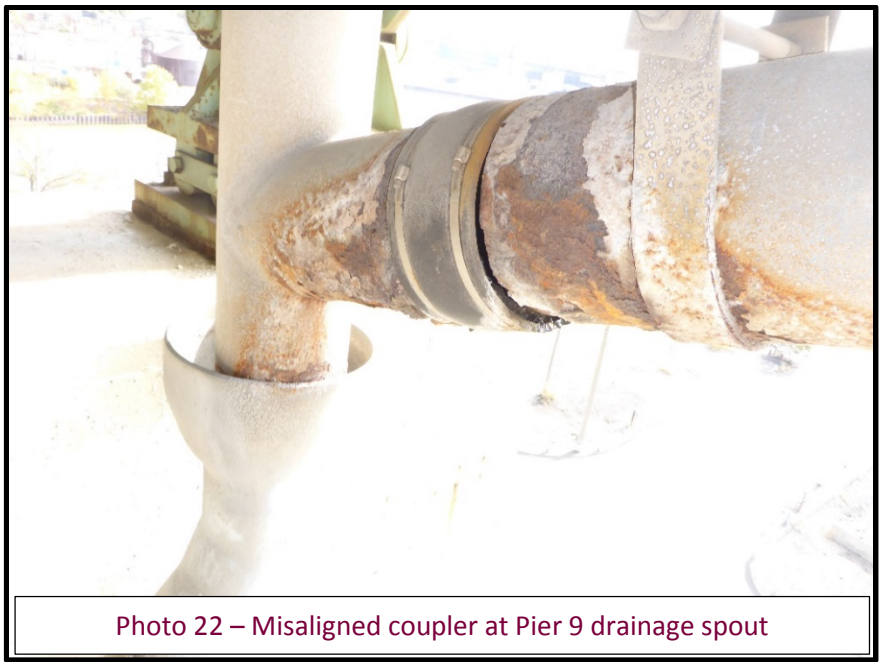


Photo 22 – Misaligned coupler at Pier 9 drainage spout

Photo 23 – Hanging joint armor at Expansion Joint 4L

5.2.7 EXPANSION JOINT

The expansion joints are in **poor** condition. Expansion joints consist of elastomeric strip seal joints at the Rear Abutments, steel finger joints at each intermediate expansion joint between bridge units and sliding plate joints at the Forward Abutments and Ramp C-B Abutment.

Elastomeric Strip Seal Joints

The mainline Eastbound Rear Abutment has several locations in which the steel joint is damaged and missing, and the Westbound entrance ramp joint at abutment B-C has similar damage (see Photo 24). These locations are in active travel lanes on Interstate 490 and could be deep enough to cause damage to a vehicle. The remaining abutment elastomeric strip seal joints are in good condition with only minor problems existing. Minor debris between the joints may prevent expansion between the joints. The elastomeric strip seals are present and prevent moisture from leaking onto the abutment backwalls. The expansion joint concrete headers exhibit spalling throughout causing potholes to form at the Rear and Forward Abutments.

Photo 24 – Holes in Westbound Ramp Abutment B-C joint armor

Steel Finger Joints

The intermediate finger joints have minor misalignment issues throughout, but are generally in good condition. Expansion Joint 2 fingers are misaligned horizontally, most notably at Westbound Expansion Joint 5 (see Photo 25). There are several areas of rust with most of the rust prevalent on the shoulders of the deck. Areas around the finger joints are patched but starting to deteriorate. Two teeth are missing from Westbound Expansion Joint 2 (see Photo 26).

Photo 25 – Transversely misaligned steel teeth at Westbound Expansion Joint 5

Photo 26 – Missing teeth at Westbound Expansion Joint 2; also note deck patch.

Sliding Plate Joints

The sliding plate joints at the mainline Forward Abutments and at Ramp C-B are generally in good condition (see Photo 27). The joint sealer is not water tight and, based on the condition of the abutment backwalls, moisture is leaking onto the structure below. The leaking joint is causing corrosion and deterioration to the bridge deck, abutment, and steel members below the joint (see Photo 28).

Photo 27 – Typical sliding plate joint in good condition

Photo 28 – Deterioration to Forward Abutment Backwall below sliding plate joint

The following table summarizes the expansion joint openings measured during inspection:

Joint Location	Type	Opening	Temperature
Rear Abutment EB	Elastomeric Strip Seal	1.25"	73°F
Rear Abutment WB	Elastomeric Strip Seal	0.75"	76°F
Ramp C-7	Elastomeric Strip Seal	1 3/4"	76°F
Expansion Joint 1 EB	Finger Joint	2 1/2"	73°F
Expansion Joint 1 WB	Finger Joint	2"	76°F
Expansion Joint 2 EB	Finger Joint	4"	73°F
Expansion Joint 2 WB	Finger Joint	4"	76°F
Expansion Joint 3 EB	Finger Joint	3 1/4"	73°F
Expansion Joint 3 WB	Finger Joint	4 1/2"	76°F
Expansion Joint 4 EB	Finger Joint	4 1/8"	73°F
Expansion Joint 4 WB	Finger Joint	3"	76°F
Expansion Joint 5 EB	Finger Joint	2 3/4"	73°F
Expansion Joint 5 WB	Finger Joint	2 7/8"	76°F
Expansion Joint 6 EB	Finger Joint	1 5/8"	73°F
Expansion Joint 6 WB	Finger Joint	2 1/4"	76°F
Forward Abutment EB	Sliding Plate Joint	1 1/2"	73°F
Forward Abutment WB	Sliding Plate Joint	1 3/4"	76°F
Ramp C-B	Sliding Plate Joint	1 7/8"	76°F
Ramp B-C	Sliding Plate Joint	2 3/4"	73°F

5.3 Superstructure

The Superstructure overall rating is a **6**, indicating that it is in **Satisfactory** condition.

The following items are rated as follows:

SUPERSTRUCTURE ITEMS	QTY.	condition state 1	2	3	4	cr TR
c14. Alignment (EA) d	54	54	0	0	0	1.00
c15.1 Beams/Girders (LF)	55590	3472 7	1996 2	901	00	1.63
c15.2 Slab (SF)						
c16. Diaphragm/X-Frames (EA)	2341	156	2068	117	0	2.21
c17. Stringers (LF)	16943	3098	1368 9	156	0	1.93
c18. Floorbeams (LF)	18629	1317	1690 3	409	0	2.08
c19. Truss Verticals (EA)						
c20. Truss Diagonals (EA)						
c21. Truss Upper Chord (EA)						
c22. Truss Lower Chord (EA)						
c23. Truss Gusset Plate (EA) d						
c24. Lateral Bracing (EA)						
c25. Sway Bracing (EA)						
c26. Bearing Devices (EA) d	465.00	314	106	42	3	2.19
c27. Arch (LF)						
c28. Arch Column/Hanger (EA)						
c29. Arch Spandrel Walls (LF)						
c30. Prot. Coating System (LF) d	91162	4149 3	4645 8	2364	847	2.07
c31. Pins/Hangers/Hinges (EA) d	64	0	61	3	0	2.23
c32. Fatigue (LF) d	91162	9114 4	18	0	0	1.00
N59. Superstructure Summary					(9-0)	6

5.3.1 ALIGNMENT

The Alignment is in **good** condition. Alignment was visually checked by sight at several girder locations throughout the bridge. There were no significant instances of misaligned girders or sagging noticed during the inspection.

5.3.2 BEAMS/GIRDERS

The Beams and Girders are in **good** condition. There are a large number of girder locations exhibiting peeling paint with corrosion or primer showing. Corrosion is common at the bottom of the webs and the tops of the bottom flanges along the fascia girders (see Photo 29). This corrosion is likely the result of water collecting and resting on the exterior sides of the beams during rain events and is consistent throughout the length of the bridge. Overall, corrosion is most active near the expansion joints. In these areas, the girders or beams exhibit heavier laminar rusting with moderate section loss up to 1/8" in some cases which typically extends about 10 to 15 feet on either side of the expansion joint (see Photo 30). **There are also several locations of the transverse stiffener bowed where located at a splice** (see Photo 31).

Photo 29 - Corrosion on top of the bottom flange of Girder M

Photo 30 - Corrosion with section loss near expansion joint 4

Photo 31 – Transverse Stiffeners bowing for connections

There are multiple locations where longitudinal stiffeners are slightly bent or bowed. The most severe bowed stiffener is at Girder J, Bay 12 between Pier 9R and 10R (see Photo 32). There are also multiple locations of misdrilled holes in the transverse stiffeners. These misdrilled holes are most likely handrail holes which were incorrectly placed or erection bolt holes that were drilled during construction to fit-up the crossframes. There is a location between Pier 7L and Pier 9L where the bottom girder flanges exhibit a wave which is most likely a fabrication or erection deficiency (see Photo 33).

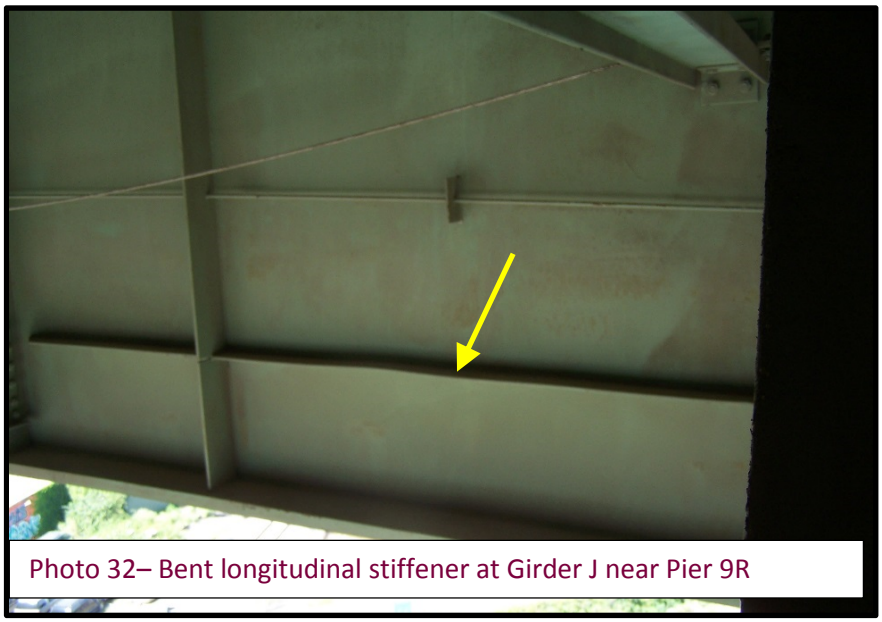


Photo 32– Bent longitudinal stiffener at Girder J near Pier 9R

Photo 33 – Wave in Girder A between Pier 7L and Pier 9L

Multiple wind guide attachments are rusted and bent away from the girder (see Photo 34). **Many misdrilled holes were noted in the connection plates at splices** (see Photo 35).

Photo 34 – Bent wind guide attachment, Girder A at expansion joint 3

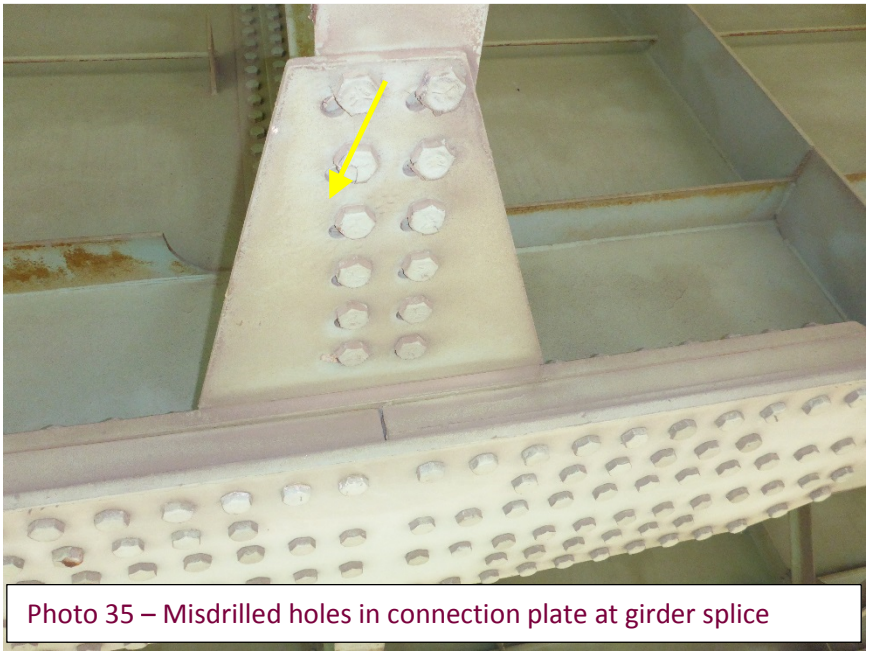


Photo 35 – Misdrilled holes in connection plate at girder splice

5.3.3 DIAPHRAGM/X-FRAMES

The X-frames are generally in **good** condition except at the deck joints. Units 1, 5, 6 and Ramp C-B have crossframes rated in this section. Girder crossframes in Units 2 through 4 are considered floorbeams. Most of the crossframes exhibit localized areas of peeling paint and light surface corrosion. The crossframes are in much worse condition at the abutments and under the expansion joints. These crossframes typically have advanced corrosion with severe section loss (see Photo 36).

Photo 36 - Crossframe corrosion near Expansion Joint

There are several locations throughout the length of the bridge where the crossframe connections to the girder or beam transverse stiffener have loose bolts, missing bolts or misdrilled holes (see Photo 37). Based on the PCS and the overall physical condition of the girders and crossframes, this defect does not negatively affect the surrounding members or the overall structure. A full list of these locations is shown in Appendix VI.

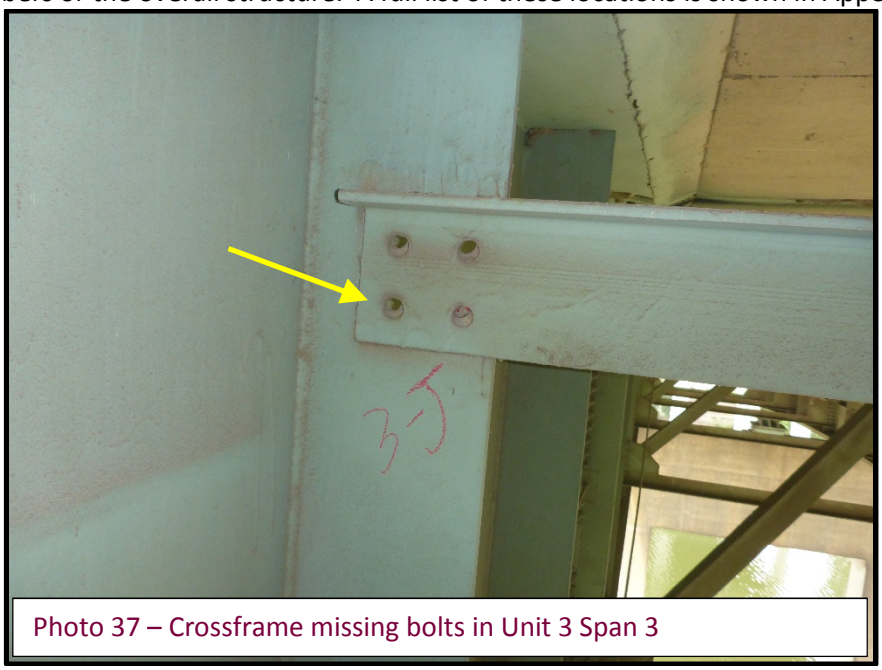


Photo 37 – Crossframe missing bolts in Unit 3 Span 3

5.3.4 STRINGERS

The stringers are in **good** condition. The most common area of corrosion is along the edge of the top flange of the stringer along the deck haunch (see Photo 38). The condition of the stringers worsens near the expansion joints and over the river, most likely due to the presence of moisture. There are some minor areas of corrosion and freckled rust at these locations, although no section loss or pitting is notable. Additionally, there are loose bolts in the bottom splice plates of Stringers 7 and 8 near Floorbeam 23 between Pier 10R and 11R (see Photo 39).

Photo 38 – Typical Corrosion Along Stringer Top Flange

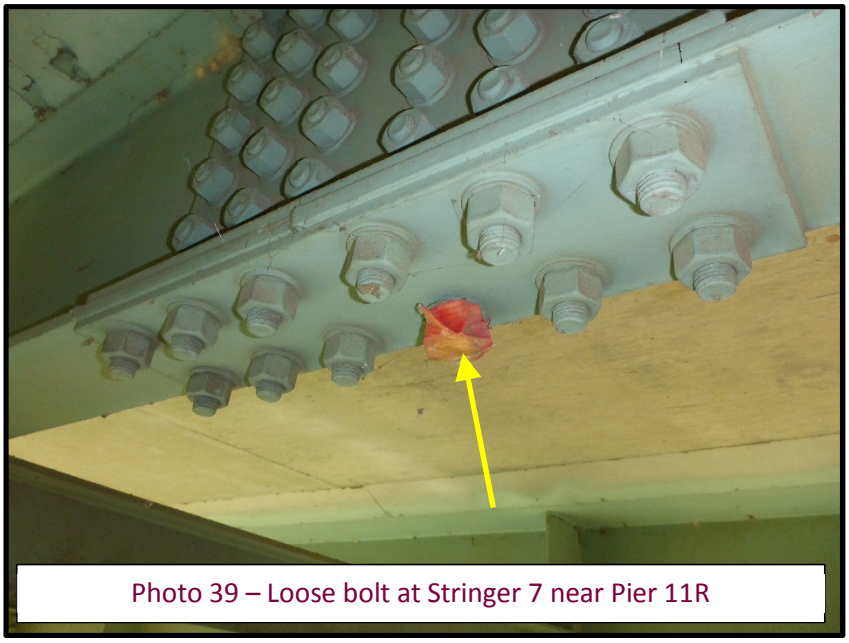


Photo 39 – Loose bolt at Stringer 7 near Pier 11R

However, Stringer 5 at Floorbeam 6 in the span between Pier 6L and 7L is completely disconnected from the floorbeam and is floating. A half inch gap exists between the floorbeam and the stringer. The gap effectively doubles the span length of the stringer; however, the stringer and the area around it appear to be in good condition (see Photo 40).

Photo 40 – Stringer 5 to Floorbeam 6 connection in Unit 2 Span 3

5.3.5 FLOORBEAMS

The Floorbeams are in **good** condition. Floorbeam K-frames are located in Units 3, 4 and 5, and are connected to the girder with bolts to the girder transverse stiffeners at the top and through the use of bolted connection plates at the base. The floorbeams located below the expansion joints are typically in worse condition than the other floorbeams. At most expansion joints, the floorbeams have active corrosion and rust because of the water falling from the clogged drainage system (see Photo 41). The remainder of the floorbeams exhibit areas of minor rust. Freckled rusting is common on the diagonal members of the K-frames.

Photo 41 – Floorbeam K-frame at Expansion Joint 4

The connections of the floorbeams to girders are in fair condition with loose bolts, missing bolts, and misdrilled holes found throughout the length of the bridge. Many of the connection plates and floorbeam members have loose bolts that could be turned by hand. There are also several locations where misdrilled holes were found

on the floorbeam connection plate or a portion of the floorbeam itself (see Photo 42). Based on the PCS and physical condition of the plate, these locations were most likely missed during construction and do not seem to be causing adverse effects on the structure. There are also locations where bolts were never installed, and, in one severe location on the 7th floorbeam located after Pier 11R, there are no bolts connecting the floorbeam to the top of the transverse stiffener on Girder J (see Photo 43). **In locations without bolts the floorbeams are welded to the girder connection plates.**

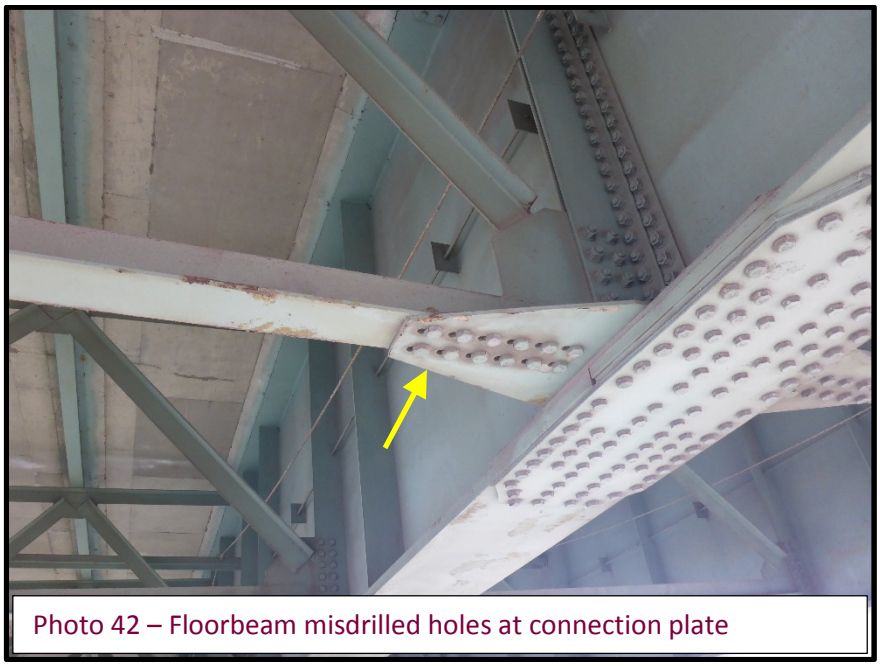


Photo 42 – Floorbeam misdrilled holes at connection plate

Photo 43 – Missing bolt at K-Frame connection

There are also several locations where the edge distance of the bolts in the steel connection plates is not adequate. In one location, the connection plate appears to be field cut to fit into place; the cope was overcut leaving minimal distance between the edge of the plate and the last row of bolts (see Photo 44).

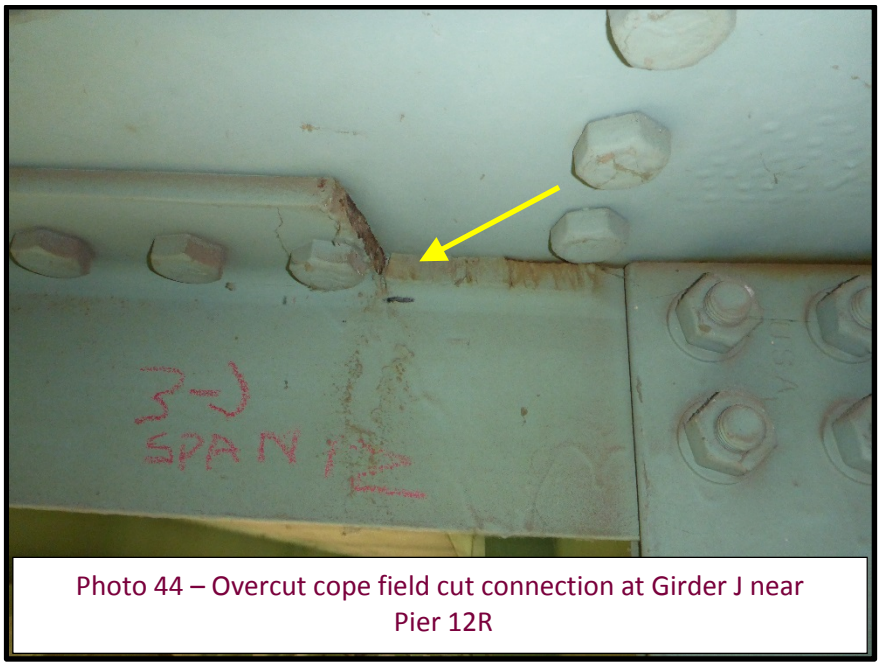


Photo 44 – Overcut cope field cut connection at Girder J near Pier 12R

5.3.6 BEARING DEVICES

The Bearing Devices are in **fair** condition. **It was noted that rocker bearing 1-D, 1-M, 1-N of the Eastbound bridge is floating. The bearings are hand loose and appear to be carrying zero live load and zero dead load, the load is likely transferred through the deck to the adjacent bearings by way of the end diaphragms (see Photo 45). Many bearings at the Rear Abutment have the lead shim plate slipped out from the base plate of the rocker, which may indicate the periodic floating of other bearings as well.** The abutments typically have debris build-up around the bearings. Laminar corrosion present around bolts and base plates on the Forward Abutment bearings (see Photos 46). Many of the rockers at the abutments exhibit heavy rusting on both the rockers. Based on the cracking of the PCS around the abutment bearings and the observed rotations of the rockers, the debris and rust do not appear to be restricting movement and the bearings appear to be operating normally for the given temperature conditions observed during inspection.

Photo 45 – Bearing 1-M floating and is hand loose; shim slipped

Photo 46 – Laminar corrosion on base plate and bolts of bearings

Photo 47 – Forward Abutment Bearing Off Center

The pier bearings are in fair condition. The pier roller bearing plates have varied offsets but do not exceed 2” and are within the tolerable limits that would be expected to be seen for the given temperature conditions

during inspection. **There are several locations where the bearing connection bolts and plates are loose on the piers** (see Photo 48)**.** The pier bearings near the expansion joint drainage pipes are generally in worse condition. Bearings near the drainage pipes exhibit surface rust to the bearing and pier connection plate (see Photo 49). For a complete list of bearing conditions and translations see Appendix VII.

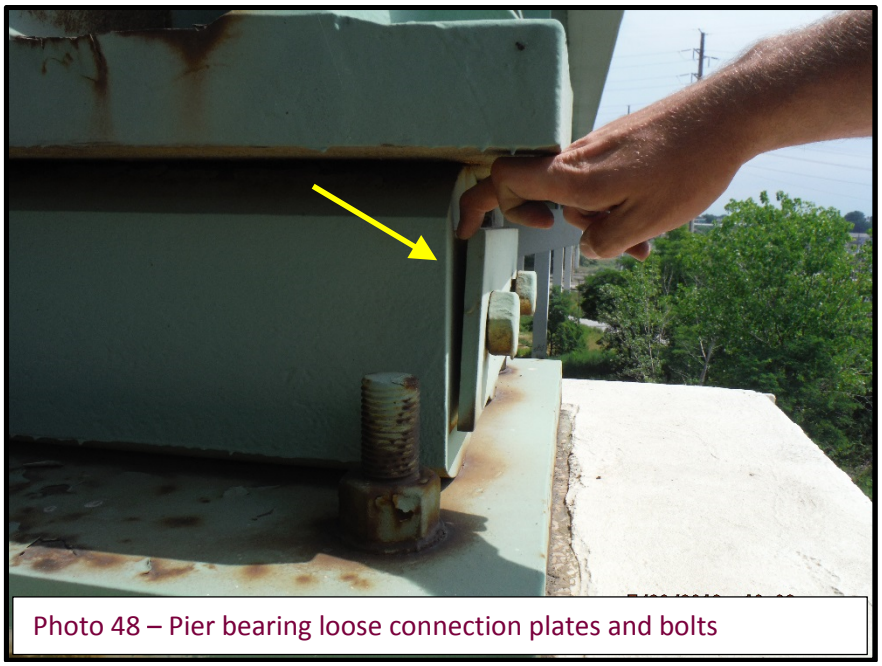


Photo 48 – Pier bearing loose connection plates and bolts

Photo 49 - Pier bearing with typical plate rusting

5.3.7 PROTECTIVE COATING SYSTEM

The Protective Coating System is in **fair** condition. Areas around the drainage system show the most deterioration to the PCS. In these areas, there's both surface corrosion and laminar corrosion to the girders, floorbeams, crossframes, and bearings (see Photo 50). **Areas in several spans exhibit bubbled and cracked PCS along the webs and tops of the bottom flanges with areas of exposed corroded metal (see Photo 51).** There are also localized areas throughout the bridge where the paint is missing and the primer is exposed. Additionally, the paint has failed along portions of the handrail that is attached to the girder. Units 3 through 6 have a thick layer of dust over the North face of the beams and girders. Units 5 and 6 are almost completely covered with a similar dirt layer. Dirt cover makes it difficult to see PCS failure and steel deficiencies (see Photo 52).

Photo 50 - Typical PCS failing at Expansion Joint 5

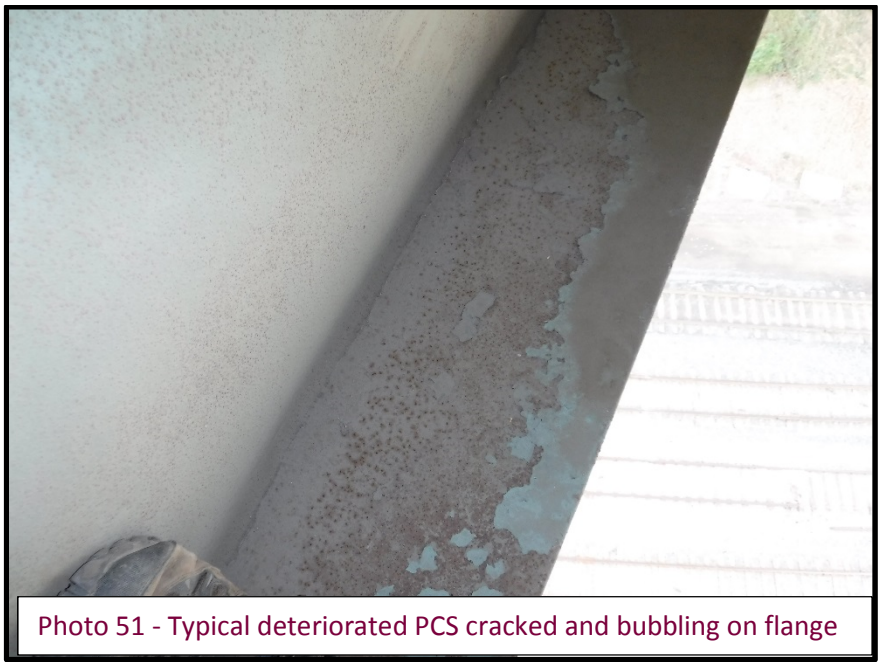


Photo 51 - Typical deteriorated PCS cracked and bubbling on flange

Photo 52 - Typical dirt covering PCS

5.3.8 HINGES

The Hinges are in **fair** condition. All of the hinges appear to be operating as designed during the 2018 inspection. Surface corrosion and debris on the bottom plates is common on the expansion hinges and can hinder proper hinge movement. As previously mentioned, this is a direct result of the leaking expansion joint and drainage trough systems. There is one (1) missing bolt in the sole plate of Girder 3-K at Expansion Hinge 3 and **two (2) missing bolts in the sole plate of Girder 4-D at Expansion Hinge 3 (see Photo 53).** Several bolts appear to be missing or broken bolt heads due to the large build-up of rust around the expansion hinges (see Photo 54).

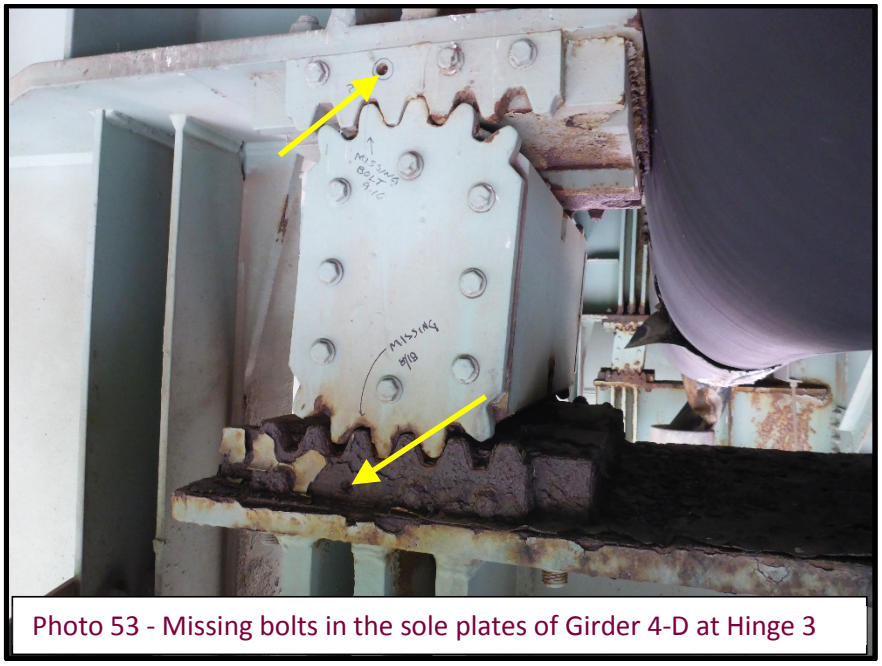


Photo 53 - Missing bolts in the sole plates of Girder 4-D at Hinge 3

Photo 54 – Expansion Hinge 3 Girder D missing or broken bolts

The area adjacent to the hinges commonly has debris piled on top of the girder flange (see Photo 55). This is problematic because the debris will hold water on the girder flange causing further rusting. It is recommended that this gets removed as part of a general maintenance program. These conditions are causing accelerated deterioration to the structural elements adjacent to the expansion joints.

Photo 55 – Debris Piled on Girder Flange around hinges

Laminar corrosion is active at many hinges' teethed plates and between the sole plates and the teethed plates (see Photo 56).

Photo 56 – Laminar Corrosion Where the Teeth Fall into the

5.3.9 FATIGUE

The fatigue-prone details for this bridge are in **good** condition. The end terminations of the longitudinal stiffener weld to the webs of the girders without a radius termination are considered a stress category E detail. No signs of fatigue cracking were noted for this detail.

The stringer bottom flange to floorbeam top flange weld is considered a stress category E detail. Stringer 5 at Floorbeam 6 in the span between Pier 6L and 7L is completely disconnected from the floorbeam. There is no sign that these members were ever welded together and this is not likely fatigue-cracking, but an incorrect fit-up that occurred during construction. No other signs of fatigue cracking were noted for this detail.

The cantilevered-suspended span design indicates that the roller hinges are detailed for a higher rating. The detail at Expansion Joint Roller 5 was constructed with tri-axial welds (see Photo 57). The tri-axial constraint reduces the apparent ductility of the member and is considered a stress category E detail. No signs of fatigue cracking were noted for this detail. For a complete list of fatigue prone details see Appendix IX.

For the Fracture Critical Member and Fatigue Prone Connection Plan see Appendix VIII.

Photo 57 - Tri-axial weld at Expansion Joint 5

5.4 Substructure

The Substructure overall rating is a **7**, indicating that it is in **Good** condition.

The following items are rated as follows:

SUBSTRUCTURE ITEMS		condition state				cr
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	524.6	483.6	41	0	0	1.11
c34. Abutment Caps (LF)		0				
c35. Abut. Columns/Bents (EA)		0				
c36. Pier Walls (LF)	25.3	18.3	7	0	0	1.36
c37. Pier Caps (LF)	3821.2	3757.2	61	3	0	1.04
c38. Pier Columns/Bents (EA)	132	107	24	1	0	1.36
c39. Backwalls (LF)	524.6	468.6	42	14	0	1.48
c40. Wingwalls (EA)	8	8	0	0	0	1.00
c42. Scour (EA) d	58	58	0	0	0	1.00
c43. Slope Protection (EA) d	6	6	0	0	0	1.00
N60. Substructure Summary					(9-0)	7

5.4.1 ABUTMENT WALLS

The abutment walls are in **fair** condition. The abutment walls on the Rear Abutments and Ramp C-7 are generally in good condition. The elastomeric strip seals at these abutments are in good condition and very little moisture appears to be affecting the abutments. The only deficiencies noted were minor vertical cracks and small spalls that exist in the concrete at the corner between the abutment wall and the beam seat. The abutment walls on both Forward Abutments exhibit several minor vertical cracks with rust staining, spalls and delaminations (see Photo 58). There are also horizontal cracks along the abutment seat. Portions of the all abutments are covered with dirt and debris but no other structural defects are present.

Photo 58 – Cracking with rust staining at Forward Abutment

5.4.2 PIER WALLS, PIER CAPS & PIER COLUMNS

The pier walls, caps and columns are in **fair/good/good** condition. The pier walls and the pier caps were visually inspected and suspect areas sounded from the ground, from a snooper and from the top of the pier caps.

The deficiencies found include minor vertical cracks throughout the pier columns. Most of the vertical cracks extend half of the column height or more. Horizontal cracks in the pier caps are frequent, and are often mirrored on both sides of the cap. There were also some locations of diagonal cracking stemming from the joint where the cap meets the column.

The pier caps and columns with drainage attached to them are generally in worse condition then the other piers. These deficiencies are likely caused by the leaking drainage systems or water leaking through the rusted manholes above the piers. Pier 9L and 9R are in worse condition than the other piers, with many vertical cracks, delaminations and rust stains closely spaced (see Photo 59).

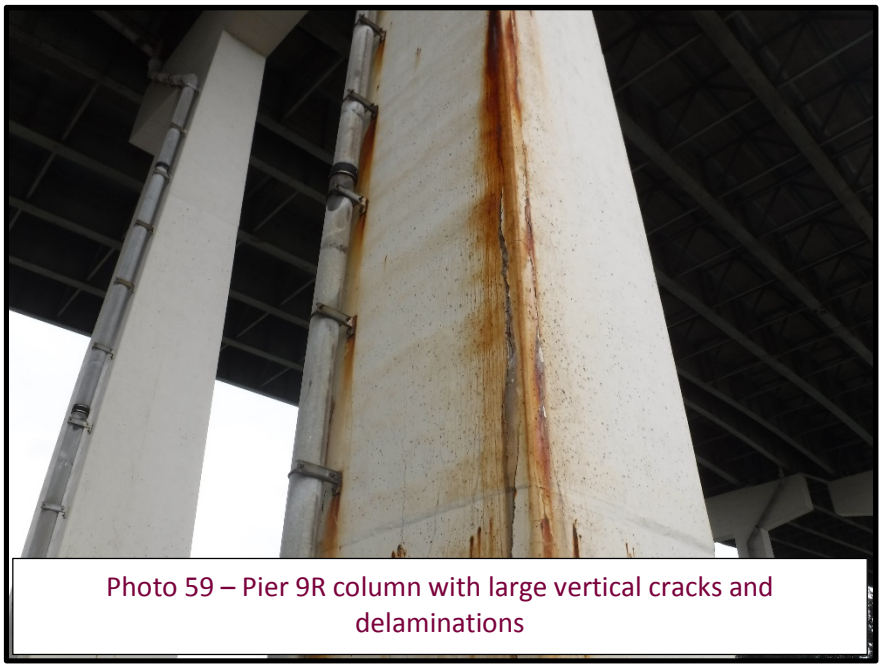


Photo 59 – Pier 9R column with large vertical cracks and delaminations

The South end of Pier 7R cap is in poor condition exhibiting a large spall with exposed and corroded reinforcing steel (see Photo 60).

Photo 60 – Pier 7 Cap Spalling with exposed reinforcing

5.4.3 BACKWALLS

The backwalls are in **fair** condition. The backwalls on the Rear Abutments and Ramp C-7 are generally in good condition. The elastomeric strip seals at these abutments are in good condition and very little moisture appears to be affecting the backwalls. The backwalls on the Forward Abutments are in fair condition and have minor deficiencies. Both Forward Abutment backwalls exhibit many vertical cracks with spalling and delaminations. Some of the cracking exhibits efflorescence and rust staining. The Ramp B-C backwall is in good condition with a few minor vertical cracks. The Ramp C-B backwall in in poor condition. Large portions of the backwall are delaminated or spalling with exposed reinforcing (see Photo 61). The backwall also exhibits many vertical cracks with rust staining. The continuous progression of the backwall deterioration is most likely caused by the leaking from the strip seal expansion joint.

Photo 61 - Advanced spalling with reinforcement corrosion at Abutment C-B backwall

5.4.4 WINGWALLS

The wingwalls are in **good** condition. There are areas of cracking and spalling near the ground lines of the wingwalls. The South wingwall at Eastbound Ramp B-C has a large vertical crack with moisture leaking through it (see Photo 62). No other significant deficiencies were noted.

Photo 62 - Damp concrete near vertical crack on South wingwall of Abutment B-C

5.4.5 SCOUR

The condition of the scour is **good**. A visual inspection was performed at both abutments and at the bottom of each pier. Very minor erosion exists near the bottom of the piers with downspouts; the erosion is not negatively affecting the piers.

5.4.6 SLOPE PROTECTION

Slope protection is in **good** condition. Minor cracking exists at the bottom of the mainline Eastbound Rear Abutment. The slope protection is failing around the base of the South column of Pier 14R (see Photo 63).

Photo 63 – Failing slope protection at the base of Pier 14R.

5.5 Channel

The Channel overall rating is an **8**, indicating that it is in **very good** condition.

The following items are rated as follows:

CHANNEL ITEMS

	condition state				cr
	QTY.	1	2	3	4	TR
c51. Alignment (LF) d	200.00	200	0	0	0	1.00
c52. Protection (LF) d	400	400	0	0	0	1.00
c53. Hydraulic Opening (EA) d	60	60	0	0	0	1.00
c54. Navigation Lights (EA) d	6	6	0	0	0	1.00
N61. Channel Summary					(9-0)	8

5.5.1 ALIGNMENT

The alignment of the Cuyahoga River is in **good** condition. The river and the canal have a straight alignment for more than 100 feet upstream and downstream. No significant deficiencies were noted.

5.5.2 PROTECTION

The channel protection of the Cuyahoga River is in **good** condition. The Cuyahoga River has steel sheeting that protects the channel banks. No significant deficiencies were noted.

5.5.3 HYDRAULIC OPENING

The hydraulic opening of the Cuyahoga River is in **good** condition. No significant deficiencies were noted.

5.5.4 NAVIGATION LIGHTS

The navigation lights over the Cuyahoga River are in **good** condition. All lights were functioning normally during inspection.

5.6 Sign/Utility

The following items are rated as follows:

SIGN/UTILITY ITEMS	condition state					cr
	QTY.	1	2	3	4	TR
c55. Signs (EA) d	12	11	1	0	0	1.12
c56. Sign Supports (EA) d	9	9	0	0	0	1.00
c57. Utilities (LF) d	4600.00	4600	0	0	0	1.00
General Appraisal					(9-0)	6
N41. Operating Status						A

5.6.1 SIGNS

The signs are rated in **good** condition. The concrete parapet and cover plate of the sign support at Pier 13R has sustained minor collision damage but is still functional.

5.6.2 SIGN SUPPORTS

The sign supports are in **good** condition. The sign supports were inspected from a snooper. The sign supports typically have PCS failure with very minor section loss to the structural steel (see Photo 64). Debris build-up around the signs bases is also typical.

Photo 64 – Typical PCS failure with section loss at the sign supports

5.6.3 UTILITIES

The utilities are in **good** condition. The light poles on the bridge are in generally good condition. Minor PCS loss was noted on the light poles throughout the bridge. The light poles and junction boxes on the bridge are typically rusting and are missing in several locations. **Conduit running across the top of the median at the West end has broken casing with rusting interior protection (see Photo 65).**

Photo 65 – Broken utility conduit along median

5.7 General

5.7.1 INSPECTION ACCESS

Safety Handrail & Cable

The inspection handrails and safety cables in Unit 2 through Unit 4 are in generally good condition. These two features are essential to provide safe access for inspection. They allow an inspection to occur without interruption to the traffic above. There are a few areas on the handrail where the PCS has failed and the handrail is corroding, especially near the downspouts. The safety cable is not properly anchored in a few places and is attached directly onto the handrail (see Photo 66). **Two (2) floorbeam bay lengths are missing the safety cable, but the handrail is in good condition (see Photo 67).** It is typical that the safety cable does not extend

all the way up to the expansion joint, making hinges more difficult to inspect. Because of the lack of handrail near the expansion joints, it is difficult to cross the expansion joint while walking the girders; especially the joints where the neoprene trough is completely full of debris, blocking the inspector's path.

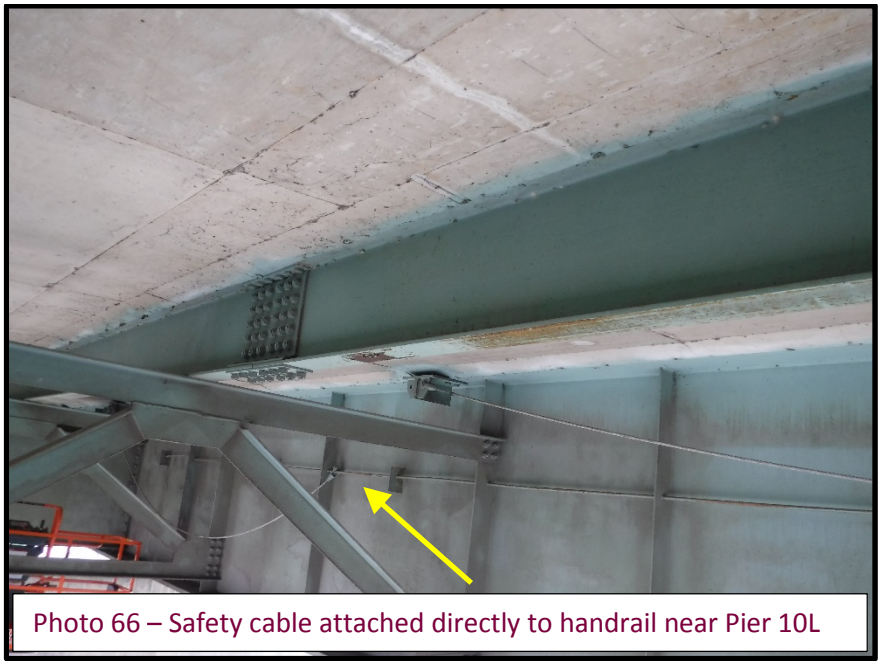


Photo 66 – Safety cable attached directly to handrail near Pier 10L

Photo 67 – Safety cable missing for two floorbeam bays

Safety Cable Issues				
Girder	Unit	Span	**Description**	Location
2-E	**2**	**2**	**Safety Cable Missing**	**4th Floorbeam West of Pier 6L**
3-A	3	2	**Safety Cable Attached to Rail**	4th Floorbeam East of Pier 10L
3-D	3	2	**Safety Cable Attached to Rail**	4th Floorbeam East of Pier 10L

Manholes

The manholes, located in the shoulders above Pier 4, Pier 9, Pier 12, Pier 15 and Pier 20, are in critical condition. The manhole and ladder systems are extremely corroded and cannot be used safely. Several manhole lids are corroded shut preventing access to the pier below. The manhole castings are also leaking water onto the steel below causing the heavy corrosion to the steel (see Photo 68).

Photo 68 – Typical manhole corrosion

Snooper Access

Trees and brush are protruding into the outside shoulders of the bridge which makes reaching below the deck with a snooper difficult at both ends of the bridge in Unit 1 and Unit 6. It is recommended that these trees are cleared prior to next year's inspection. **The ground slope at the East end of the Westbound bridge approaches the bottom of the beam, barring a snooper from reaching in for inspection. Additionally, the recently installed lighting poles for the Towpath Trail, under construction, run under Span 4 and limit the amount of snooper boom rotation in the span.**

5.8 Conclusion and Recommendations

HDR and DLZ have determined the following recommendations for this bridge. Based on the level of urgency, recommendations have been divided into three categories: Priority, Maintenance, and Monitor.

5.8.1 PRIORITY

The following recommendations are priority repairs which should be completed as soon as possible to address an immediate safety concern:

- Repair the concrete expansion joint headers at all abutment expansion joints
- Repair holes in the mainline Eastbound Rear Abutment expansion joint armor
- Repair deteriorated wearing surface patches and patch any existing potholes including the deck core that was found West of Pier 10
- Repair failed neoprene trough steel support armor which is hanging from Expansion Joint 5R
- Replace torn neoprene drainage troughs that have tears or have missing anchor bolts

5.8.2 MAINTENANCE

The following recommendations are on-going repairs which are intended to maintain the current level of service for the structure:

- Clean all scuppers and downspouts to prevent water from leaking onto the steel and piers below the expansion joints
- Clean the drainage troughs under the finger joints, which are still in good condition, to prevent water from leaking onto the steel and piers below the expansion joints
- Patch the wearing surface to protect the underlying floor
- Patch and reseal cracked or spalled portions of the concrete parapet
- Repair any damaged portion of the parapet vandal protection fence
- Replace the seal at the mainline forward abutments and the Ramp C-B and Ramp B-C abutments to prevent moisture from leaking onto the substructure below
- Tighten loose bolts and replace missing bolts in cross-frames, floorbeams, stringers, bearings and hinges
- Clean and repaint structural steel
- Repair portions of safety cable which were incorrectly installed or missing
- Rehabilitate inspection manholes system above Pier 4, Pier 9, Pier 12, Pier 15 and Pier 20
- Remove vegetation at both ends of structure to allow snooper access during inspection

5.8.3 MONITOR

The following items should be investigated and recorded with each annual bridge inspection:

- Monitor the deterioration to the structural steel under the leaking deck joints for accelerated corrosion
- Monitor the bearings and expansion rollers with large rotations and those that are floating
- Monitor all the fatigue prone details
- Monitor spalling and reinforcing corrosion at the tops of the backwall at both abutments and at the South edge of Pier 7R

APPENDIX I – Bridge Inspection Field Report

DRAFT

2017 ELEMENT LEVEL INSPECTION
BRIDGE INSPECTION FIELD REPORT

Structure File Number: 1811991 Inventory Bridge Number: CUY 00490 01.000 Bridge Type: 3 - STEEL/6 - GIRDER (FLOOR SYSTEM)/3 - DECK

Sufficiency Rating: 86.7 Date Built: 7/1/1990

District: 12 Place Code (FIPS): CLEVELAND I-490 over CUYAHOGA RIVER Type of Service on: HIGHWAY

APPROACH ITEMS

	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (EA)	7	0	5	2	0	2.71
c2. Approach Slabs (SF)	11834.4	11175.4	448	211	0	1.32
c3. Relief Joint (LF)	461.3	283.3	178	0	0	1.49
c4. Embankment (EA) d	9	9	0	0	0	1.00
c5. Guardrail (EA)	10	3	6	1	0	2.29

N36. Safety Features: Tr, Gr, Tm — 36)B 1 36)C 1 36)D 1

c6. Approach Summary (9-0) 5

DECK ITEMS

	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	518996	497603	14019	7373	1	1.26
c7.2 Edge of Floor/Slab (LF)	15139	15016	123	0	0	1.01
c8. Wearing Surface (SF)	518995	516495	1973	526	1	1.02
c9. Curb/Sidewalk/Walkway (LF)						
c10. Median (LF)	6914	6668	246	0	0	1.05
c11. Railing (LF)	8192	7653	459	80	0	1.24

N36. Safety Features: Rail — 36)A 1

c12. Drainage (EA) d	35	19	12	2	2	2.78
c13. Expansion Joint (LF) d	1256	1030	96	130	0	2.06

N58. Deck Summary (9-0) 7

SUPERSTRUCTURE ITEMS

	QTY.	1	2	3	4	TR
c14. Alignment (EA) d	54	54	0	0	0	1.00
c15.1 Beams/Girders (LF)	55594	347331	19962	901	00	1.63
c15.2 Slab (SF)						
c16. Diaphragm/X-Frames (EA)	2341	156	2068	117	0	2.21
c17. Stringers (LF)	16943	3098	13689	156	0	1.93
c18. Floorbeams (LF)	18629	1317	16903	409	0	2.08
c19. Truss Verticals (EA)						
c20. Truss Diagonals (EA)						
c21. Truss Upper Chord (EA)						
c22. Truss Lower Chord (EA)						
c23. Truss Gusset Plate (EA) d						
c24. Lateral Bracing (EA)						
c25. Sway Bracing (EA)						
c26. Bearing Devices (EA) d	465.00	314	106	42	3	2.19
c27. Arch (LF)						
c28. Arch Column/Hanger (EA)						
c29. Arch Spandrel Walls (LF)						
c30. Prot. Coating System (LF) d	91162	414930	464588	2364	847	2.07
c31. Pins/Hangers/Hinges (EA) d	64	0	61	3	0	2.23
c32. Fatigue (LF) d	91162	911444	18	0	0	1.00

N59. Superstructure Summary (9-0) 6

SUBSTRUCTURE ITEMS

	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	524.6	483.6	41	0	0	1.11
c34. Abutment Caps (LF)		0				
c35. Abut. Columns/Bents (EA)		0				
c36. Pier Walls (LF)	25.3	18.3	7	0	0	1.36
c37. Pier Caps (LF)	3821.2	3757.2	61	3	0	1.04
c38. Pier Columns/Bents (EA)	132	107	24	1	0	1.36
c39. Backwalls (LF)	524.6	468.6	42	14	0	1.48
c40. Wingwalls (EA)	8	8	0	0	0	1.00
c42. Scour (EA) d	58	58	0	0	0	1.00
c43. Slope Protection (EA) d	6	6	0	0	0	1.00

N60. Substructure Summary (9-0) 7

CULVERT ITEMS

	QTY.	1	2	3	4	TR
c44. General (LF)						
c45. Alignment (LF) d						
c46. Shape (LF) d						
c47. Seams (LF) d						
c48. Headwall/Endwall (LF)						
c49. Scour (LF) d						
c50. Abutments (LF)	0					

N62. Culvert Summary (9-0) N

CHANNEL ITEMS

	QTY.	1	2	3	4	TR
c51. Alignment (LF) d	200.00	200	0	0	0	1.00
c52. Protection (LF) d	400	400	0	0	0	1.00
c53. Hydraulic Opening (EA) d	60	60	0	0	0	1.00
c54. Navigation Lights (EA) d	6	6	0	0	0	1.00

N61. Channel Summary (9-0) 8

SIGN/UTILITY ITEMS

	QTY.	1	2	3	4	TR
c55. Signs (EA) d	12	11	1	0	0	1.12
c56. Sign Supports (EA) d	9	9	0	0	0	1.00
c57. Utilities (LF) d	4600.00	4600	0	0	0	1.00

General Appraisal (9-0) 6

N41. Operating Status A

Inspector Name Foye, Ian

Inspection Date/Type 07/30/2018 Routine and In-Depth and Fracture

PE Number 82900

Reviewer Name

Review Date

PE Number

Structure File Number: 1811991 Inventory Bridge Number: CUY 00490 01.000 Bridge Type: 3 - STEEL/6 - GIRDER (FLOOR SYSTEM)/3 - DECK

Sufficiency Rating: 86.7 Date Built: 7/1/1990

District: 12 Place Code (FIPS): CLEVELAND I-490 over CUYAHOGA RIVER Type of Service on: HIGHWAY

Key: "Qty" = Quantity for Element Level inspection; "(LF)" = Linear Feet; "(SF)" = Square Feet; "(EA)" = Each or count; "CR" = 1-4 Condition Rating or average of worst span unless Summary item 9-0, then the average of entire bridge influenced by the bold boxes; "TR" = Transition Rating or weighted average of condition states; "d" = dedicated or specific chart and guidance, all others use Material specific chart/guidance; "c" = condition prefix; "N" = NBIS rating

Inspection Procedures

Consultant Inspection. 7-30 through 8-7. Climb access over RR on 9-24 to 9-25. Weekdays anytime with DLZ Engineering, Matt Lawler 216-392-4447.

Comments

APPROACH

c1. Approach Wearing Surface

All of the mainline and ramp approaches have concrete and asphalt patches throughout. About 10% of the approach wearing surfaces have existing patches or need to be patched; these areas are exposing the underlying base. The approach wearing surfaces typically have potholes and patched areas that are unsound and breaking apart. Longitudinal and transverse cracks are also common throughout all approach wearing surfaces.

c2. Approach Slabs

Approximately 10% of the mainline approach slabs have been patched or are in a distressed state and need to be patched. Several concrete patched areas have completely deteriorated and are filled with asphalt concrete. The approach slabs of Ramp C-B, Ramp B-C and Ramp C-7 are in good condition. None of the approach slabs appear to be settling and there is no evidence of undermining.

c3. Relief Joint

The Eastbound Rear Abutment relief joint is heavily cracked and deteriorated in the shoulder and the remaining relief joint has moderate transverse cracks throughout. The Eastbound Ramp C-B relief joint is heavily cracked and appears to be settling throughout. The Westbound Rear Abutment relief joint has minor transverse cracks throughout and one large crack in the Southern two lanes. The relief joints at the Westbound Forward Abutment, Ramp B-C, and Ramp C-7 are in good condition with only hairline transverse cracks present.

c5. Guardrail

There are locations with minor cracking with rust staining at the guardrail connections to the concrete parapet. Two locations have sustained collision damage and are in serious condition. The guardrail on the North side of Ramp C-B is severely damaged and four (4) posts are bent and misaligned. The guardrail on the South side of the Eastbound Forward Abutment is severely damaged with multiple posts that are missing or are damaged and the guardrail thrie-beam is misaligned and bent. The concrete parapets on all of the approach slabs are in good condition with minor vertical cracks and minor spalls throughout.

DECK

c7.1 Floor/Slab

There is map cracking, transverse and longitudinal cracks with efflorescence, spalling with exposed reinforcing steel, delaminations and efflorescence located throughout the deck. The bridge deck was in generally worse condition near the expansion joints.There are several locations near the middle of a few spans where a single

transverse crack stretched all the way across the deck floor. These areas often had smaller cracks and delaminations propagating from them. There is an open deck core just West of Pier 10 between Girder 3-F and Stringer 3-5. The open core is allowing water to leak through the deck and saturate the concrete around the core.

c7.2 Edge of Floor/Slab

The bridge fascia exhibits minor vertical cracks throughout; these are located approximately every 5 to 10 feet. There is also rust staining present on the edge of floor slab which appears to be leakage from the bridge railing. Larger cracks and spalling were noted near the expansion joints. Several spalls exist on the interior median joint in Unit 5 and Unit 6.

c8. Wearing Surface

The wearing surface has transverse and longitudinal cracks throughout which is allowing water to seep into the concrete deck and promoting deterioration of the floor. Most of the raised pavement markers are missing leaving approximately 6 inch by 6 inch by 1-inch-deep crevices in the deck. There are multiple locations of patches, some of which are concrete and some of which are asphalt concrete.There are locations where patches are deteriorated.

c10. Median

There are multiple locations of cracking, mostly vertical, and spalls on the parapet faces. There are locations where the neoprene cover is missing from on top of the median, most notably on Span 13 and Span 14. There is significant cracking and spalling with exposed reinforcing steel at the expansion joint between Spans 4 and 5.

c11. Railing

Both the Eastbound and Westbound parapets are cracking with rust staining and exhibit spalling throughout. The majority of the cracks are vertical cracks which extend the entire length of the bridge and are typically spaced 15 feet to 20 feet apart. There are locations of spalling on the exterior side of the parapet which fully expose the vandal protection fence posts.

There are several locations on the Eastbound side where the fence fabric has been damaged and the fence posts are bent. At random locations throughout the bridge, the pack rust around the fence is prying up the fence base plate. Many of the fence gates are unlocked. There are multiple locations where the horizontal rail splices are broken due to heavy corrosion. There are long stretches of fence with damaged diamond mesh fabric and with broken or bent fence posts. 120 feet of damaged fence with a bent post is located on Westbound Span 16. Westbound Span 14 has 20 feet of damaged fabric with a broken post. Westbound Span 7 has over 40 feet of damaged and loose fabric. Eastbound Span 1 has one (1) fence post missing, effectively doubling the fabric span length.

c12. Drainage

Most of the scuppers are partially clogged with six (6) scuppers being completely plugged. Loose trash and debris on the deck is accumulating near the scuppers. There is a loose scupper grate in the right exit lane on the Eastbound direction, which makes a loud banging noise.

The neoprene drainage troughs run transversely below the finger expansion joints, they are mostly clogged and overflowing with debris. There are multiple locations were the neoprene troughs are torn open leaking debris and water onto the steel framing below. Many of the couplers are misaligned. Several connections to the

hoppers are also misaligned and filled with debris.

c13. Expansion Joint

The mainline Eastbound Rear Abutment has several locations in which the steel joint is damaged and missing. The expansion joint concrete headers exhibit spalling throughout causing potholes to form at the Rear and Forward Abutments. Expansion Joint 2 fingers are misaligned horizontally, most notably at Westbound Expansion Joint 5. There are several areas of rust with most of the rust prevalent on the shoulders of the deck. Areas around the finger joints are patched but starting to deteriorate. Two teeth are missing from Westbound Expansion Joint 2

The sliding plate joints at the mainline Forward Abutments and at Ramp C-B are generally in good condition. The joint sealer is not water tight and, based on the condition of the abutment backwalls, moisture is leaking onto the structure below. The leaking joint is causing corrosion and deterioration to the bridge deck, abutment, and steel members below the joint

SUPERSTRUCTURE

c15.1 Beams/Girders

The Beams and Girders are in good condition. Corrosion is common at the bottom of the webs and the tops of the bottom flanges along the fascia girders. Corrosion is most active near the expansion joints. In these areas, the girders or beams exhibit heavier laminar rusting with moderate section loss up to 1/8” in some cases which typically extends about 10 to 15 feet on either side of the expansion joint. There are also several locations of the transverse stiffener being tack welded to the girder. There is a location between Pier 7L and Pier 9L where the bottom girder flanges exhibit a wave which is most likely a fabrication or erection deficiency. Multiple wind guide attachments are rusted and bent away from the girder.

There are multiple locations where longitudinal stiffeners are slightly bent or bowed.There are also multiple locations of misdrilled holes in the transverse stiffeners. These misdrilled holes are most likely handrail holes which were incorrectly placed or erection bolt holes that were drilled during construction to fit-up the crossframes. There is also one location where a vertical stiffener is not welded to Girder J, this was most likely missed during original construction. There a few location with missing bolts in girder splices.

c16. Diaphragm/Cross Frames

There are several locations throughout the length of the bridge where the crossframe connections to the girder or beam transverse stiffener have loose bolts, missing bolts or misdrilled holes. Based on the PCS and the overall physical condition of the girders and crossframes, this defect does not negatively affect the surrounding members or the overall structure.

c17. Stringers

The stringers are in good condition. The condition of the stringers worsens near the expansion joints and over the river, most likely due to the presence of moisture. There are some minor areas of corrosion and freckled rust at these locations, although no section loss or pitting is notable.

Stringer 5 at Floorbeam 6 in the span between Pier 6L and 7L is completely disconnected from the floorbeam and is floating. A half inch gap exists between the floorbeam and the stringer. The gap effectively doubles the span length of the

stringer.

c18. Floorbeams

The connections of the floorbeams to girders are in fair condition with loose bolts, missing bolts, and misdrilled holes found throughout the length of the bridge. Freckled rusting is common on the diagonal members of the K frames. 6 new locations of missing bolts or misdrilled holes were found in the 2017 inspection.

c26. Bearing Devices

The abutments typically have debris build-up around the bearings. Many of the rockers at the abutments exhibit heavy rusting on both the rockers and base plates. Laminar corrosion present around bolts and base plates on the Forward Abutment bearings.
It was noted that rocker bearing 1-X of the Eastbound bridge is floating. The bearing is hand loose and appears to be carrying zero live load and zero dead load, the load is likely transferred through the deck to the adjacent bearings. There are several locations where the bearing connection bolts and plates are loose.

The pier bearings near the expansion joint drainage pipes are generally in worse condition. Bearings near the drainage pipes exhibit surface rust to the bearing and pier connection plate.

c30. Protective Coating System

The Protective Coating System is in fair condition. Areas around the drainage system show the most deterioration to the PCS. In these areas, there's both surface corrosion and laminar corrosion to the girders, floorbeams, crossframes, and bearings. There are also localized areas throughout the bridge where the paint is missing and the primer is exposed.

c31. Pins/Hangers/Hinges

The Hinges are in fair condition. The area adjacent to the hinges commonly has debris piled on top of the girder flange. This is problematic because the debris will hold water on the girder flange further advance the rusting. There is one (1) missing bolt in the sole plate of Girder 3-K at Expansion Hinge 3 and one (1) missing bolt in the sole plate of Girder 4-D at Expansion Hinge 3. Several bolts appear to be missing or broken due to the large build-up of rust around the expansion hinges. Laminar corrosion is active where the teeth of the hinges fall into the grooves of the sole plate and the masonry plate.

c32. Fatigue

There is a tri-axial weld at expansion joint 5, but no cracks were noted. No cracks noted at the ends of the longitudinal stiffeners. The stringer bottom flange to floorbeam top flange weld is considered a fatigue prone detail. Stringer 5 at Floorbeam 6 in the span between Pier 6L and 7L is completely disconnected from the floorbeam. No other signs of fatigue cracking were noted for this detail.

SUBSTRUCTURE

c33. Abutment Walls

The abutment walls on the rear abutments and Ramp C-7 are generally in good condition. The abutment walls on both forward abutments exhibit several minor vertical cracks with rust staining, spalls and delaminations.

c38. Pier Columns/Bents

Minor vertical cracks throughout the pier columns. Most of the vertical cracks extend half of the column height or more. The pier caps and columns with drainage attached to them are generally in worse condition then the other piers.

c36. Pier Walls

Pier 9L is the only hammerhead pier on the bridge. It is generally in good condition with minor spalls and cracks with efflorescence.

c37. Pier Caps

The pier caps are generally in good condition. Horizontal cracks in the pier caps are frequent, and are often mirrored on both sides of the cap. There were also some locations of diagonal cracking stemming from the joint where the cap meets the column. The South end of Pier 7R cap is in poor condition exhibiting a large spall with exposed and corroded reinforcing steel.

c39. Backwalls

The backwalls on the rear abutments and Ramp C-7 are generally in good condition. The backwalls on the forward abutments are in fair condition and have minor deficiencies. Both forward abutment backwalls exhibit many minor vertical cracks with minor spalls and delaminations. Some of the cracking exhibits efflorescence and rust staining. The Ramp C-B backwall in in poor condition. Large portions of the backwall are delaminated or spalling with exposed reinforcing

c40. Wingwalls

There are minor areas of cracking and spalling near the ground lines of the wingwalls. The South wingwall at Eastbound Ramp B-C has a large vertical crack with moisture leaking through it

c43. Slope Protection

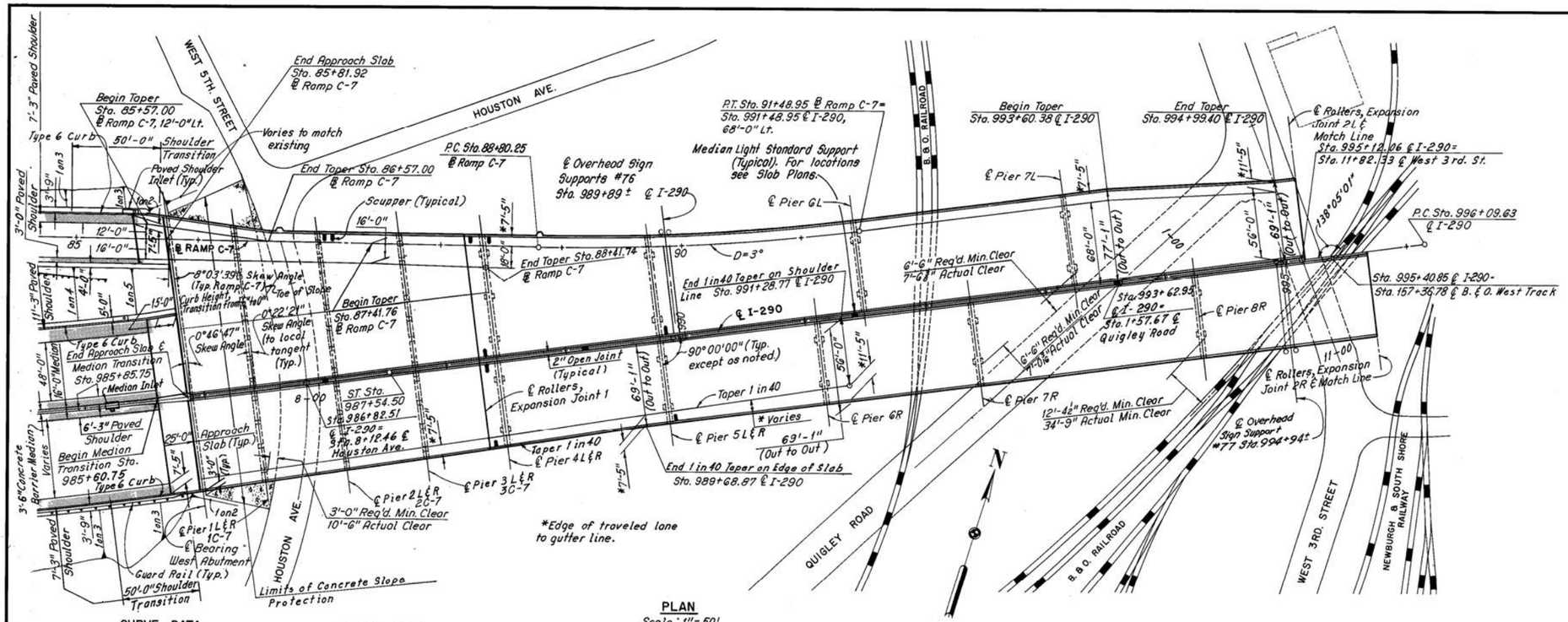
Slope protection is in good condition. Minor cracking exists at the bottom of the mainline Eastbound Rear Abutment. The slope protection is failing around the base of the South column of Pier 14R.

APPENDIX II – Existing Site Plans

FHWA REGION	STATE	PROJECT	
5	OHIO		

74
174

CUYAHOGA COUNTY
CUY- 290-027



PROPOSED STRUCTURE

TYPE: Continuous steel beam (Unit 1) continuous welded steel girder with floor system (Units 2, 3 and 4), continuous multiple welded steel girder (Units 5, 6 and C-8) with reinforced concrete deck and substructure.

SPANS: Spans are measured along ℄ I-290:
Unit 1 - 53'-0", 67'-0", 67'-0" 53'-0"
Unit 2L - 151'-0" Cantilever, 131'-6", 180'-6", 180'-6", 180'-6" Cantilever.
Unit 3L - 201'-0" Cantilever, 237'-0", 330'-0", 174'-0", 201'-0" Cantilever.
Unit 4L - 178'-0½", 188'-11⅜", 145'-0¼", 151'-0" Cantilever.
Unit 2R - 151'-0" Cantilever, 131'-6", 131'-6", 131'-6", 182'-6", 147'-0".
Unit 3R - 201'-0" Cantilever, 201'-0", 340'-0", 185'-0", 201'-0" Cantilever.
Unit 4R - 164'-0½", 166'-11⅜", 145'-0¼", 151'-0" Cantilever.
Unit 5 - 119'-0", 135'-0", 135'-2½", 134'-9⅜", 124'-1⅛", 101'-0" Cantilever.
Unit 6 - 104'-9½", 117'-7½", 119'-8⅜", 122'-9½", 96'-10¼".
Spans are measured along ℄ Ramp C-8:
Unit 6C-8 - 114'-6¼", 122'-11⅛", 124'-9", 124'-9", 96'-0".

ROADWAYS: I-290 - Width Varies face to face of parapets, 67'-0" to 143'-2" Left Bridge and 67'-0" to 103'-2" Right Bridge. There is an 2" open joint between Left and Right Bridge.

Ramp C-8 - Width Varies, 28'-0" to 36'-0" face to face of parapets.

LOADING: HS 20-44 and Interstate Alternate Loading.

SKEW: Unit 1 - None with respect to local tangent at S.T. Sta. 987+54.50
Unit 2 - None
Unit 3 - None
Units 4, 5 and 6 - Varies (See Plan)
Unit 6C-8 - 45° Right Forward with respect to local Tangent at P.T. Sta. 10+89.88

WEARING SURFACE: 1½" Latex Modified Concrete

APPROACH SLABS: AS-1-81 (25' long)

ALIGNMENT: Units 1 thru 6 - Spiral left, Tangent and 0°50' Curve Right.
Unit 6C-8 - 3° Curve Right, 8° Curve Right and Tangent.

SUPERELEVATION: Unit 1 - Varies: -0.0156 ft. per ft. to +0.169 ft. per ft.
Unit 2 - Varies level to .0156 ft. per ft.
Unit 3 - Varies .0156 ft. per ft. to .02 ft. per ft.
Units 4, 5 and 6 - .02 ft. per ft.
Unit 6C-8 - Varies .0156 ft. per ft. to .064 ft. per ft.

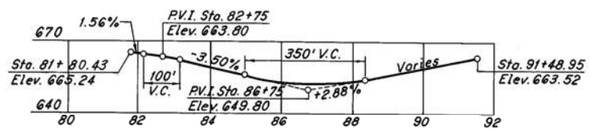
CURVE DATA
℄ RAMP C-7

P.I. Sta. 90+14.82
Δ = 8°03'39"
D = 3°00'00" Left
R = 1,909.86'
T = 134.57'
L = 268.70'
E = 4.74'

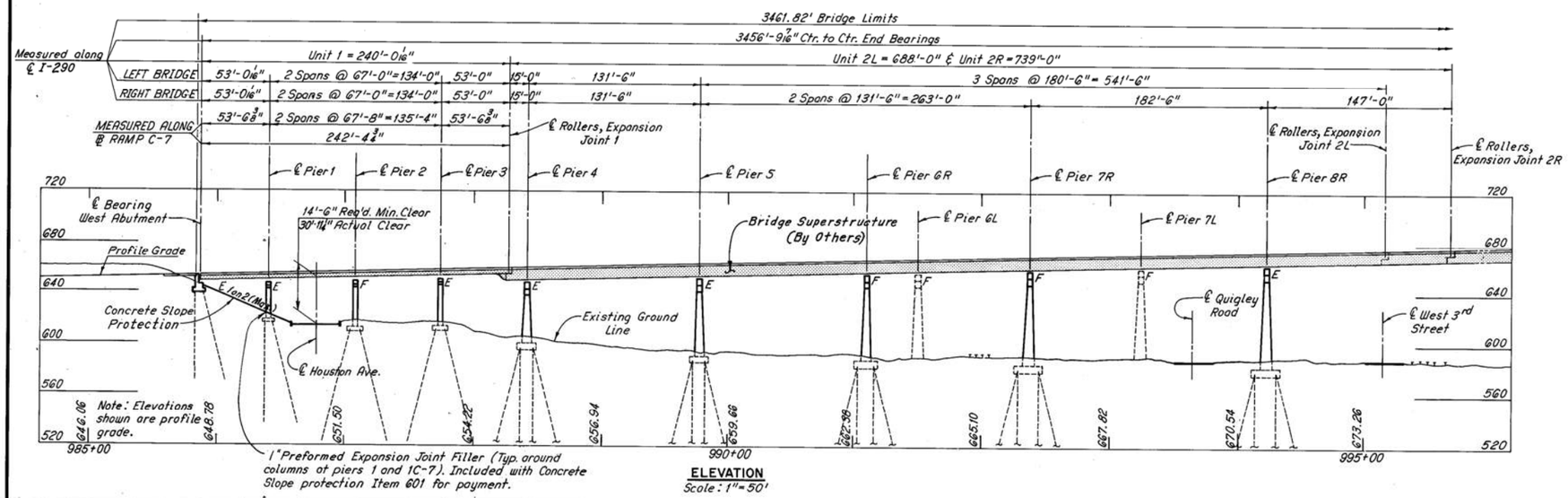
SPIRAL DATA
℄ I-290

C.S. Sta. 983+54.50
S.T. Sta. 987+54.50
Θs = 4°00'00"
Ts = 590.53'
Ls = 400.00'
P = 2.33'
K = 199.97'
S.T. = 133.40'
L.T. = 266.74'
Es = 28.81'

PLAN
Scale: 1" = 50'



PROFILE RAMP C-7
Scale: Horiz. 1" = 200'
Vert. 1" = 30'



ELEVATION
Scale: 1" = 50'

TRAFFIC DATA: (2005)
I-290
87,120 A.D.T.
8,172 D.H.V.
TRUCK 5 %

Maintenance of Traffic

Two lanes of traffic with a minimum vertical clearance of 14'-6" and a minimum horizontal width of 18'-0" on Houston Avenue, 35'-0" on Quigley Road and 30'-0" on West 3rd Street and Independence Road shall be maintained at all times.

Foundation Data

See General Note No. 14.

Notes:
For existing contours, buildings and underground utilities see Site Plan Sheets.

H.N.T.B. BR. NO. 9 PART I - SUBSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF CONSULTING ENGINEERS CLEVELAND — HNTB

GENERAL PLAN AND ELEVATION UNITS 1 AND 2

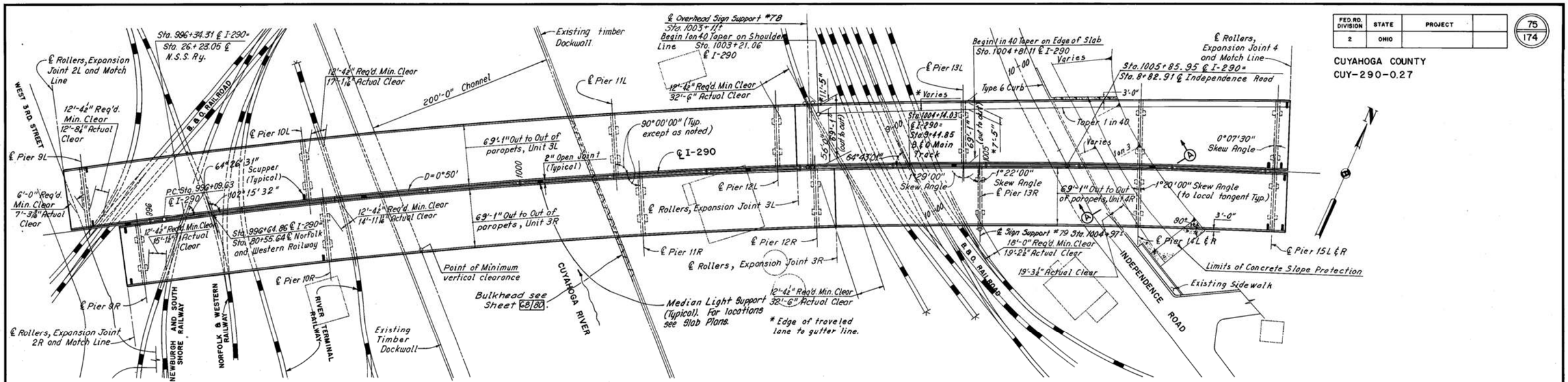
I-290 OVER CUYAHOGA RIVER
BR. NO. CUY-290-0110
STA. 985+85.75 TO STA. 1020+47.57 (℄ I-290)
CLEVELAND CUYAHOGA COUNTY OHIO

DRAWN	TRACED	CHECKED	REVIEWED	REVISED
JWC	DLP	D.H.S.	C.A.B.	
DATE 3-10-70	DATE 4-1-70	DATE 10-9-70	DATE 10-18-82	SHEET 1 / 80

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

75
174

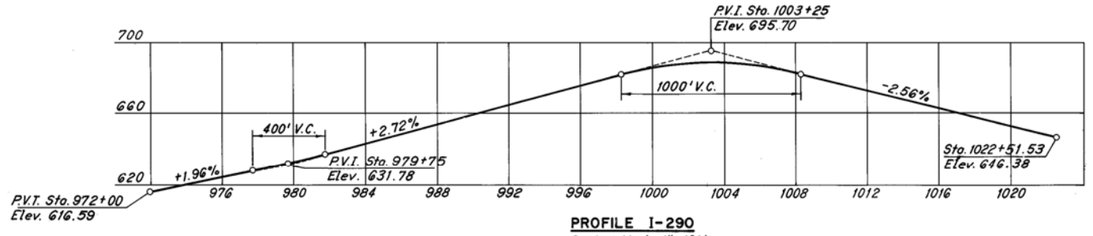
CUYAHOGA COUNTY
CUY-290-0.27



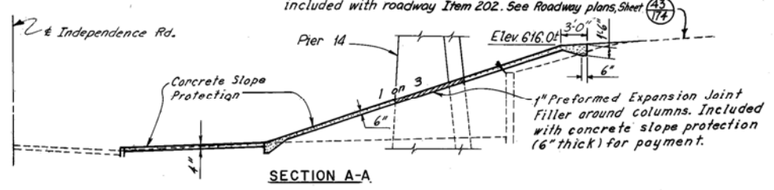
PLAN
Scale: 1"=50'

CURVE DATA
℄ I-290

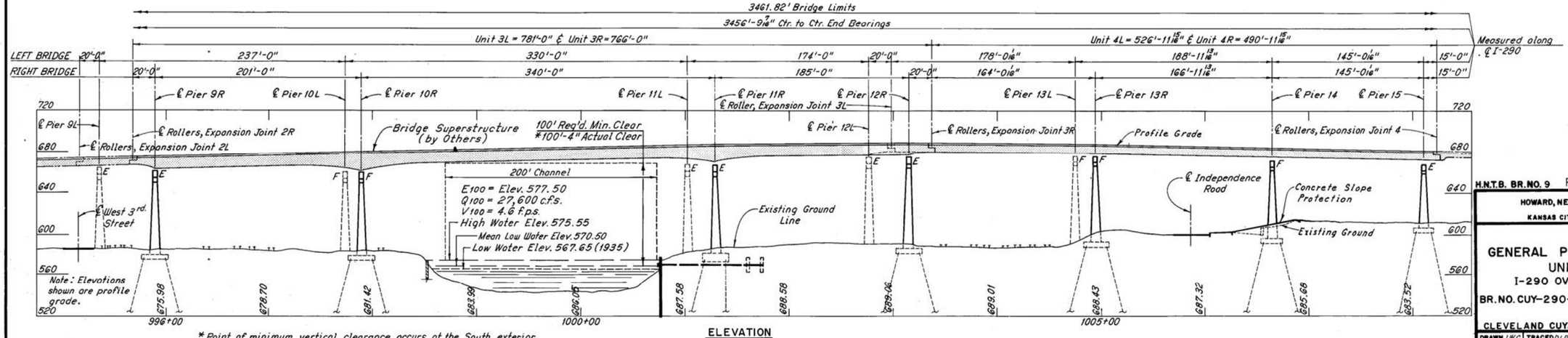
P.I. Sta. 1009+47.08
Δ = 22°00'57"
D = 0°50'00" Right
R = 6,875.49'
T = 1,337.45'
L = 2,641.90'
E = 128.88'



PROFILE I-290
Scale: Horiz. 1"=400'
Vert. 1"=40'



SECTION A-A



*Point of minimum vertical clearance occurs at the South exterior girder and West edge of 200' channel.

ELEVATION
Scale: 1"=50'

H.N.T.B. BR. NO. 9 PART I - SUBSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

GENERAL PLAN AND ELEVATION
UNITS 3 AND 4
I-290 OVER CUYAHOGA RIVER

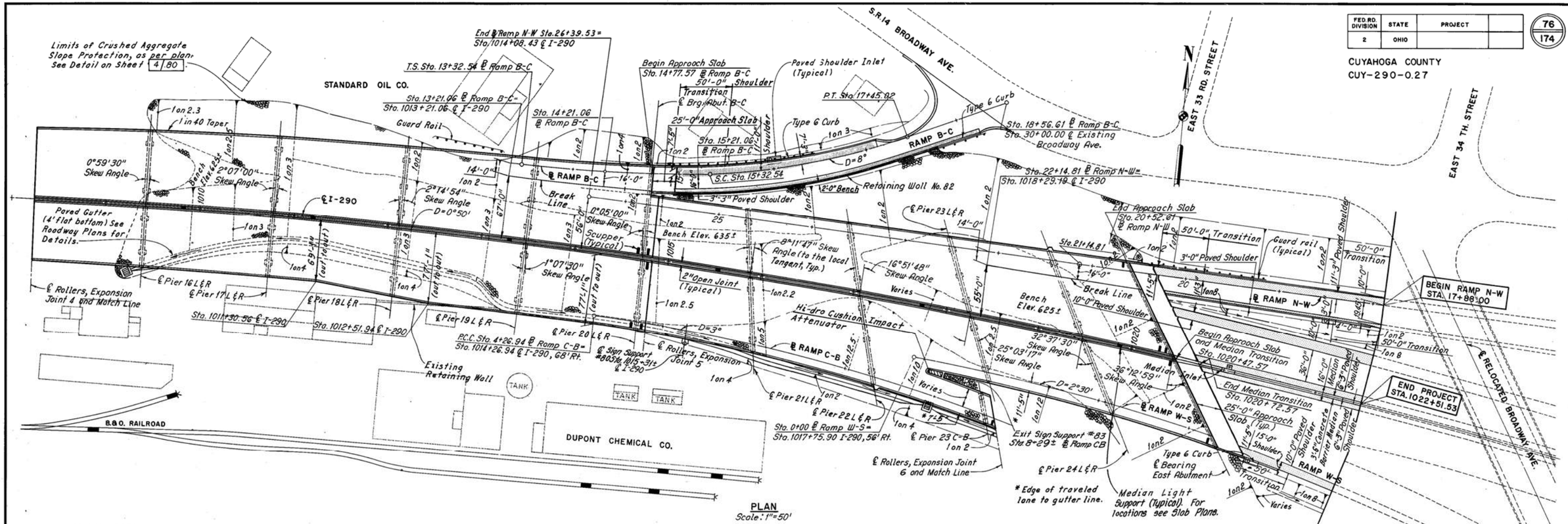
BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57 (℄ I-290)
CLEVELAND CUYAHOGA COUNTY OHIO

DRAWN JWC	TRACED DLR	CHECKED DHS 10-8-70	REVIEWED CAB 10-16-85	REVISED
DATE 3-1970	DATE 4-1-70	DATE	DATE	SHEET 2 80

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

76
174

CUYAHOGA COUNTY
CUY-290-0.27



PLAN
Scale: 1"=50'

SPIRAL DATA
℄ RAMP B-C

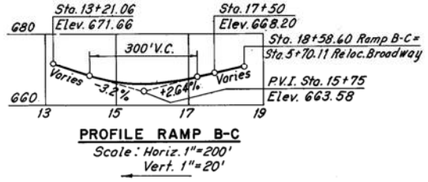
T.S. Sta. 13+32.54
S.C. Sta. 15+32.54
θ_s = 8°00'00"
T_s = 253.71'
L_s = 200.00'
P = 2.32'
K = 99.94'
S.T. = 66.79'
L.T. = 133.47'
E_s = 18.60'

CURVE DATA
℄ RAMP B-C

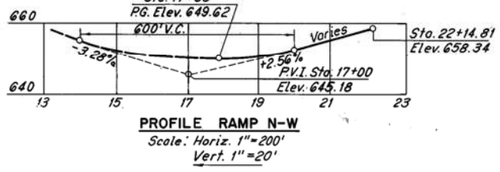
P.I. Sta. 16+39.57
Δ = 16°59'53"
D = 8°00'00"
R = 716.20'
T = 107.02'
L = 212.48'
E = 7.95'

CURVE DATA
℄ RAMP W-S

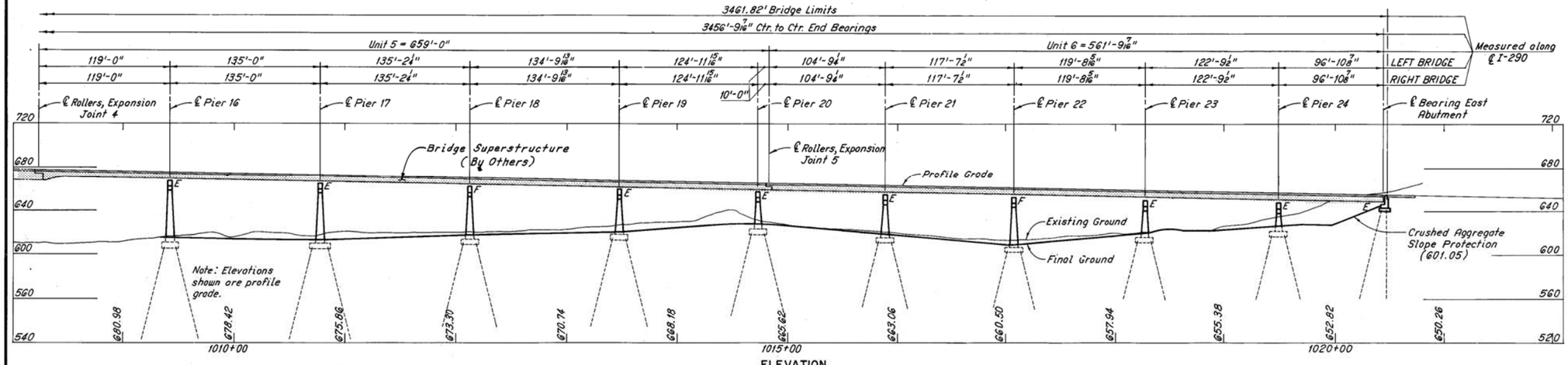
P.I. Sta. 4+02.12
Δ = 19°54'12"
D = 2°30'00"
R = 2,291.83'
T = 402.12'
L = 796.13'
E = 35.01'



PROFILE RAMP B-C
Scale: Horiz. 1"=200'
Vert. 1"=20'



PROFILE RAMP N-W
Scale: Horiz. 1"=200'
Vert. 1"=20'



ELEVATION
Scale: 1"=50'

Note:
See Roadway Plans for final grading of cut slopes.

H.N.T.B. BR. NO. 9 PART I - SUBSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

GENERAL PLAN AND ELEVATION UNITS 5 AND 6

I-290 OVER CUYAHOGA RIVER

BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57

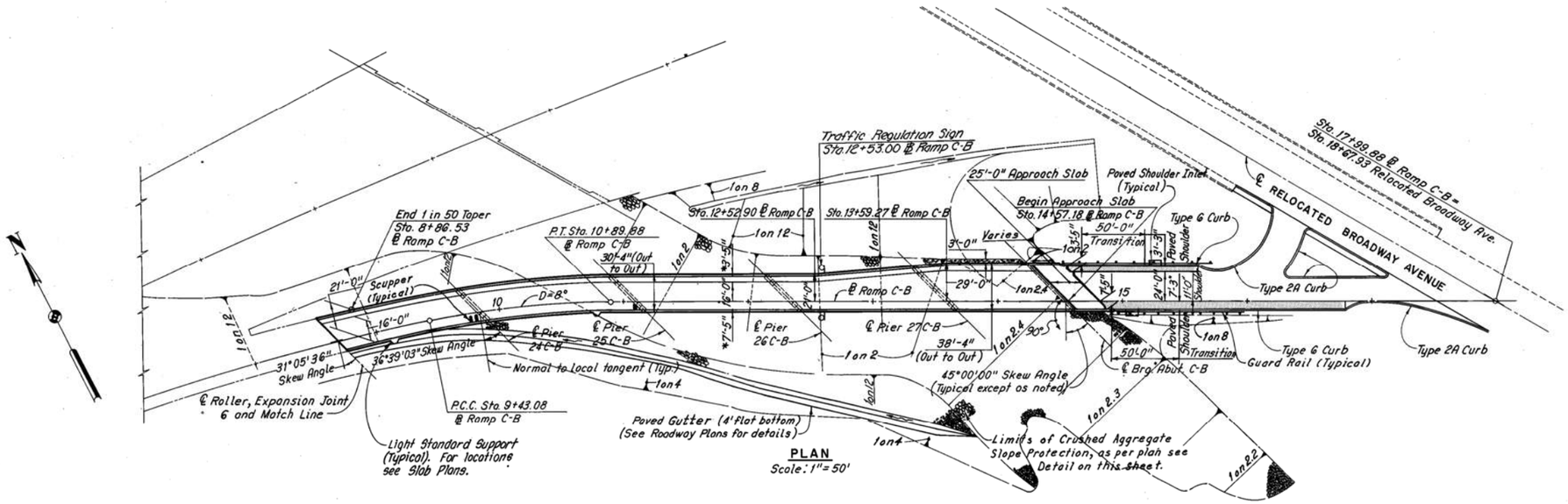
CLEVELAND CUYAHOGA COUNTY (℄ I-290) OHIO

DRAWN J.F.C.	TRACED D.L.A.	CHECKED D.H.S.	REVIEWED C.A.B.	REVISED
DATE 3-10-70	DATE 4-1-70	DATE 10-8-70	DATE 10-18-85	SHEET 3 / 80

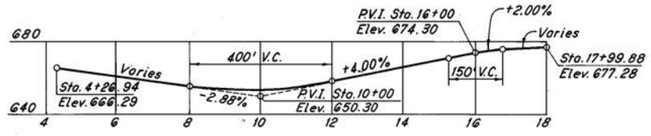
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

77
174

CUYAHOGA COUNTY
CUY-290-0.27



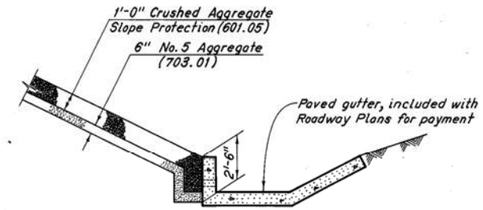
PLAN
Scale: 1"=50'



PROFILE RAMP C-B
Scale: Horiz. 1"=200'
Vert. 1"=40'
Direction of Traffic

CURVE DATA
℄ RAMP C-B

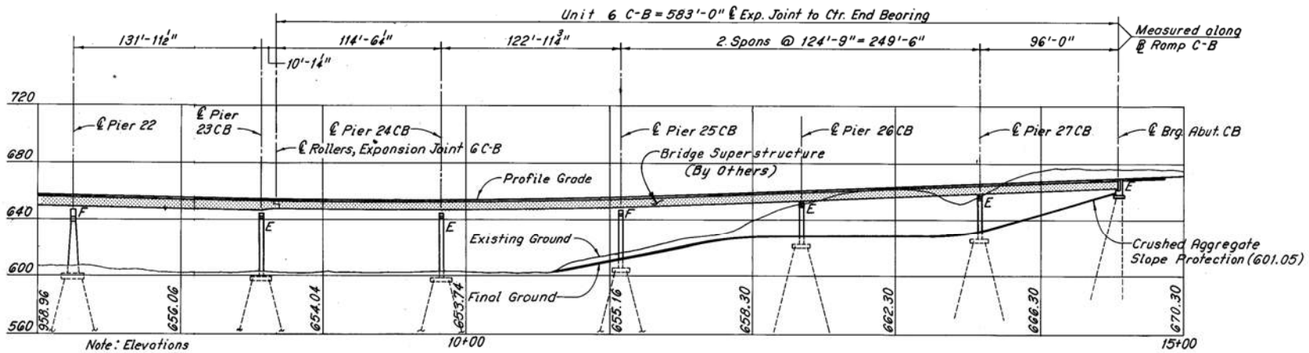
P.I. Sta. 6+86.60	P.I. Sta. 10+16.74
Δ = 15°29'03"	Δ = 11°44'38"
D = 3°00'00" Right	D = 8°00'00" Right
R = 1,909.86'	R = 716.20'
T = 259.65'	T = 73.66'
L = 516.14'	L = 146.80'
E = 17.57'	E = 3.78'



CRUSHED AGGREGATE SLOPE PROTECTION DETAIL

Note: The Crushed Aggregate Slope Protection shall be placed within the limits specified on Sheet 3 80 and on this Sheet. The 6" bed of No. 5 Aggregate shall be placed to the same limits and shall be included with Item 601, Crushed Aggregate Slope Protection, as per plan, for payment.

Note:
See Roadway Plans for final grading of cut slopes.



Note: Elevations shown are profile grade.

ELEVATION RAMP C-B
Scale: 1"=50'

H.N.T.B. BR. NO. 9 PART I - SUBSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

GENERAL PLAN AND ELEVATION RAMP C-B

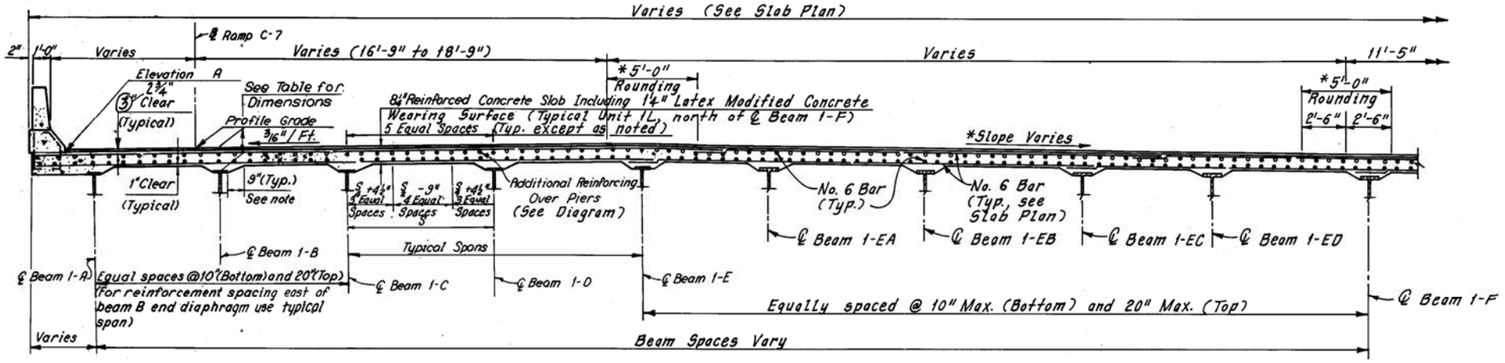
I-290 OVER CUYAHOGA RIVER

BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57 (℄ I-290)

CLEVELAND CUYAHOGA COUNTY OHIO

DRAWN	TRACED	CHECKED	REVIEWED	REVISED
J.W.C.	D.L.R.	D.H.S.	C.A.B.	
DATE 3-10-70	DATE 4-1-70	DATE 10-8-71	DATE 10-18-88	SHEET 4/80

APPENDIX III – Existing Transverse Sections



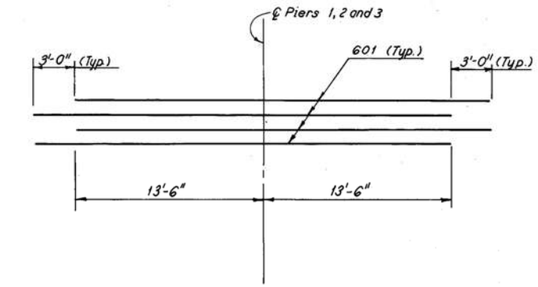
PART CROSS SECTION

Note:
A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

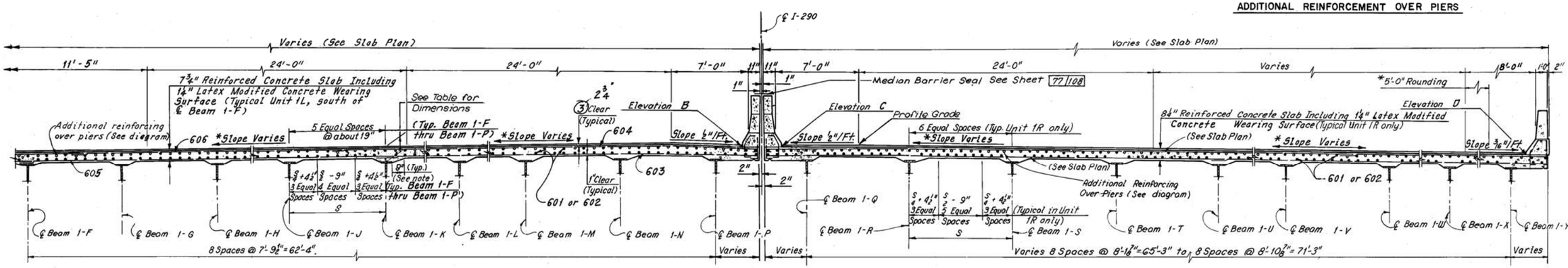
FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

159 / 193

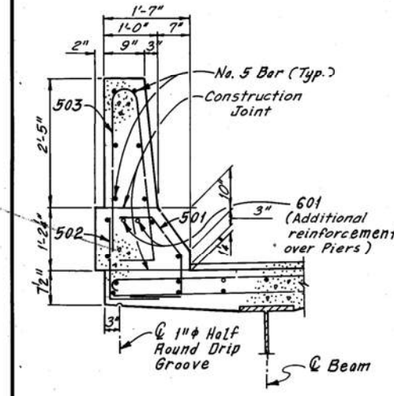
CUYAHOGA COUNTY
CUY-290-0.27



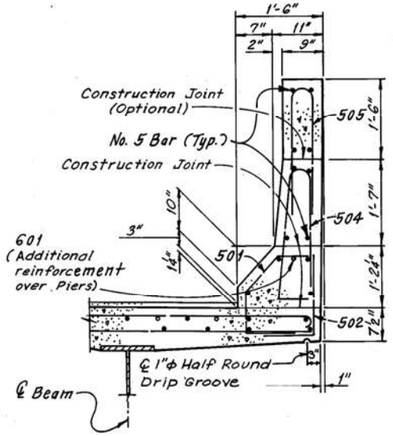
ADDITIONAL REINFORCEMENT OVER PIERS



PART CROSS SECTION



EXTERIOR CURB AND PARAPET DETAIL
(4'-0" Chain Link fence not shown)



MEDIAN CURB AND PARAPET DETAIL

TOP OF PORTLAND CEMENT CONCRETE (GIVEN AT QUARTER SPAN POINTS)																		
	℄ BRG. W.ABUT	1/4	1/2	3/4	℄ PIER 1	1/4	1/2	3/4	℄ PIER 2	1/4	1/2	3/4	℄ PIER 3	1/4	1/2	3/4	EXP. ROLLERS	
ELEV A	653.32	653.10	652.91	652.73	652.60	652.50	652.43	652.39	652.37	652.43	652.55	652.72	652.94	653.15	653.39	653.67	653.95	ELEV A
ELEV B	648.08	648.46	648.82	649.18	649.53	650.00	650.46	650.91	651.35	651.82	652.29	652.73	653.17	653.54	653.90	654.25	654.59	ELEV B
ELEV C	648.09	648.47	648.83	649.18	649.53	650.00	650.46	650.91	651.35	651.82	652.29	652.73	653.17	653.53	653.89	654.24	654.57	ELEV C
ELEV D	649.91	650.19	650.45	650.71	650.96	651.31	651.66	651.97	652.23	652.62	652.96	653.30	653.67	653.98	654.29	654.59	654.88	ELEV D

Note:
The top of Portland Cement Concrete elevations shown at the gutter lines are those which are required before concrete is placed. Proper allowance has been made for the dead load deflections caused by the weight of the concrete and wearing surface.

TOP OF WEARING SURFACE TO TOP OF BEAM FLANGE							
Beams	West Abutment	Field Splice 1	Beam End Diaphragm	Field Splice Beam 1-A	Field Splice 2	Field Splice 3	Expansion Rollers
A	$9\frac{5}{8}$"				$9\frac{1}{4}$"		
B	$9\frac{3}{8}$"			-			
C thru E	$9\frac{5}{8}$"	$9\frac{1}{4}$"					
EA thru ED	10"						
F thru P	$8\frac{3}{4}$"	$8\frac{3}{4}$"					
Q thru Y	$9\frac{1}{8}$"	$9\frac{1}{4}$"					

The above haunch dimensions are measured from top of Pavement to top of flange at ℄ Bearings.

Note: All reinforcing bar marks shall be prefixed ESA.

Note:
Required reinforcing bar lap lengths shall be 30 bar diameters minimum.

Note:
For Fence Details, see Sheet 105/108.

Revised 12-24-86

H.N.T.B. BR. NO. 9 PART II - SUPERSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

TYPICAL CROSS SECTION UNIT 1

I-290 OVER CUYAHOGA RIVER

BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57 (℄ I-290)

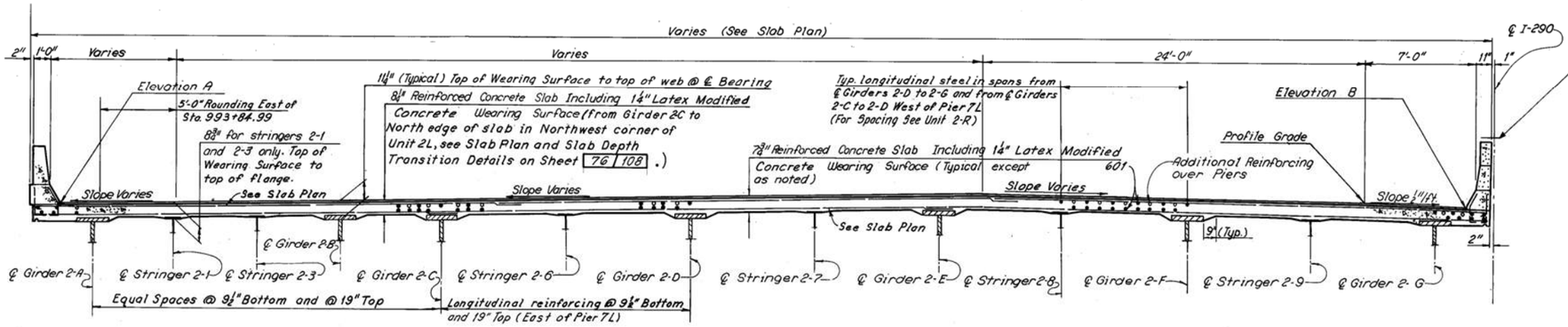
CLEVELAND CUYAHOGA COUNTY OHIO

DRAWN D.M.P	TRACED A.T.T	CHECKED T.R	REVIEWED C.A.B	REVISED
DATE 7-30-69	DATE 8-6-69	DATE 3-27-70	DATE 8-24-86	SHEET 74/108

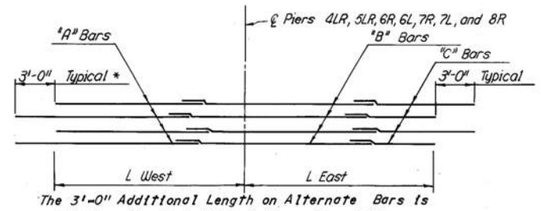
FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

162/193

CUYAHOGA COUNTY
CUY-290-0.27



TYPICAL CROSS- SECTION (UNIT 2 L)



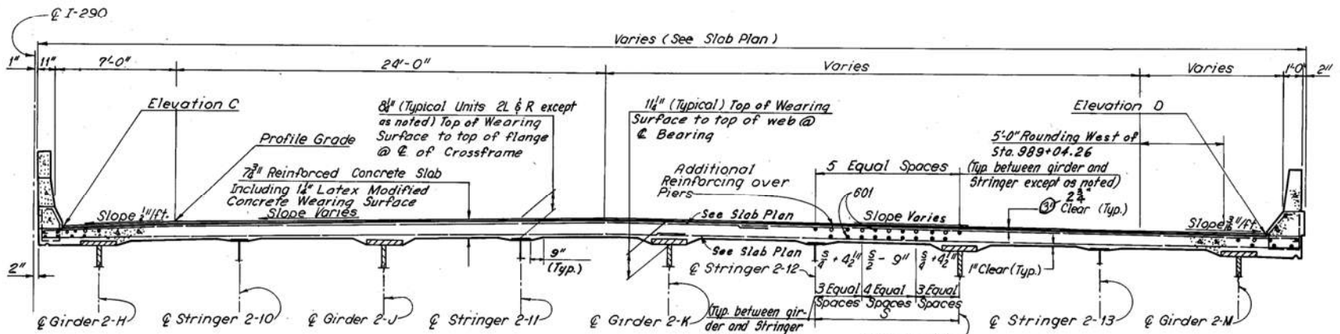
The 3'-0" Additional Length on Alternate Bars is omitted on the West Side of Piers 4L and 4R

ADDITIONAL REINFORCEMENT OVER PIERS

Note: For additional reinforcement over Piers in Northwest corner of slab at Pier 4L see Slab Plan.

ADDITIONAL REINFORCING OVER PIERS (SEE DIAGRAM ABOVE)					
Pier	L West	L East	A Bars	B Bars	C Bars
4L	12'-8"	27'	*661 653	601	——
4R	12'-8"	27'	*661 653	601	——
5L	27'	37'	659	601	——
5R	27'	27'	649	642	——
6L	37'	37'	601	657	642
6R	27'	27'	649	642	——
7L	37'	45'	652	659	601
7R	27'	37'	659	601	——
8R	37'	37'	601	657	642

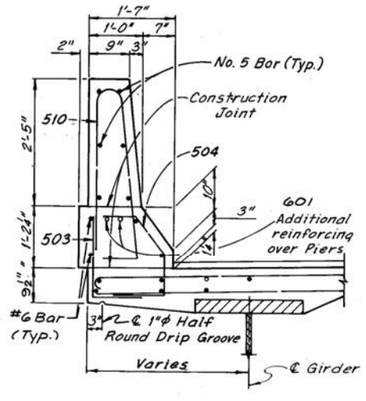
*Alternate placement to give 3'-0" stagger between ends of bar.



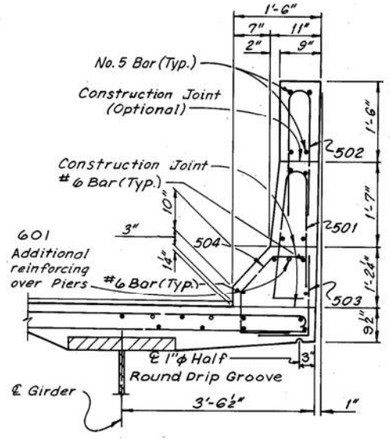
TYPICAL CROSS SECTION (UNIT 2R)

Note: All reinforcing bar marks shall be prefixed ESB.

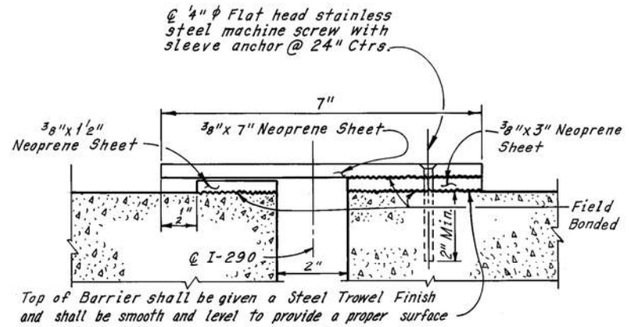
Note:
Required reinforcing bar lap lengths shall be 30 bar diameters minimum.



EXTERIOR CURB AND PARAPET DETAIL
(4'-0" Chain Link fence not shown)



MEDIAN CURB AND PARAPET DETAIL



Top of Barrier shall be given a Steel Trowel Finish and shall be smooth and level to provide a proper surface for bonding of Neoprene.

MEDIAN BARRIER SEAL

Note:
Barrier Seal shall be continuous, except at sign supports, light and pull box blisters and at expansion joints.
Payment for stainless steel screws shall be included in the unit price bid for Item Special, Median Barrier Seal, for payment.

Notes:
For details of Stringer haunch transitions see CF-19 detail on Sheet 56/108.
A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall not be more than 1:4 for a haunch less than 9" in width.
For Elevations A thru D see Sheet 78/108.
For cross slope details see Superelevation Transition Diagram, Sheet 94/108.
For Fence Details, see Sheet 105/108.

Revised 12-24-86

H.N.T.B. BR. NO. 9 PART II - SUPERSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

TYPICAL CROSS SECTIONS
UNIT 2

I-290 OVER CUYAHOGA RIVER
BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57 (℄ I-290)
CLEVELAND CUYAHOGA COUNTY OHIO

DRAWN D.M.P. DATE 9-5-69	TRACED J.T. DATE 9-10-69	CHECKED J.D.S. DATE 3-27-70	REVIEWED C.A.B. DATE 12-24-86	REVISED

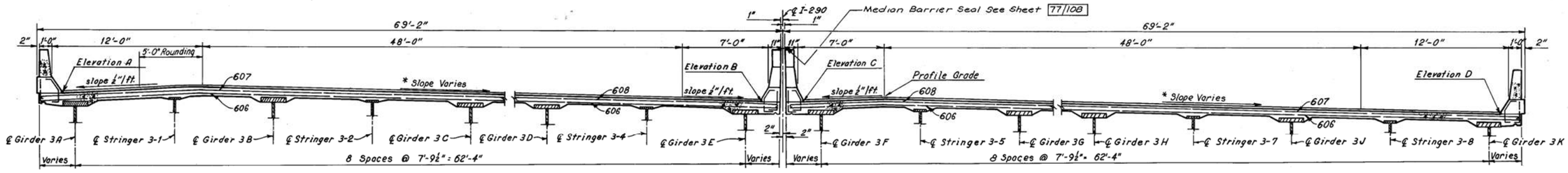
SHEET 77/108

FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

185/193

CUYAHOGA COUNTY
CUY-290-0.27

* See Superelevation Transition Diagram, Sheet 94/108.

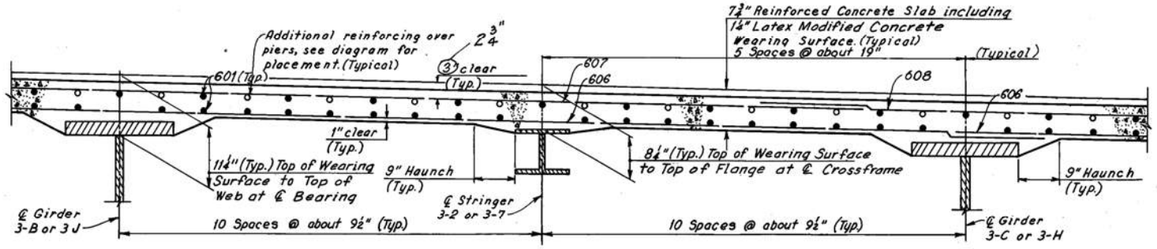


TYPICAL CROSS SECTION (UNIT THREE)

TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS (UNIT 3)

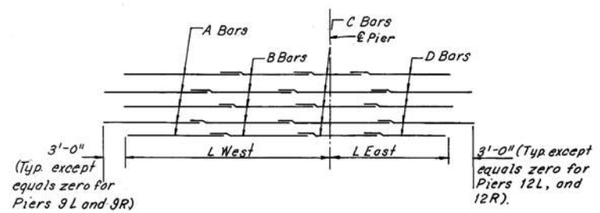
	℄ ROLLERS 2L OR 2R	℄ PIER 9L OR 9R	.1	.2	.3	.4	.5	.6	.7	.8	.9	℄ PIER 10L OR 10R	1 15	2 15	3 15	4 15	5 15	6 15	7 15	8 15	9 15	10 15	11 15	12 15	13 15	14 15	℄ PIER 11L OR 11R	.1	.2	.3	.4	.5	.6	.7	.8	.9	℄ PIER 12L OR 12R	℄ ROLLERS 3L OR 3R
ELEV A	673.57	674.18	674.97	675.78	676.59	677.35	678.06	678.68	679.28	679.90	680.55	681.23	681.88	682.55	683.23	683.90	684.53	685.12	685.65	686.12	686.54	686.90	687.21	687.48	687.72	687.95	688.17	688.33	688.49	688.65	688.81	688.96	686.10	689.23	689.35	689.45	689.55	689.65
ELEV B	673.30	673.86	674.54	675.23	675.89	676.53	677.15	677.75	678.35	678.98	679.63	680.31	680.95	681.62	682.30	682.97	683.60	684.19	684.73	685.20	685.62	685.98	686.29	686.56	686.79	687.02	687.24	687.41	687.57	687.73	687.88	688.03	688.17	688.31	688.42	688.52	688.62	688.73
ELEV C	674.73	675.25	675.78	676.32	676.85	677.38	677.90	678.43	678.99	679.53	680.12	680.71	681.40	682.11	682.81	683.49	684.13	684.70	685.22	685.68	686.07	686.41	686.69	686.93	687.14	687.34	687.54	687.68	687.82	687.97	682.11	688.75	688.36	688.47	688.56	688.64	688.71	688.77
ELEV D	674.30	674.72	675.14	675.56	675.99	676.47	676.99	677.53	678.07	678.63	679.21	679.81	680.50	681.21	681.91	682.59	683.22	683.80	684.32	684.77	685.17	685.50	685.79	686.02	686.24	686.44	686.63	686.77	686.92	687.06	687.20	687.33	687.45	687.57	687.65	687.73	687.80	687.87

Note:
The top of Portland Cement Concrete elevations shown at the gutter lines are those which are required before concrete is placed. Proper allowance has been made for the dead load deflections caused by the weight of the concrete and wearing surface.



TYPICAL SLAB REINFORCEMENT DETAIL
(Unit 3L shown. Unit 3R opposite hand)

Note:
A haunch width of 9" shall be used for computing quantity of concrete. However the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

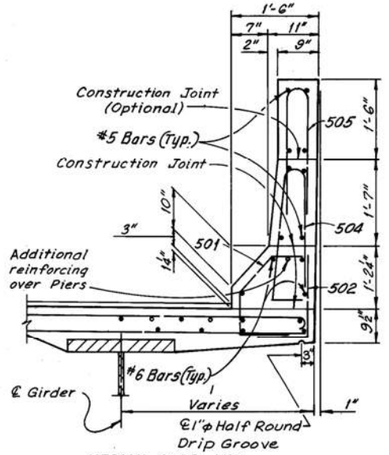


PLACEMENT DIAGRAM FOR ADDITIONAL REINFORCEMENT OVER PIERS

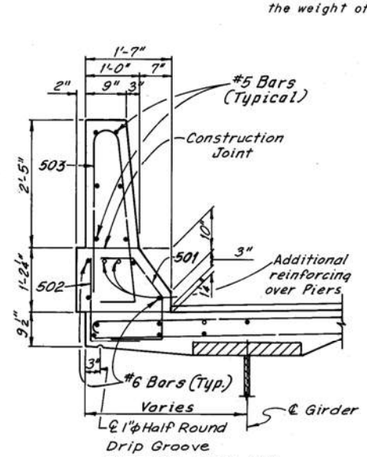
ADDITIONAL REINFORCING OVER PIERS						
Pier	L West	L East	A Bars	B Bars	C Bars	D Bars
9L	17'-6"	48'	~~609~~ 610	601	601	——
9R	17'-6"	43'	~~601~~ 614	614	——	——
10L	48'	66'	601	601	601	614
10R	41'	68'	616	601	601	601
11L	66'	35'	601	601	601	615
11R	68'	37'	601	601	601	617
12L	38'	17'-6"	618 ~~612~~	601	——	——
12R	37'	17'-6"	618 ~~601~~	601	——	——

* Alternate placement to give 3'-0" Stagger between ends of bar.

Note:
Required reinforcing bar lap lengths shall be 30 bar diameters minimum.



MEDIAN CURB AND PARAPET DETAIL



EXTERIOR CURB AND PARAPET DETAIL
(4'-0" Chain Link fence not shown)

Note: All reinforcing bar marks shall be prefixed ESC.

Note:
For Fence Details, see Sheet 105/108.

Revised 12-24-86

H.N.T.B. BR. NO. 9 PART II - SUPERSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

TYPICAL CROSS SECTION UNIT—3

I-290 OVER CUYAHOGA RIVER

BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57 (℄ I-290)

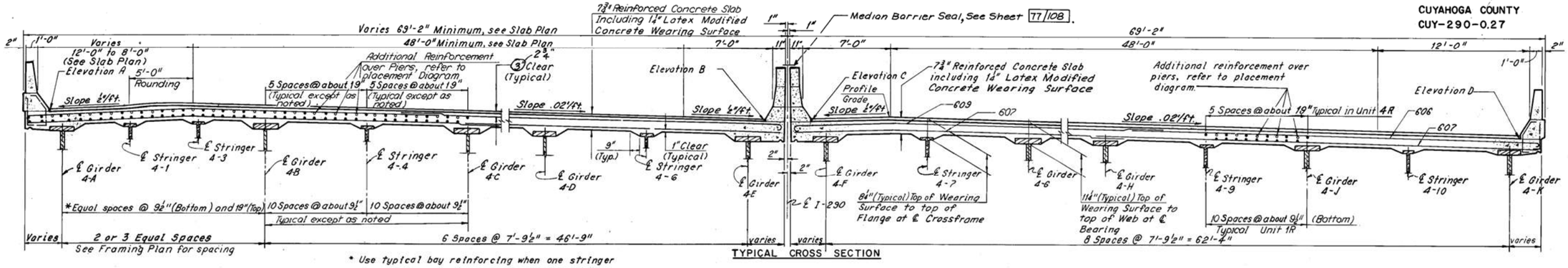
CLEVELAND CUYAHOGA COUNTY OHIO

DRAWN DS	TRACED TS	CHECKED DWH	REVIEWED CAB	REVISED
DATE 7-11-69	DATE 8-6-69	DATE 3-4-70	DATE 2-24-86	SHEET 80/108

FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

167
193

CUYAHOGA COUNTY
CUY-290-0.27

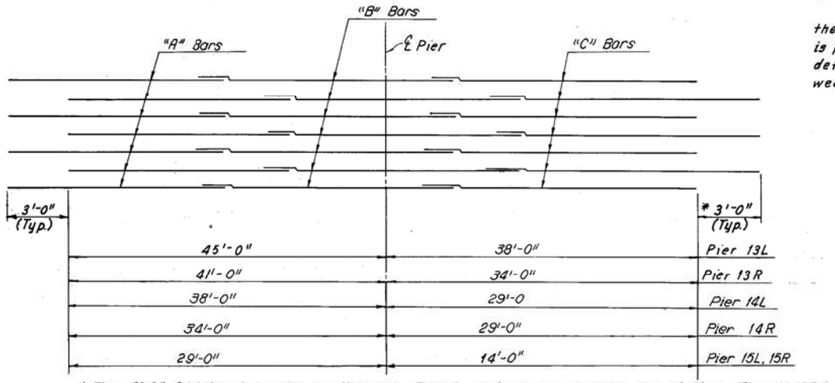


* Use typical bay reinforcing when one stringer between Girders 4A and 4B (see Slab Plan).

TYPICAL CROSS SECTION

TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS (UNIT 4L)																																
	℄ ROLLERS 3L	.1	.2	.3	.4	.5	.6	.7	.8	.9	℄ PIER 13L	.1	.2	.3	.4	.5	.6	.7	.8	.9	℄ PIER 14L	.1	.2	.3	.4	.5	.6	.7	.8	.9	℄ PIER 15L	℄ ROLLER 4L
ELEV A	689.65	689.75	689.85	689.86	689.94	689.92	689.87	689.77	689.66	689.54	689.42	689.30	689.18	689.05	688.91	688.72	688.48	688.19	687.87	687.53	687.19	686.95	686.72	686.48	686.23	685.95	685.66	685.33	684.99	684.63	684.26	683.87
ELEV B	688.73	688.85	688.92	688.96	688.95	688.91	688.82	688.69	688.56	688.40	688.25	688.10	687.97	687.83	687.67	687.47	687.23	686.94	686.62	686.29	685.96	685.71	685.46	685.21	684.95	684.67	684.36	684.03	683.68	683.31	682.92	682.52

TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS (UNIT 4R)																																
	℄ ROLLER 3R	.1	.2	.3	.4	.5	.6	.7	.8	.9	℄ PIER 13R	.1	.2	.3	.4	.5	.6	.7	.8	.9	℄ PIER 14R	.1	.2	.3	.4	.5	.6	.7	.8	.9	℄ PIER 15R	℄ ROLLER 4R
ELEV C	688.77	688.84	688.87	688.88	688.84	688.78	688.68	688.56	688.40	688.24	688.08	687.92	687.76	687.60	687.43	687.24	687.02	686.77	686.51	686.23	685.96	685.72	685.49	685.24	684.99	684.71	684.40	684.06	683.70	683.32	682.92	682.51
ELEV D	687.87	687.94	687.97	687.98	687.96	687.89	687.78	687.65	687.49	687.33	687.16	687.00	686.85	686.69	686.53	686.34	686.12	685.88	685.62	685.35	685.08	684.84	684.61	684.36	684.11	683.82	683.51	683.17	682.81	682.42	682.02	681.61



* The 3'-0" Additional Length on Alternate Bars is omitted on the East Side of Piers 15L and 15R.

PLACEMENT DIAGRAM FOR ADDITIONAL REINFORCING OVER PIERS

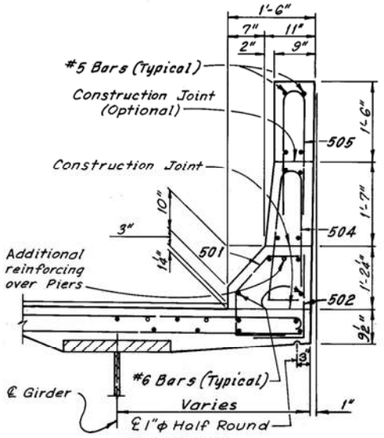
ADDITIONAL REINFORCING OVER PIERS					
	Pier 13L	Pier 13R	Pier 14L	Pier 14R	Piers 15L&15R
"A" Bars	601	601	601	601	601
"B" Bars	601	601	601	627	*628 / 629
"C" Bars	601	602	603	—	—

* Alternate placement to give 3'-0" Stagger between ends of bar.

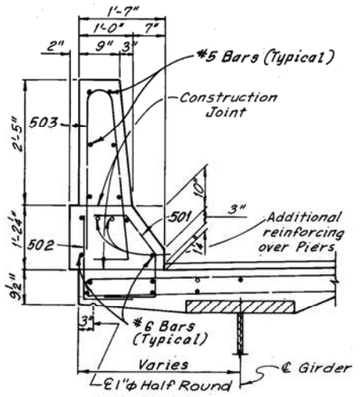
Note:
The top of Portland Cement Concrete elevations shown at the gutter lines are those which are required before concrete is placed. Proper allowance has been made for the dead load deflections caused by the weight of the concrete and wearing surface.

Note:
Required reinforcing bar lap lengths shall be 30 bar diameters minimum.

Note: All reinforcing bar marks shall be prefixed ESD.



MEDIAN CURB AND PARAPET DETAIL



EXTERIOR CURB AND PARAPET DETAIL
(4'-0" Chain Link fence not shown)

Notes:
A haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

For Fence Details, see Sheet 105/108.

Revised 12-24-86

H.N.T.B. BR.NO. 9 PART II - SUPERSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

TYPICAL CROSS SECTION
UNIT 4

I-290 OVER CUYAHOGA RIVER

BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57

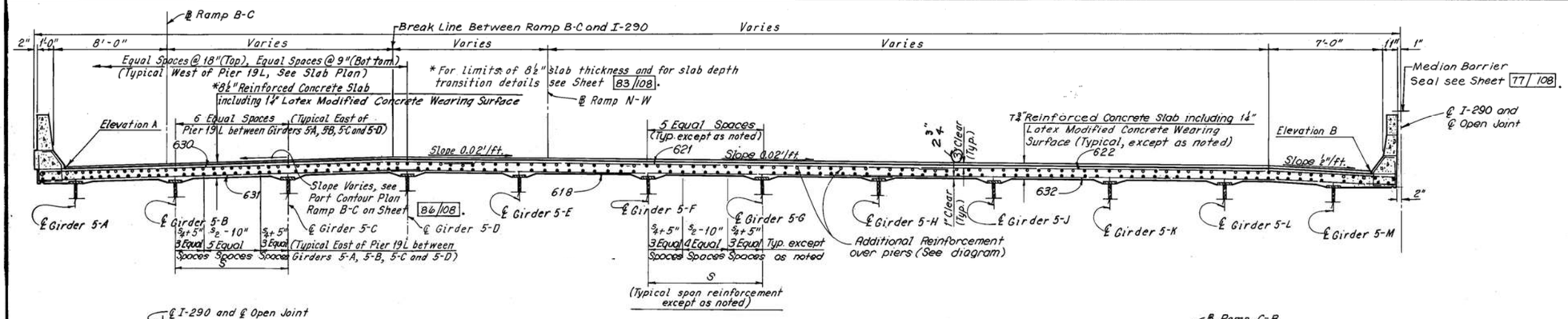
CLEVELAND CUYAHOGA COUNTY (℄ I-290) OHIO

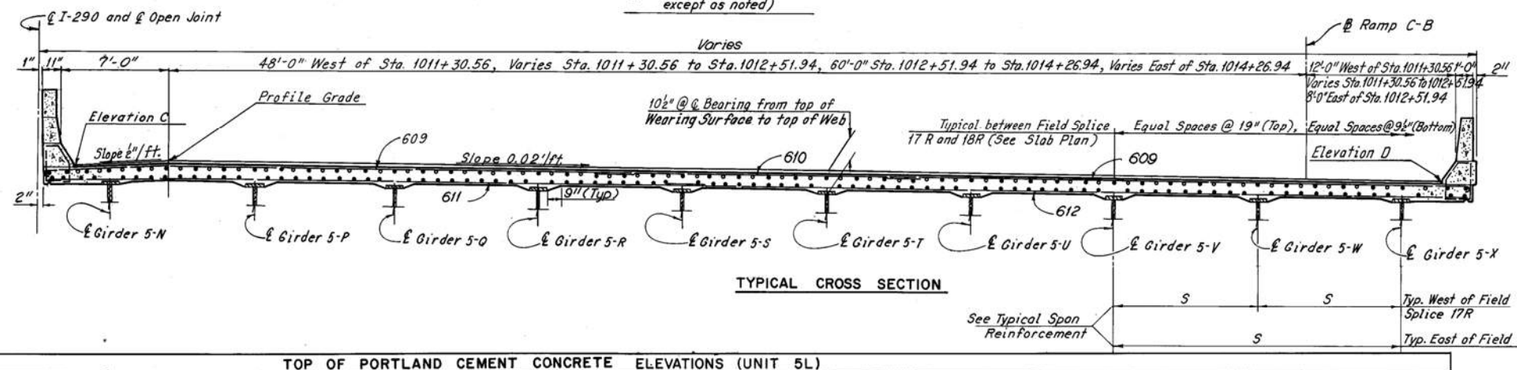
DRAWN T.D.S.	TRACED G.E.M.	CHECKED D.W.R.	REVIEWED G.A.B.	REVISED
DATE 7-24-85	DATE 9-25-85	DATE 11-5-85	DATE 12-24-86	SHEET 82/108

FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

169/193

CUYAHOGA COUNTY
CUY-290-0.27

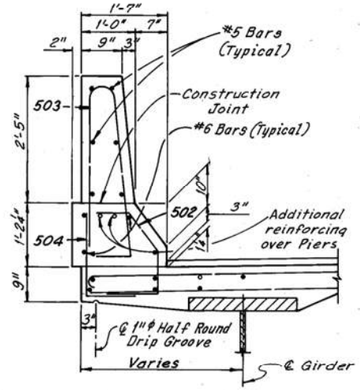




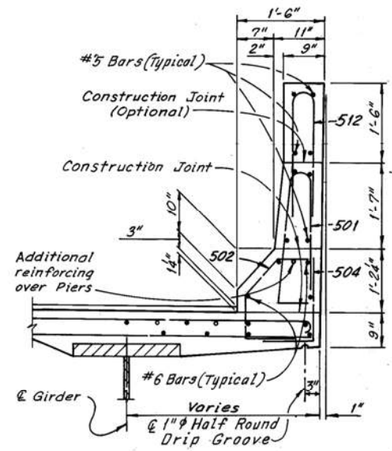
TYPICAL CROSS SECTION

Note: All reinforcing bar marks shall be prefixed ESE.

Note:
A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.



EXTERIOR CURB AND PARAPET DETAIL
(4'-0" Chain Link fence not shown)



MEDIAN CURB AND PARAPET DETAIL

Notes:
For Fence Details, see Sheet 105/108.

Revised 12-24-86

TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS (UNIT 5L)

	℄ EXPAN. ROLLERS 4L	0.2	0.4	0.6	0.8	℄ PIER 16L	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ PIER 17L	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
ELEV A	683.87	683.39	682.85	682.23	681.58	680.94	680.60	680.27	679.95	679.63	679.30	678.96	678.61	678.26	677.92	677.59	677.26	676.94	676.62	676.29	675.94	675.58	675.19	674.80	674.42
ELEV B	682.52	682.01	681.45	680.82	680.16	679.50	679.16	678.82	678.50	678.17	677.84	677.49	677.13	676.76	676.40	676.05	675.72	675.40	675.08	674.76	674.41	674.06	673.69	673.32	672.94

TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS (UNIT 5L)

	℄ PIER 18L	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ PIER 19L	0.2	0.4	0.6	0.8	℄ BRG. ABUT. B-C OR ℄ PIER 20L	℄ EXPAN. ROLLERS 5L
ELEV A	674.04	673.70	673.37	673.04	672.72	672.38	672.04	671.70	671.35	670.88	670.49	669.75	669.02	668.15	667.33	666.58	
ELEV B	672.58	672.25	671.92	671.59	671.26	670.92	670.57	670.21	669.84	669.48	669.13	668.54	667.96	667.34	666.65	665.93	665.65

Note:
The top of Portland Cement Concrete elevations shown at the gutter lines are those which are required before concrete is placed. Proper allowance has been made for the dead load deflections caused by the weight of the concrete and wearing surface.

TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS (UNIT 5R)

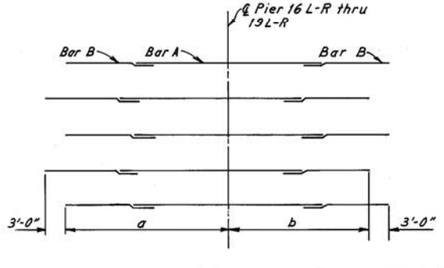
	℄ EXPAN. ROLLERS 4R	0.2	0.4	0.6	0.8	℄ PIER 16R	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ PIER 17R	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
ELEV C	681.51	682.01	681.45	680.82	680.15	679.50	679.15	678.82	678.50	678.17	677.83	677.48	677.12	676.75	676.39	676.04	675.71	675.39	675.08	674.76	674.42	674.06	673.69	673.31	672.94
ELEV D	681.61	681.09	680.51	679.88	679.21	678.56	678.23	677.90	677.57	677.25	676.91	676.56	676.19	675.81	675.43	675.07	674.74	674.42	674.10	673.78	673.44	673.08	672.72	672.35	671.99

TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS (UNIT 5R)

	℄ PIER 18R	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ PIER 19R	0.2	0.4	0.6	0.8	℄ PIER 20R	℄ EXPAN. ROLLERS 5R
ELEV C	672.59	672.25	671.93	671.60	671.27	670.94	670.58	670.21	669.85	669.48	669.13	668.54	667.97	667.35	666.66	665.93	665.64
ELEV D	671.65	671.29	670.95	670.61	670.27	669.92	669.56	669.19	668.82	668.46	668.10	667.50	666.92	666.29	665.59	664.86	664.57

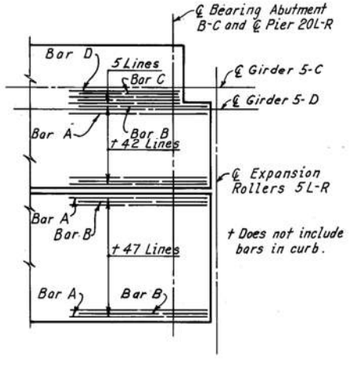
ADDITIONAL REINFORCEMENT OVER PIERS

	PIER 16		PIER 17		PIER 18		PIER 19		PIER 20	
	L	R	L	R	L	R	L	R	L	R
Bar A	601	←					→	601	643	643
Bar B	636	636	639	637	639	637	638	638	642	642
a	30'-0"	30'-0"	27'-0"	27'-0"	29'-0"	27'-0"	27'-0"	27'-0"	——	——
b	27'-0"	27'-0"	29'-0"	27'-0"	27'-0"	27'-0"	25'-0"	25'-0"	——	——
Bar C	——	——	——	——	——	→	——	——	640	——
Bar D	——	——	——	——	——	——	——	——	645	——



ADDITIONAL REINFORCEMENT OVER PIERS

Note:
Required reinforcing bar lap lengths shall be 30 bar diameters minimum.



† Does not include bars in curb.

Notes:
For Fence Details, see Sheet 105/108.

Revised 12-24-86

H.N.T.B. BR. NO. 9 PART II - SUPERSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

TYPICAL CROSS SECTION
UNIT 5

I-290 OVER CUYAHOGA RIVER

BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57

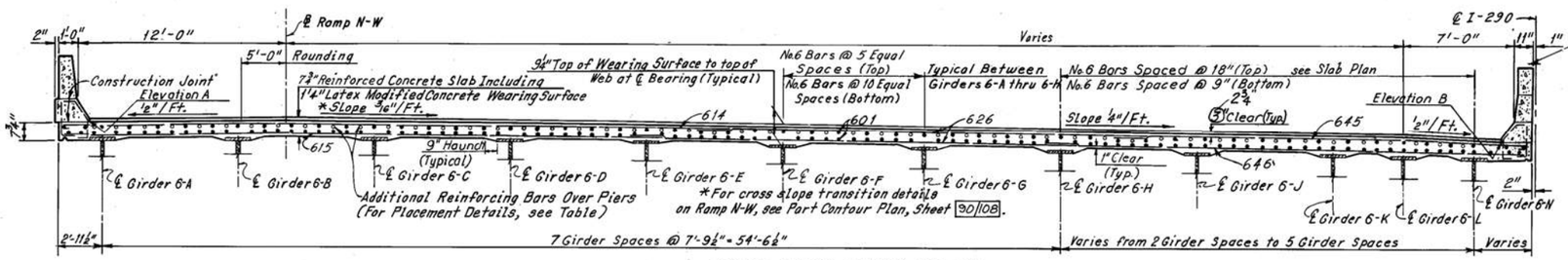
CLEVELAND CUYAHOGA COUNTY (℄ I-290) OHIO

DRAWN D.H.S.	TRACED A.J.T.	CHECKED J.W.C.	REVIEWED P.A.B.	REVISED
DATE 3-1969	DATE 10-7-69	DATE 10-30-69	DATE 2-24-86	SHEET 84/108

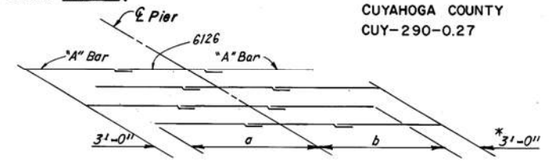
FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

173/193

CUYAHOGA COUNTY
CUY-290-0.27



TYPICAL CROSS SECTION UNIT 6L



*Note: Typical except at Pier 23 CB this dimension changes to 0.

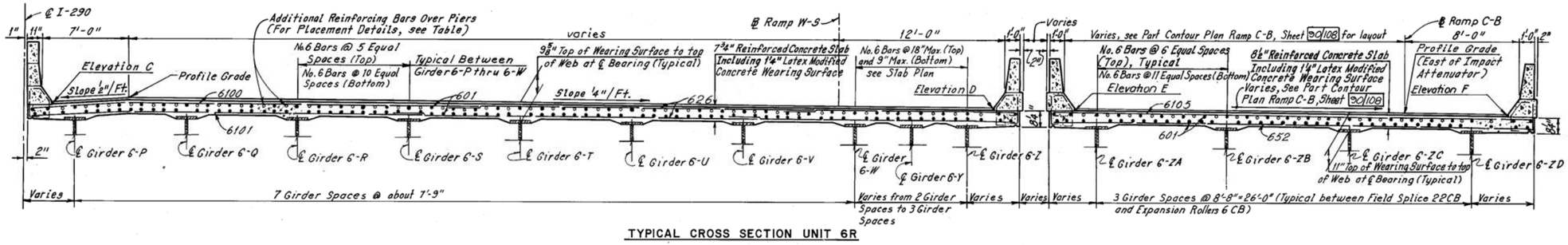
Note:
Required reinforcing bar lap lengths shall be 30 bar diameters minimum.

Note: All reinforcing bar marks shall be prefixed ESF.

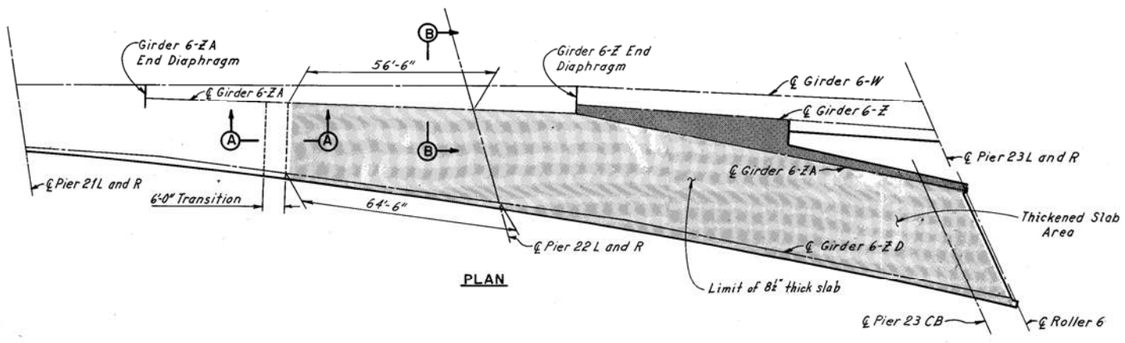
Note:
A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

TABLE OF ADDITIONAL REINFORCEMENT OVER PIERS

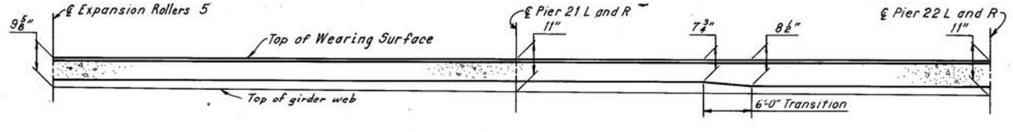
	Pier 21L	Pier 22L	Pier 23L	Pier 24L	Pier 21R	Pier 22R	Pier 23R	Pier23CB	Pier 24R
a	26'-0"	23'-6"	24'-0"	24'-6"	29'-0"	26'-9"	25'-6"	29'-6"	27'-6"
b	23'-6"	24'-0"	24'-6"	24'-0"	26'-9"	25'-6"	27'-6"	9'-9"	27'-3"
"A" Bars	632	630	6119	6119	638	687	6120	6122	6121



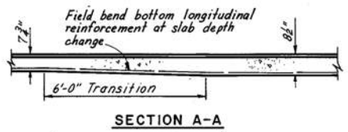
TYPICAL CROSS SECTION UNIT 6R



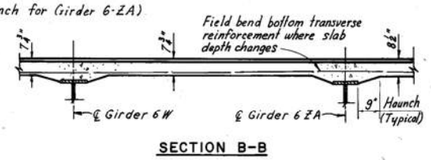
PLAN



HAUNCH TRANSITION, GIRDERS ZB THRU ZD
(Use constant 9⅝" haunch for Girder 6-Z and 11" haunch for Girder 6-ZA)

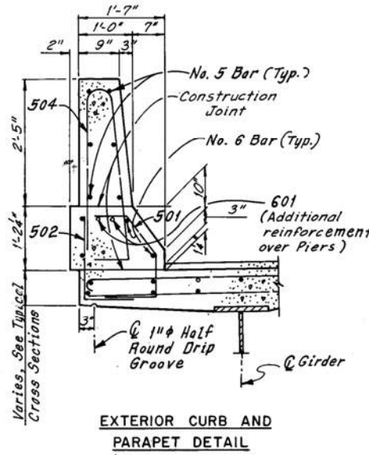


SECTION A-A

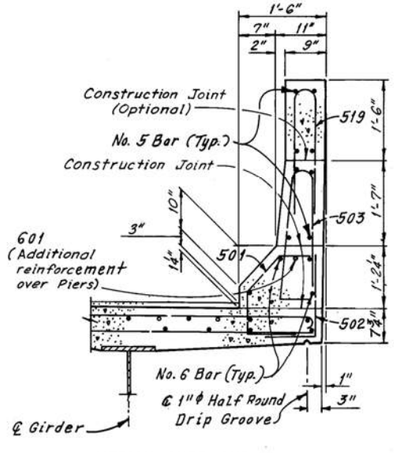


SECTION B-B

SLAB DEPTH TRANSITION DETAILS



EXTERIOR CURB AND PARAPET DETAIL
(4'-0" Chain Link fence not shown)



MEDIAN CURB AND PARAPET DETAIL

Notes:
For Fence Details, see Sheet 105/108.
For Elevations A thru F, see Sheet 90/108.

Revised 12-24-86

H.N.T.B. BR. NO. 9 PART II - SUPERSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

TYPICAL CROSS SECTIONS UNIT 6

I-290 OVER CUYAHOGA RIVER

BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57 (℄ I-290)

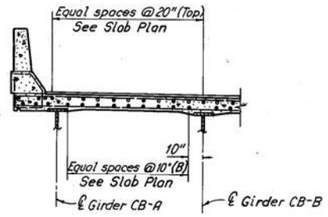
CLEVELAND CUYAHOGA COUNTY OHIO

DRAWN KYH	TRACED HCH	CHECKED JW	REVIEWED A.B.	REVISED
DATE 10-6-69	DATE 11-1-69	DATE 11-18-69	DATE 2-24-86	SHEET 88/108

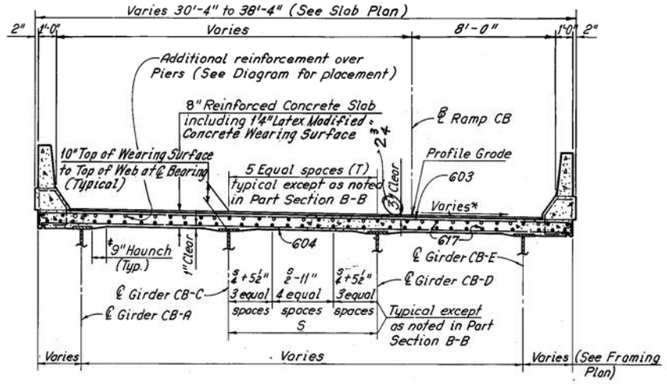
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

178
193

CUYAHOGA COUNTY
CUY-290-0.27

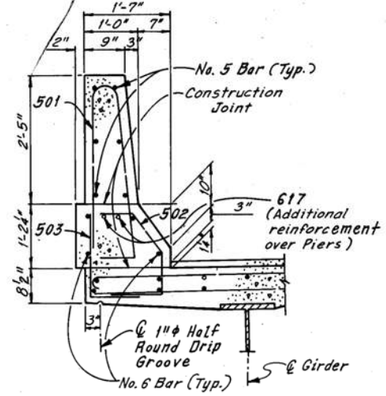


PART SECTION B-B
(For additional details see Section A-A)



SECTION A-A

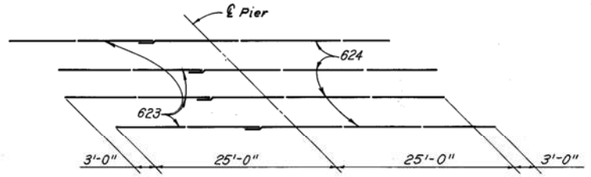
* See Superelevation Transition Diagram Sheet 94/108



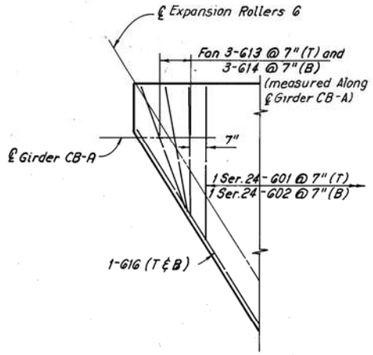
EXTERIOR CURB AND PARAPET DETAIL
(4'-0" Chain Link fence not shown)

*Note:
A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

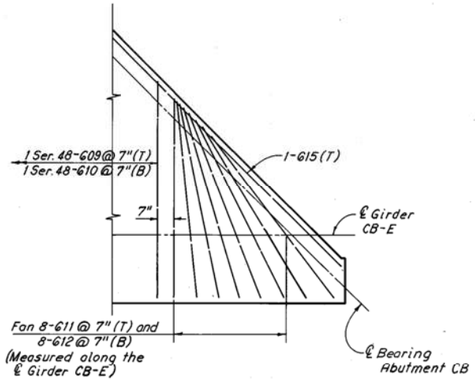
Note: All reinforcing bar marks shall be prefixed ESG.



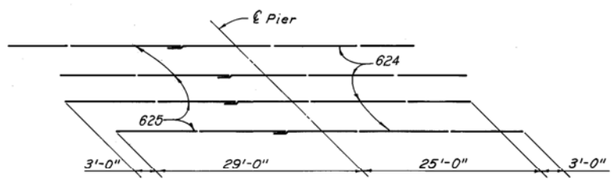
PLACEMENT OF 623 AND 624 BARS OVER PIERS 25CB, 26CB AND 27CB



DETAIL "A"



DETAIL "B"



PLACEMENT OF 624 AND 625 BARS OVER PIER 24CB

Note:
Required reinforcing bar lap lengths shall be 30 bar diameters minimum.

Note:
For location of Sections A-A and B-B and Details A-A and B-B see Sheet 92/108.
The following abbreviations are used:
(T) = Top
(B) = Bottom
For Fence Details, see Sheet 105/108.

TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS AT GUTTER LINE

Curb	℄ Exp. Rollers 6	.2	.4	.6	.8	℄ Pier 24 CB	.2	.4	.6	.8	℄ Pier 25 CB	.2	.4	.6	.8	℄ Pier 26 CB	.2	.4	.6	.8	℄ Pier 27 CB	¼	½	¾	℄ Brg. Abut. CB.
North	655.15	654.84	654.58	654.37	654.28	654.34	654.55	654.71	654.83	655.00	655.29	655.77	656.47	657.24	658.10	659.06	660.03	661.01	661.98	662.94	663.90	664.90	665.88	666.81	667.70
South	654.01	653.77	653.58	653.41	653.29	653.26	653.43	653.79	654.22	654.72	655.31	656.05	656.88	657.79	658.74	659.71	660.74	661.78	662.77	663.73	664.70	665.68	666.68	667.63	668.54

Note:
The top of Portland Cement Concrete elevations shown at the gutter lines are those which are required before concrete is placed. Proper allowance has been made for the dead load deflections caused by the weight of the concrete and wearing surface.

Revised 12-24-86

H.N.T.B. BR. NO. 9 PART II - SUPERSTRUCTURE

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

UNIT 6CB
TYPICAL CROSS SECTION

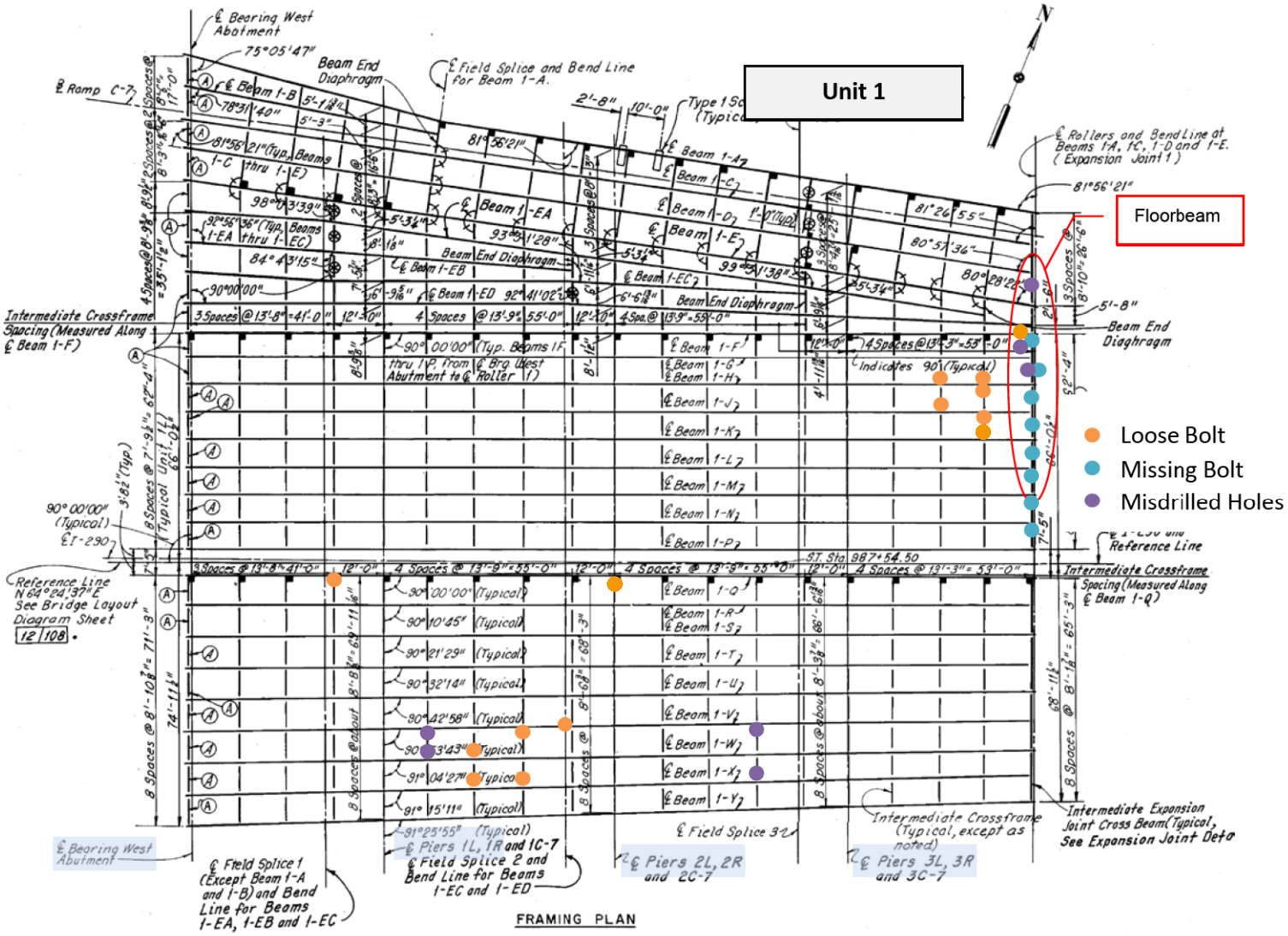
I-290 OVER CUYAHOGA RIVER

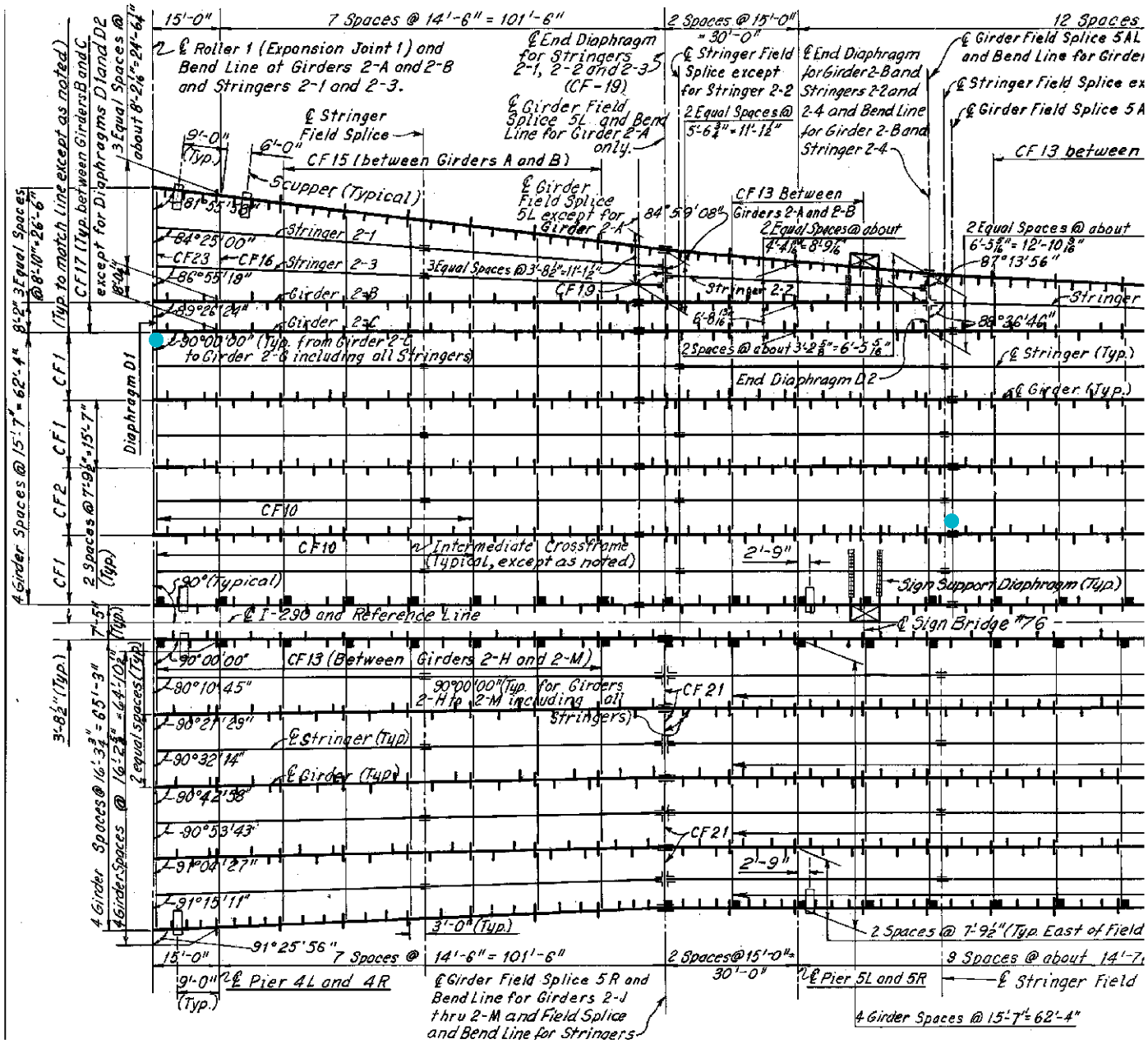
BR. NO. CUY-290-0110 STA. 985+85.75 TO STA. 1020+47.57

CLEVELAND CUYAHOGA COUNTY (℄ I-290) OHIO

DRAWN DLR	TRACED DLR	CHECKED MLB	REVIEWED C.A.B.	REVISED
DATE 10-15-69	DATE 10-18-69	DATE 11-26-69	DATE 2-24-86	SHEET 93/108

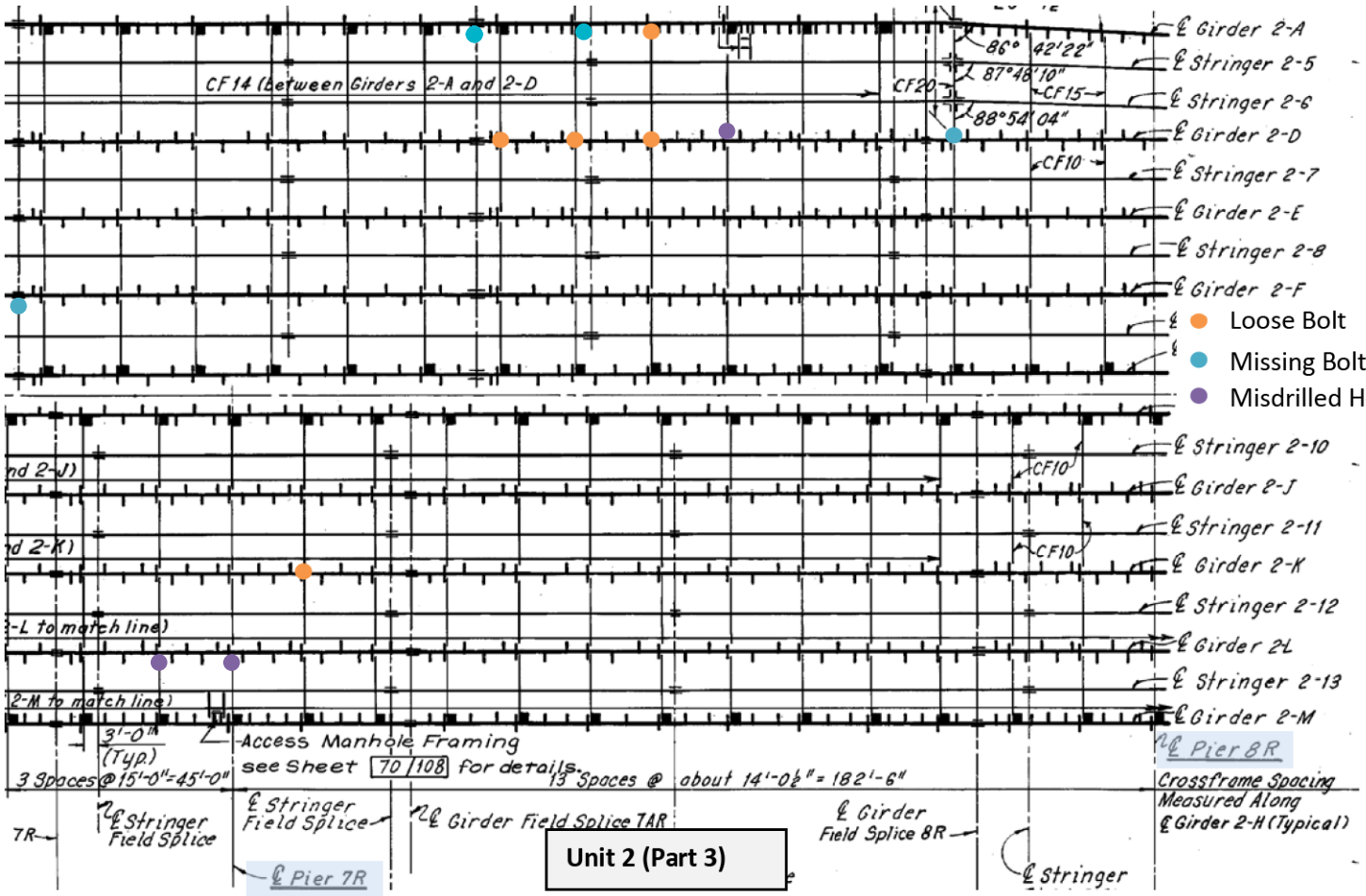
APPENDIX IV – Framing Plan


Unit 1
Floorbeam
Loose Bolt
Missing Bolt
Misdrilled Holes
℄ Bearing West Abutment
℄ Ramp C-7
Beam End Diaphragm
℄ Field Splice and Bend Line for Beam 1-A.
℄ Rollers and Bend Line at Beams 1-A, 1-C, 1-D and 1-E. (Expansion Joint 1)
Intermediate Crossframe Spacing (Measured Along ℄ Beam 1-F)
Indicates 90° (Typical)
Reference Line N 64° 24' 37" E See Bridge Layout Diagram Sheet 12 108
Intermediate Crossframe Spacing (Measured Along ℄ Beam 1-Q)
Intermediate Expansion Joint Cross Beam (Typical, See Expansion Joint Detail
℄ Bearing West Abutment
℄ Field Splice 1 (Except Beam 1-A and 1-B) and Bend Line for Beams 1-EA, 1-EB and 1-EC
℄ Piers 1L, 1R and 1C-7
℄ Field Splice 2 and Bend Line for Beams 1-EC and 1-ED
℄ Field Splice 3
℄ Piers 2L, 2R and 2C-7
Intermediate Crossframe (Typical, except as noted)
℄ Piers 3L, 3R and 3C-7
FRAMING PLAN

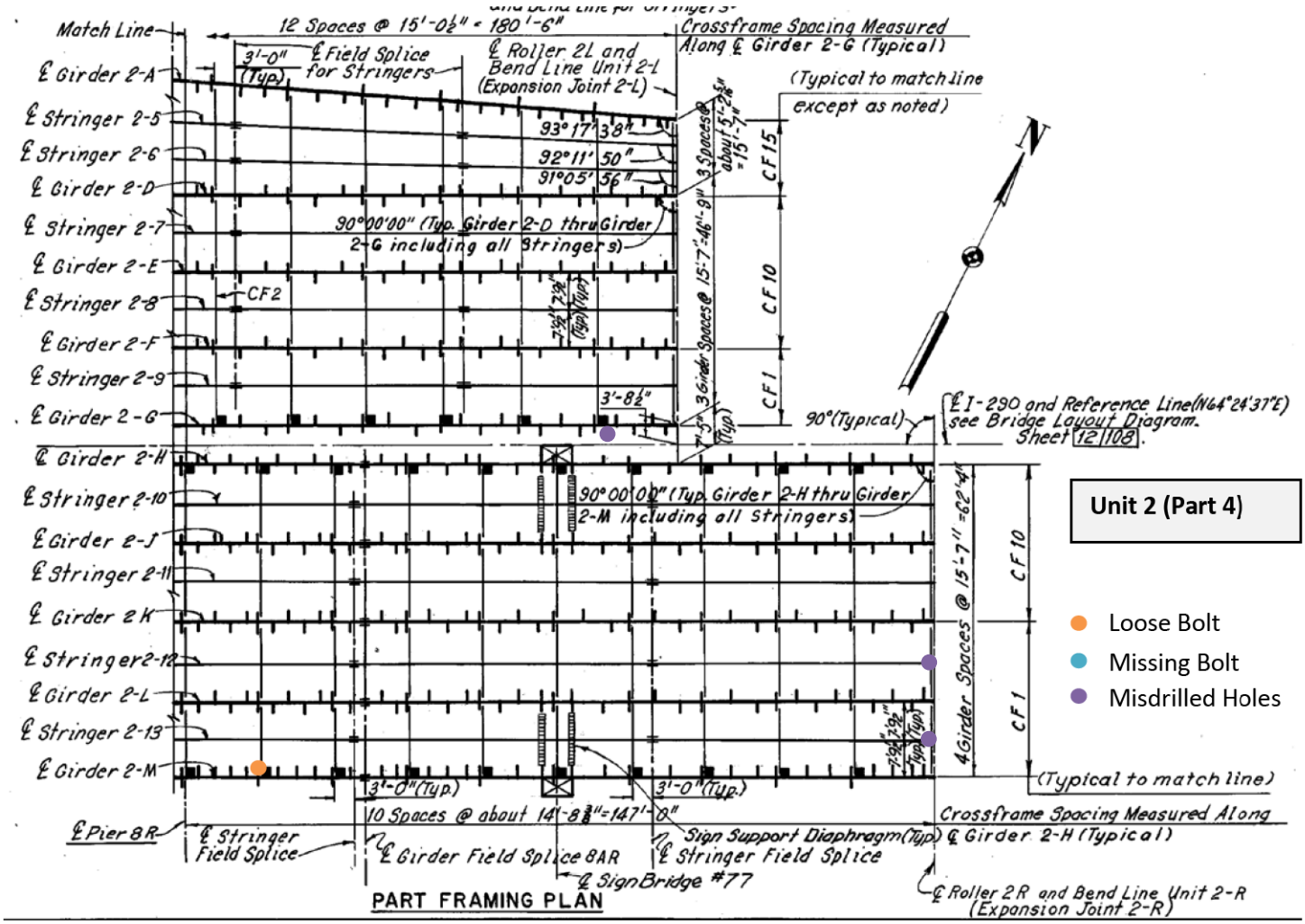


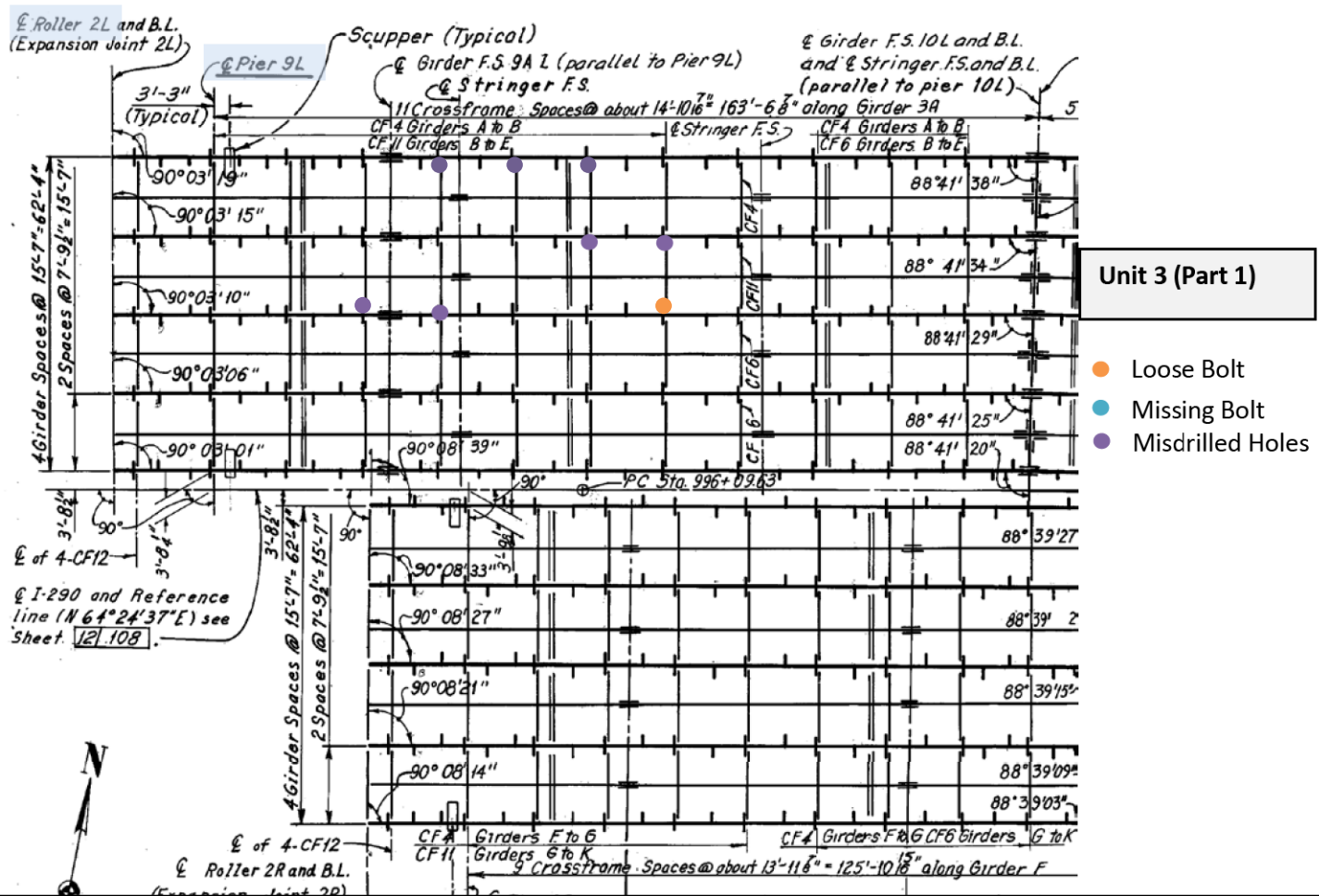
Unit 2 (Part 1)

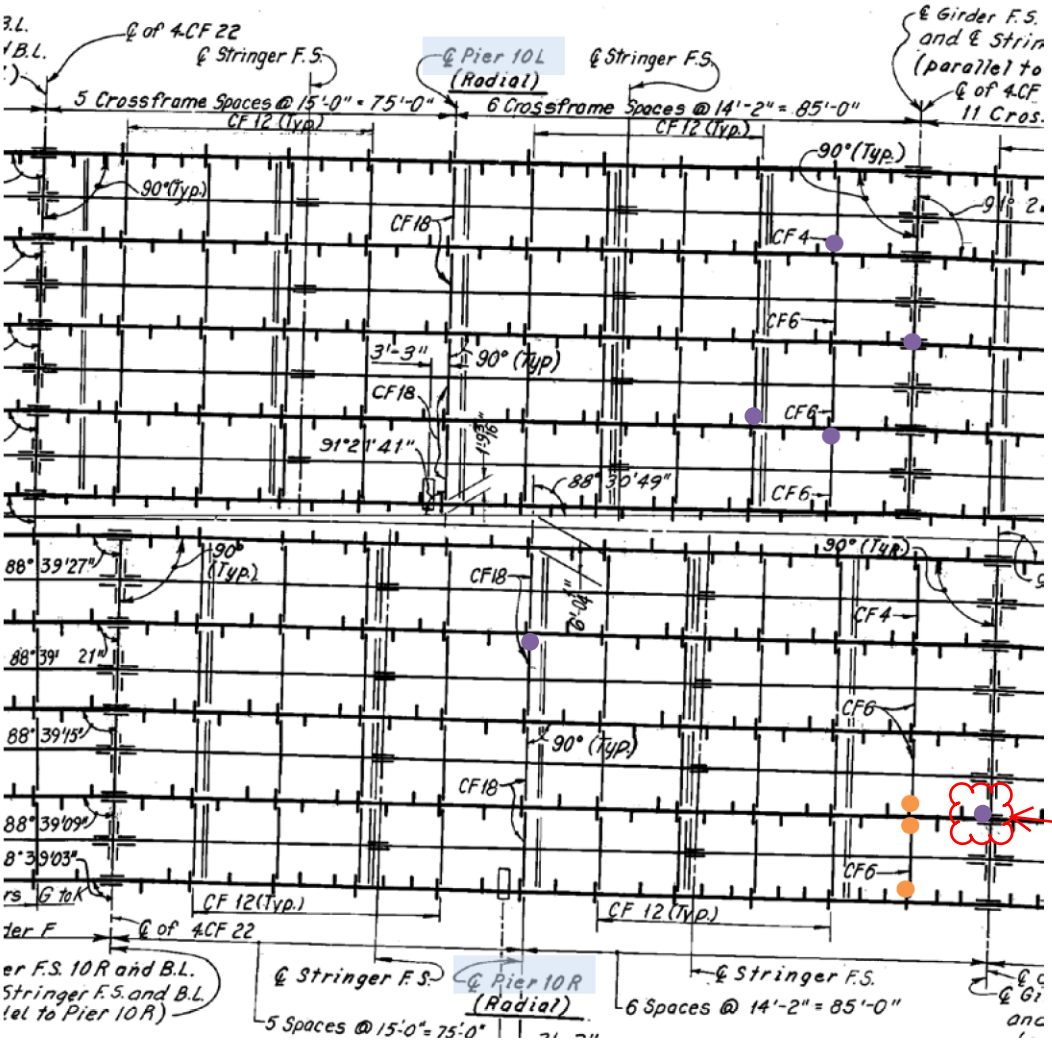
- Loose Bolt
- Missing Bolt
- Misdrilled Holes

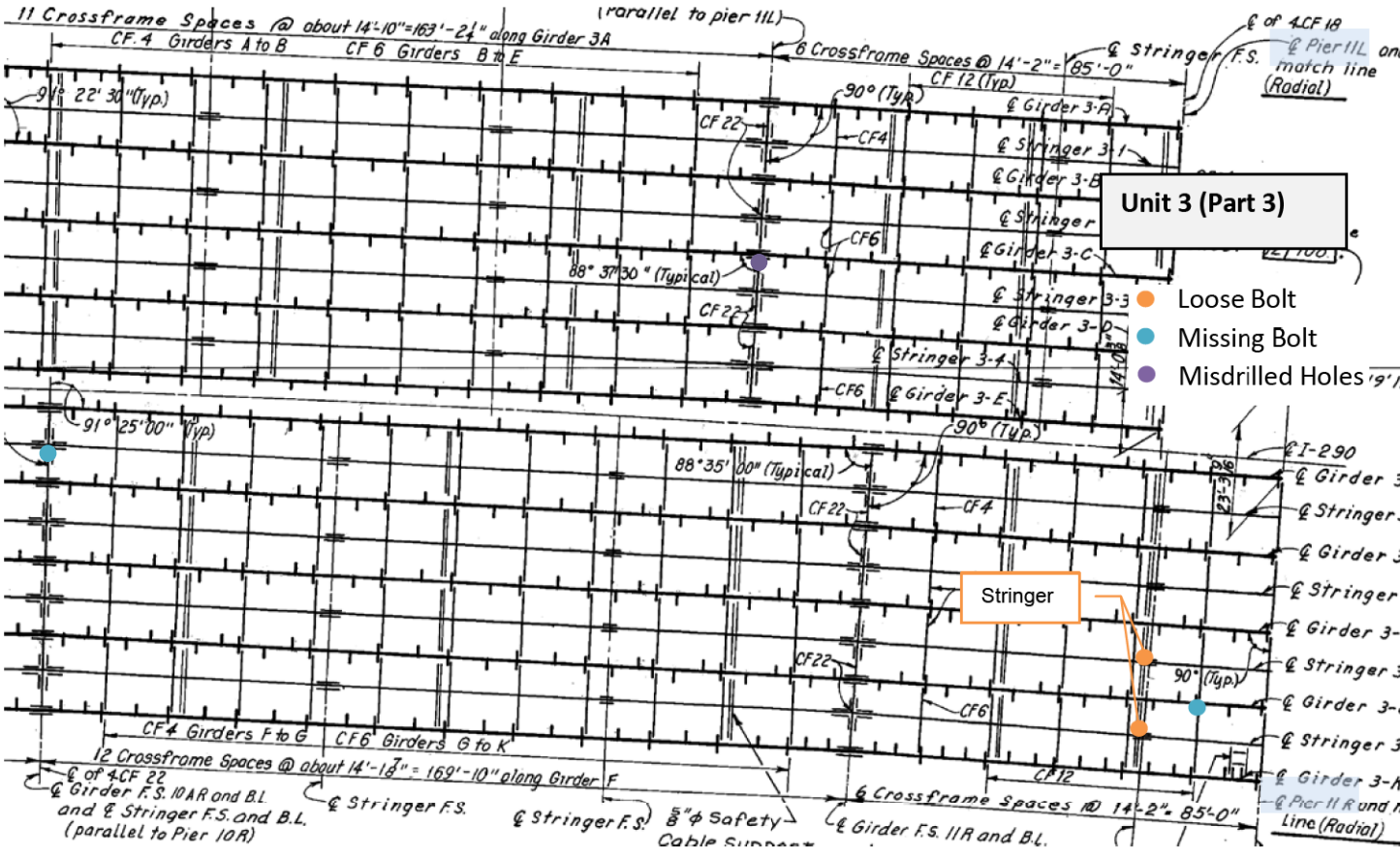

℄ Girder 2-A
℄ Stringer 2-5
℄ Stringer 2-6
℄ Girder 2-D
℄ Stringer 2-7
℄ Girder 2-E
℄ Stringer 2-8
℄ Girder 2-F
CF14 (between Girders 2-A and 2-D
CF20
CF15
CF10
86° 42'22"
87°48'10"
88°54'04"
Loose Bolt
Missing Bolt
Misdrilled Holes
℄ Stringer 2-10
℄ Girder 2-J
℄ Stringer 2-11
℄ Girder 2-K
℄ Stringer 2-12
℄ Girder 2-L
℄ Stringer 2-13
℄ Girder 2-M
℄ Pier 8R
Crossframe Spacing Measured Along ℄ Girder 2-H (Typical)
3'-0" (Typ.)
3 Spaces @ 15'-0" = 45'-0"
Access Manhole Framing see Sheet 70/108 for details.
13 Spaces @ about 14'-0½" = 182'-6"
℄ Stringer Field Splice
℄ Girder Field Splice T4R
℄ Girder Field Splice 8R
℄ Pier 7R
℄ Stringer

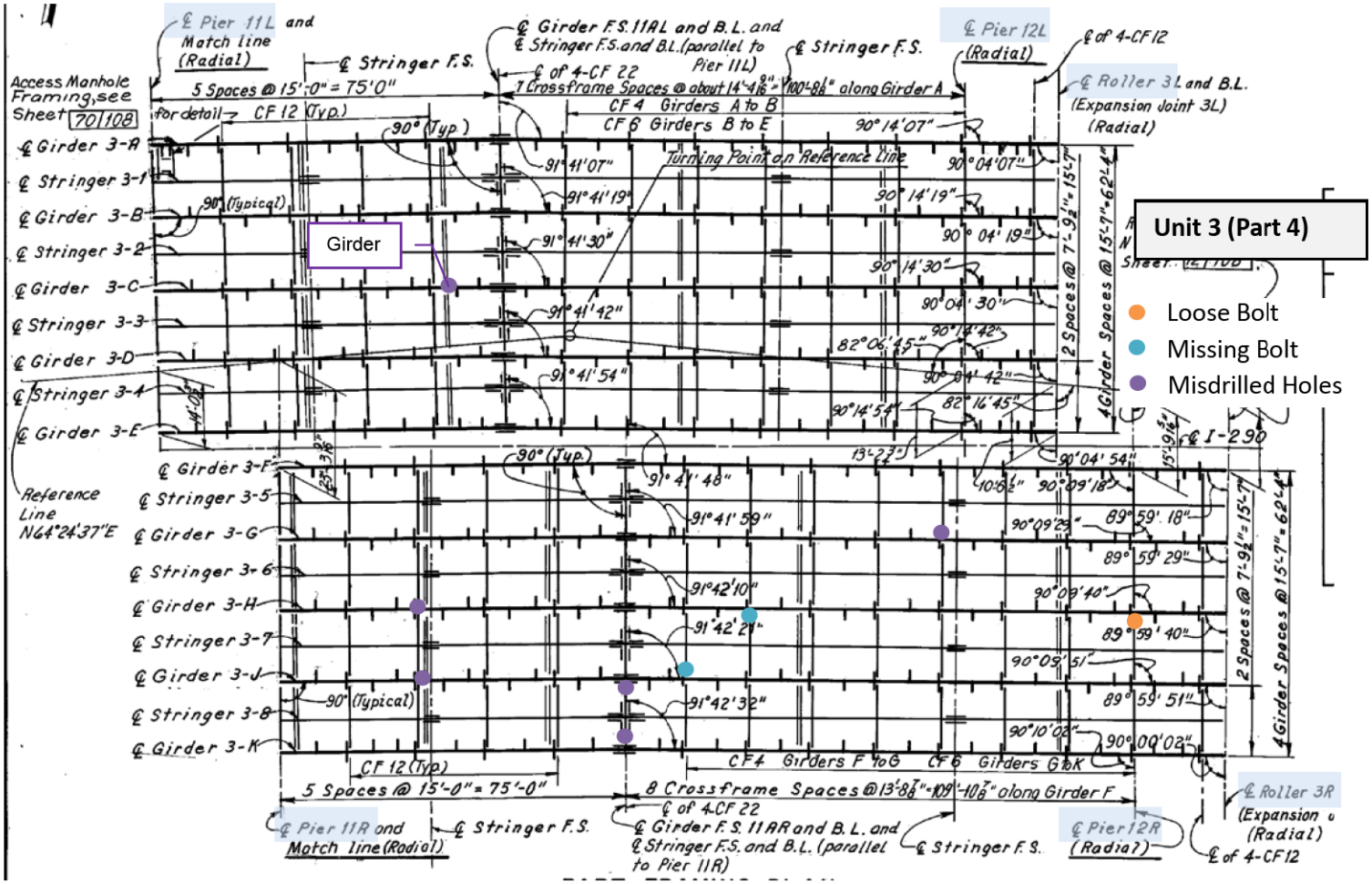
Unit 2 (Part 3)

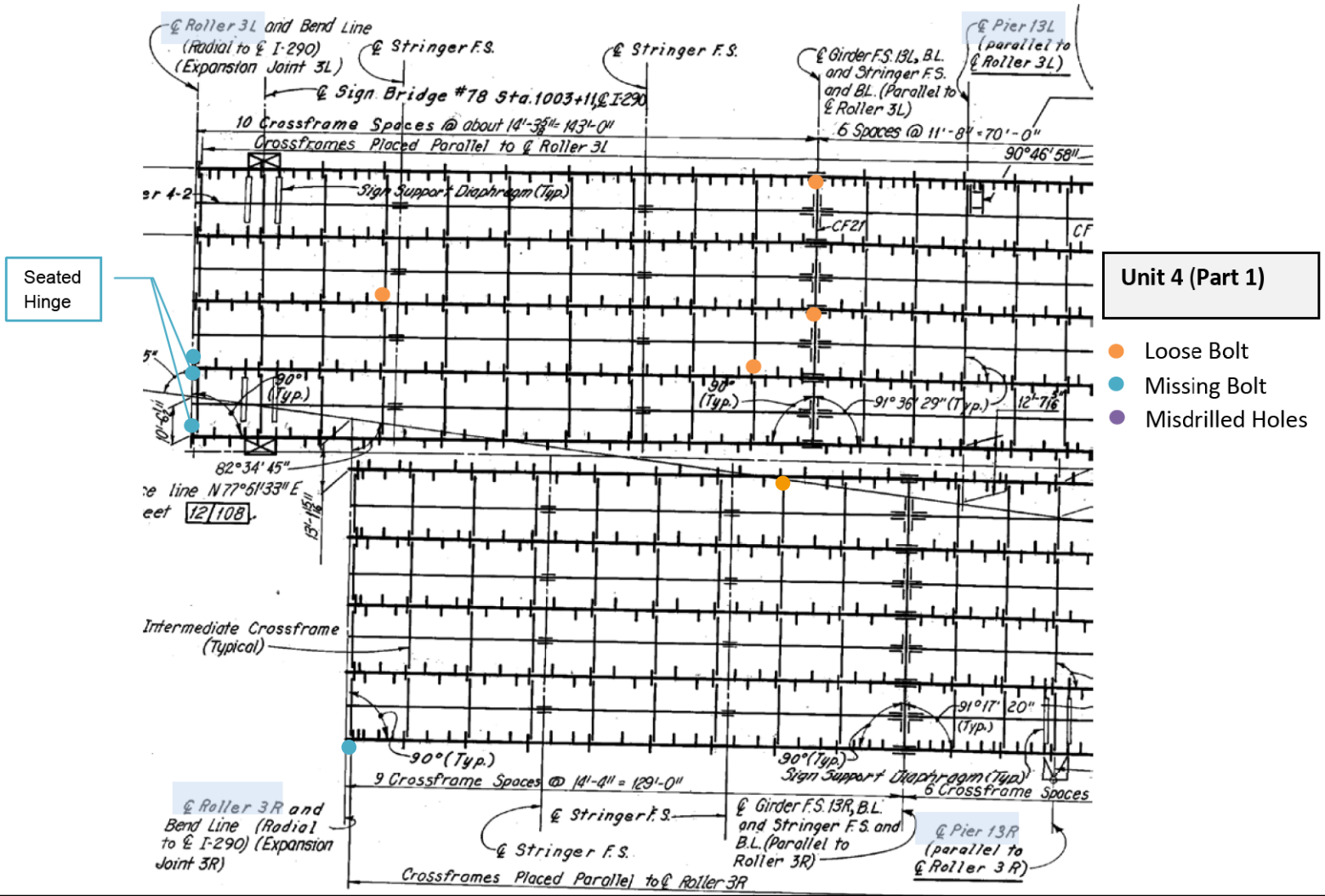

Match Line
12 Spaces @ 15'-0½" = 180'-6"
℄ Field Splice for Stringers
℄ Roller 2L and Bend Line Unit 2-L (Expansion Joint 2-L)
Crossframe Spacing Measured Along ℄ Girder 2-G (Typical)
(Typical to match line except as noted)
℄ Girder 2-A
℄ Stringer 2-5
℄ Stringer 2-6
℄ Girder 2-D
℄ Stringer 2-7
℄ Girder 2-E
℄ Stringer 2-8
℄ Girder 2-F
℄ Stringer 2-9
℄ Girder 2-G
℄ Girder 2-H
℄ Stringer 2-10
℄ Girder 2-J
℄ Stringer 2-11
℄ Girder 2-K
℄ Stringer 2-12
℄ Girder 2-L
℄ Stringer 2-13
℄ Girder 2-M
93°17'38"
92°11'50"
91°05'56"
90°00'00" (Typ. Girder 2-D thru Girder 2-G including all Stringers)
90°00'00" (Typ. Girder 2-H thru Girder 2-M including all Stringers)
CF2
CF15
CF10
CF1
3 Girder Spaces @ 15'-7"=46'-9"
4 Girder Spaces @ 15'-7"=62'-4"
3'-8½"
90°(Typical)
℄ I-290 and Reference Line (N64°24'37"E) see Bridge Layout Diagram. Sheet 12.108.
Unit 2 (Part 4)
Loose Bolt
Missing Bolt
Misdrilled Holes
3'-0" (Typ.)
10 Spaces @ about 14'-8⅜"=147'-0"
℄ Pier 8R
℄ Stringer Field Splice
℄ Girder Field Splice 8AR
Sign Support Diaphragm (Typ.)
℄ Stringer Field Splice
℄ Sign Bridge #77
Crossframe Spacing Measured Along ℄ Girder 2-H (Typical)
℄ Roller 2R and Bend Line Unit 2-R (Expansion Joint 2-R)
PART FRAMING PLAN

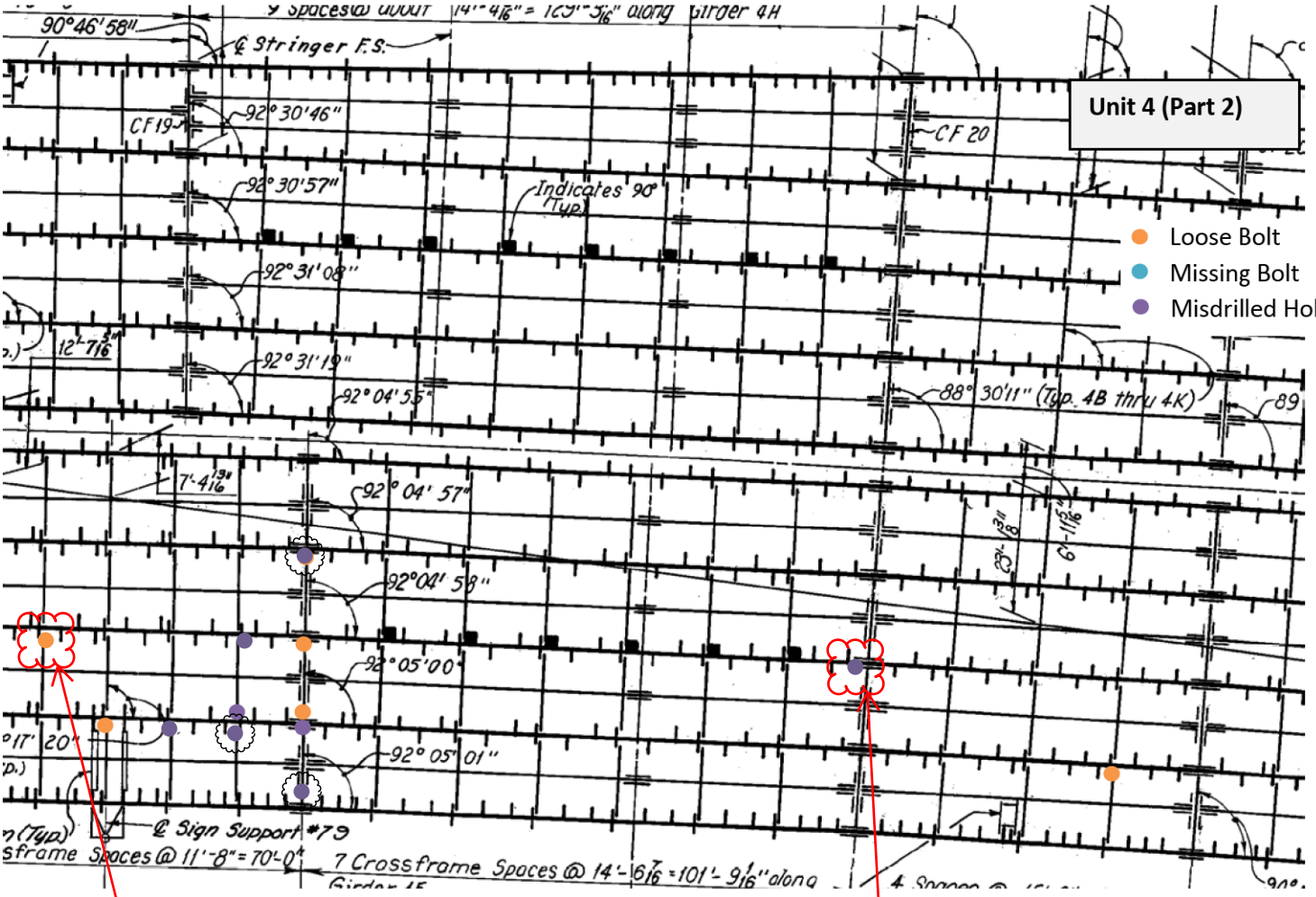

℄ Roller 2L and B.L. (Expansion Joint 2L)
℄ Pier 9L
Scupper (Typical)
℄ Girder F.S. 9A L (parallel to Pier 9L)
℄ Stringer F.S.
℄ Girder F.S. 10L and B.L. and ℄ Stringer F.S. and B.L. (parallel to pier 10L)
11 Crossframe Spaces @ about 14'-10 7/16" 163'-6 7/8" along Girder 3A
CF4 Girders A to B
CF11 Girders B to E
CF6 Girders B to E
℄ Stringer F.S.
3'-3" (Typical)
90°03'19"
90°03'15"
90°03'10"
90°03'06"
90°03'01"
90°08'39"
88°41'38"
88°41'34"
88°41'29"
88°41'25"
88°41'20"
88°39'27
88°39'21
88°39'15
88°39'09
88°39'03
90°08'33"
90°08'27"
90°08'21"
90°08'14"
PC Sta. 996+09.63
4 Girder Spaces @ 15'-7"=62'-4"
2 Spaces @ 7'-9½"=15'-7"
3'-8½"
℄ of 4-CF12
℄ I-290 and Reference line (N 61°24'37"E) see Sheet 12.108.
℄ Roller 2R and B.L.
CF4 Girders F to G
CF11 Girders G to K
CF4 Girders F to G CF6 Girders G to K
9 Crossframe Spaces @ about 13'-11 7/16" = 125'-10 15/16" along Girder F
Unit 3 (Part 1)
Loose Bolt
Missing Bolt
Misdrilled Holes

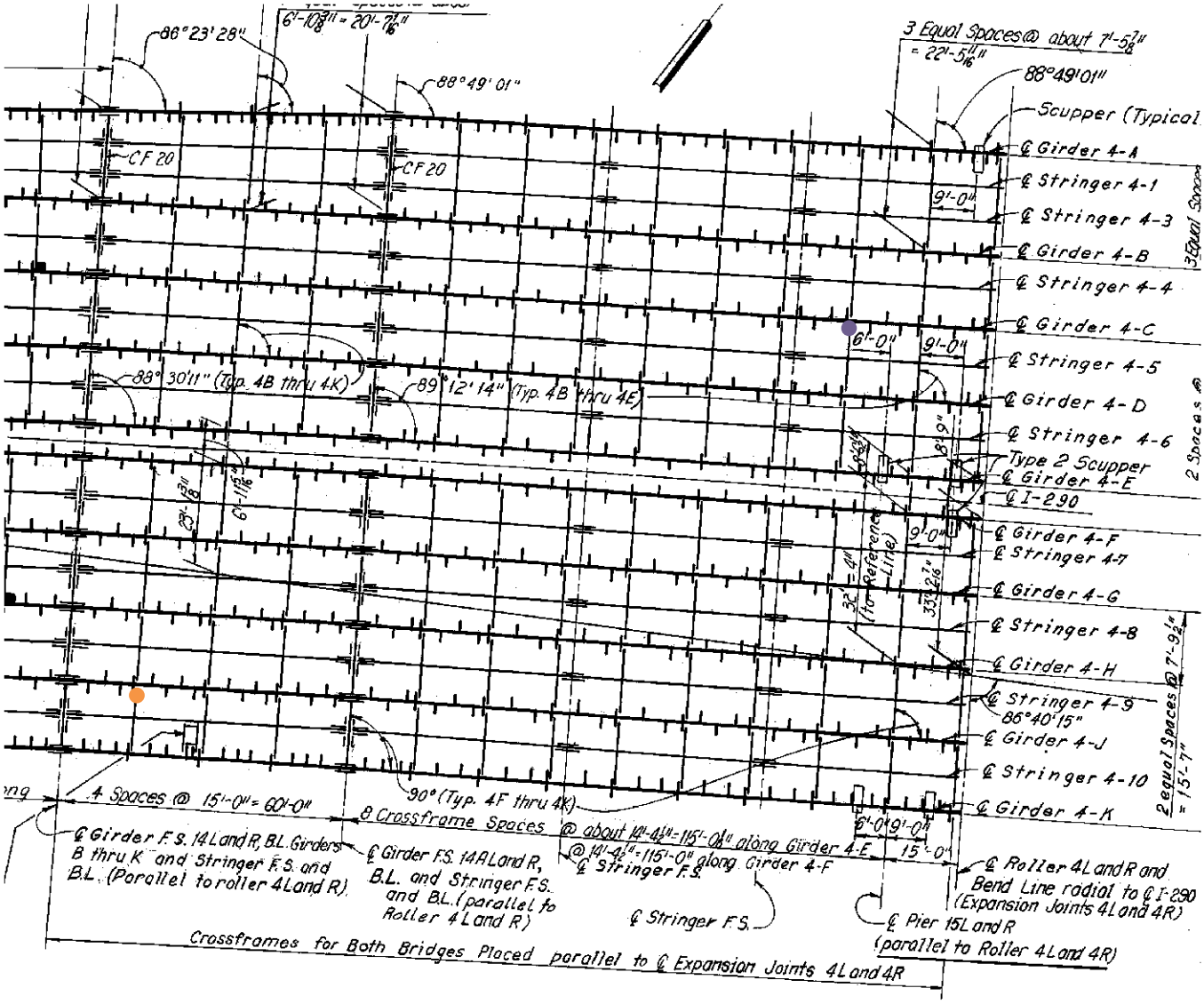

Unit 3 (Part 2)
Loose Bolt
Missing Bolt
Misdrilled Holes
2018 DLZ INSPECTION
5 Crossframe Spaces @ 15'-0" = 75'-0"
6 Crossframe Spaces @ 14'-2" = 85'-0"
CF 12 (Typ.)
90° (Typ.)
CF18
CF 4
CF6
3'-3"
91°21'41"
88°30'49"
88°39'27"
88°39'21"
88°39'15"
88°39'09"
88°39'03"
CF 12(Typ.)
℄ of 4CF 22
℄ Stringer F.S.
℄ Pier 10L (Radial)
℄ Pier 10R (Radial)
5 Spaces @ 15'-0" = 75'-0"
6 Spaces @ 14'-2" = 85'-0"


Unit 3 (Part 3)
Loose Bolt
Missing Bolt
Misdrilled Holes
Stringer
11 Crossframe Spaces @ about 14'-10"=163'-2¼" along Girder 3A
CF 4 Girders A to B
CF 6 Girders B to E
6 Crossframe Spaces @ 14'-2" = 85'-0"
CF 12 (Typ)
90° (Typ.)
CF 22
CF4
CF6
88° 37'30" (Typical)
91° 25'00" (Typ.)
88°35'00" (Typical)
CF 4 Girders F to G
CF 6 Girders G to K
12 Crossframe Spaces @ about 14'-1⅞" = 169'-10" along Girder F
℄ of 4CF 22
℄ Girder F.S. 10AR and B.L. and ℄ Stringer F.S. and B.L. (parallel to Pier 10R)
℄ Stringer F.S.
℄ Stringer F.S.
8" ϕ Safety Cable Support
℄ Girder F.S. 11R and B.L.
℄ Crossframe Spaces @ 14'-2" = 85'-0"
℄ Pier 11L match line (Radial)
℄ I-290


Girder
Unit 3 (Part 4)
Loose Bolt
Missing Bolt
Misdrilled Holes

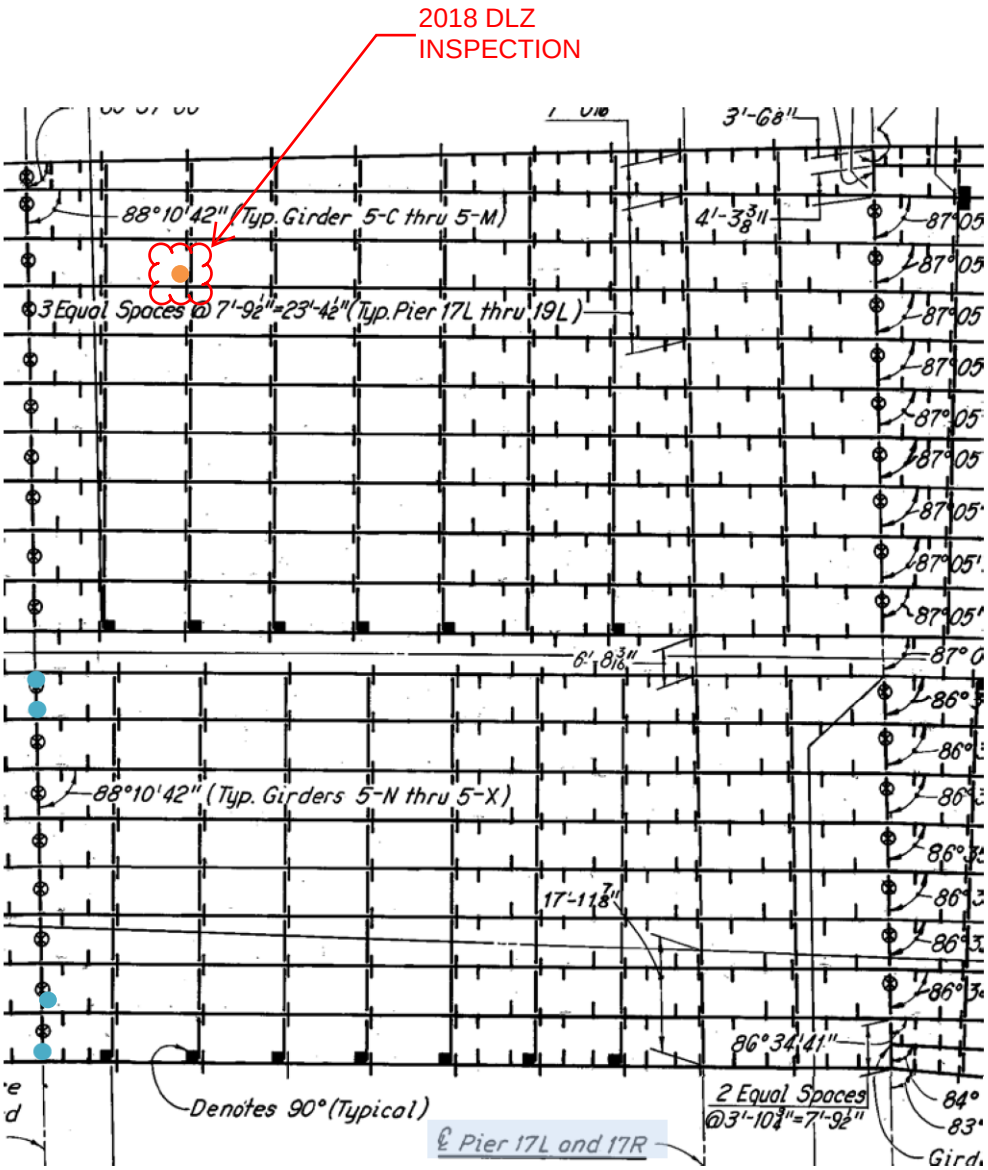

Seated Hinge
Unit 4 (Part 1)
Loose Bolt
Missing Bolt
Misdrilled Holes

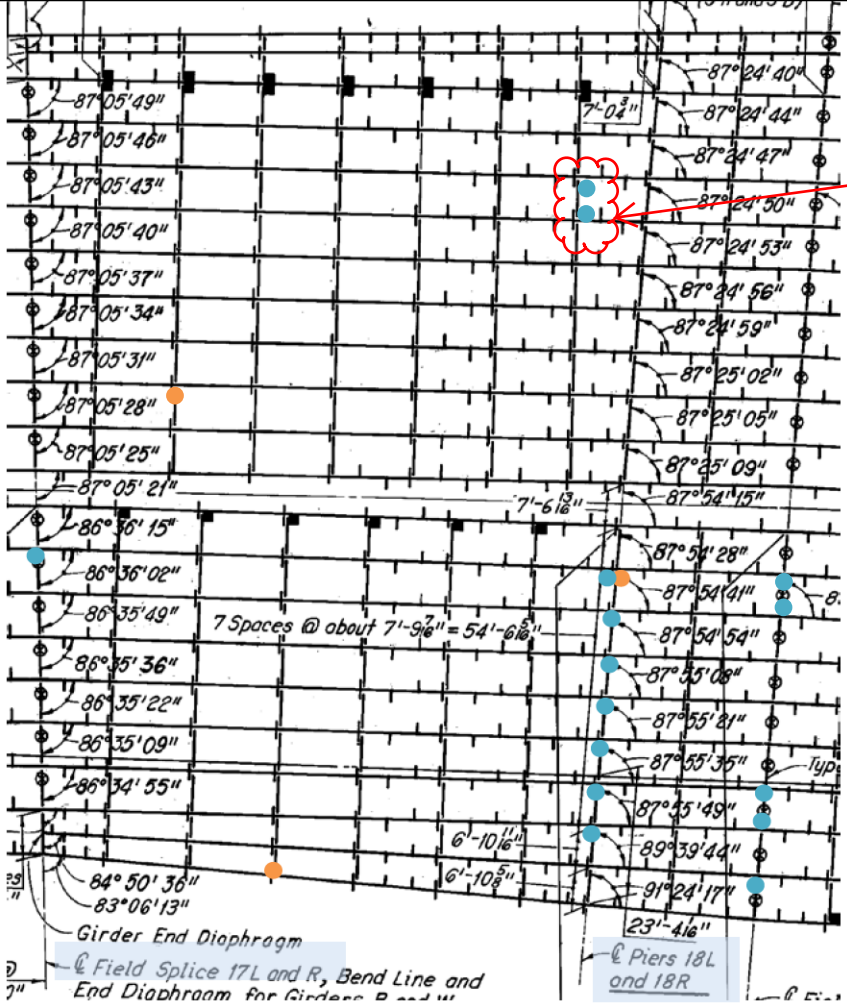

Unit 4 (Part 2)
Loose Bolt
Missing Bolt
Misdrilled Holes
90°46'58"
℄ Stringer F.S.
CF19
92°30'46"
92°30'57"
Indicates 90° Typ.
92°31'08"
92°31'19"
92°04'55"
CF 20
88°30'11" (Typ. 4B thru 4K)
92°04'57"
92°04'58"
92°05'00"
92°05'01"
℄ Sign Support #79
7 Crossframe Spaces @ 14'-6 7/16" = 101'-9 1/16" along
2018 DLZ INSPECTION
2018 DLZ INSPECTION
Loose Bolt
Missing Bolt
Misdrilled Holes



Unit 4 (Part 3)

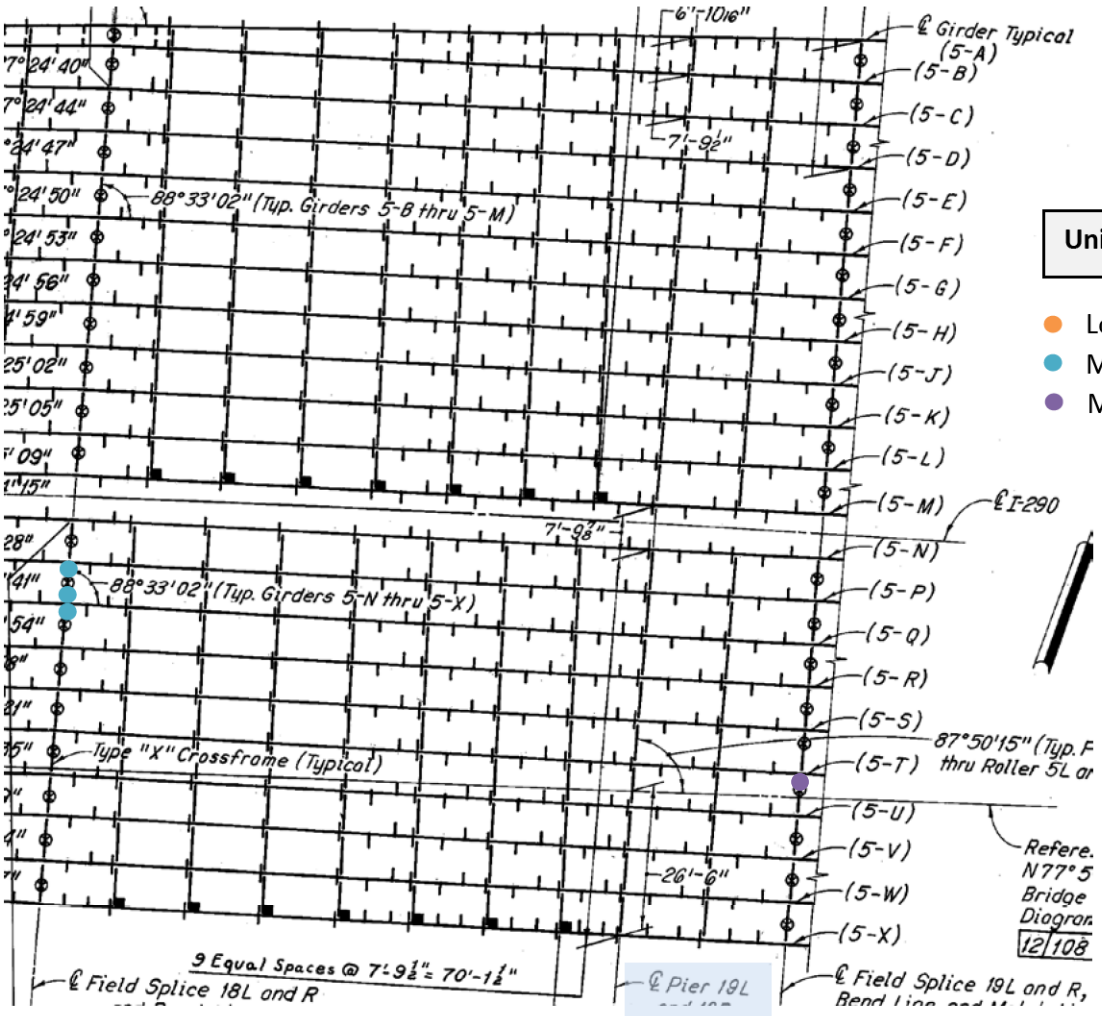
- Loose Bolt
- Missing Bolt
- Misdrilled Holes


2018 DLZ
INSPECTION
88°10'42" (Typ. Girder 5-C thru 5-M)
3 Equal Spaces @ 7'-9½"=23'-4½" (Typ. Pier 17L thru 19L)
3'-6⅜"
4'-3⅜"
6'-8³/₁₆"
88°10'42" (Typ. Girders 5-N thru 5-X)
17'-11⅞"
86°34'41"
2 Equal Spaces
@3'-10¾"=7'-9½"
Denotes 90° (Typical)
℄ Pier 17L and 17R
Unit 5 (Part 2)
Loose Bolt
Missing Bolt
Misdrilled Holes



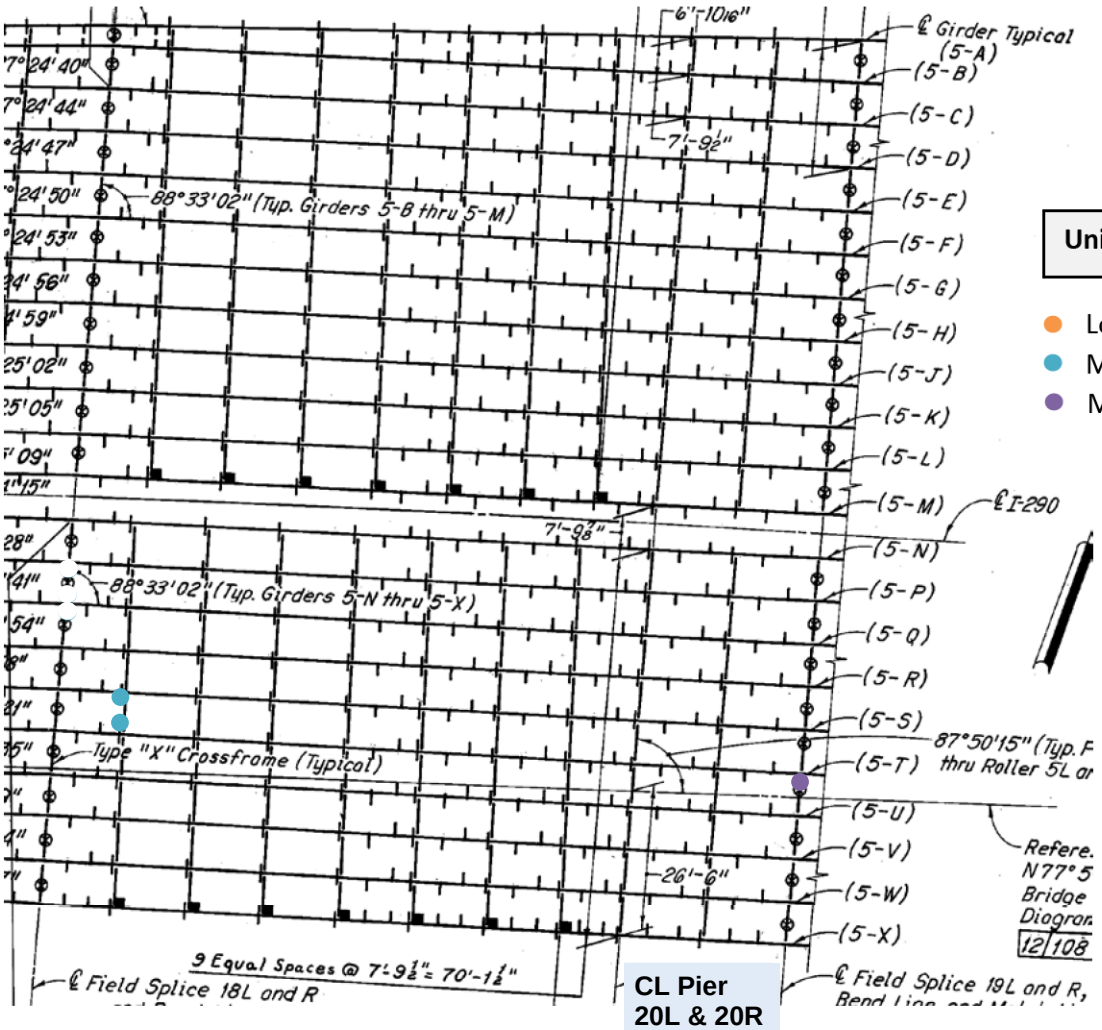
Unit 5 (Part 3)

- Loose Bolt
- Missing Bolt
- Misdrilled Holes



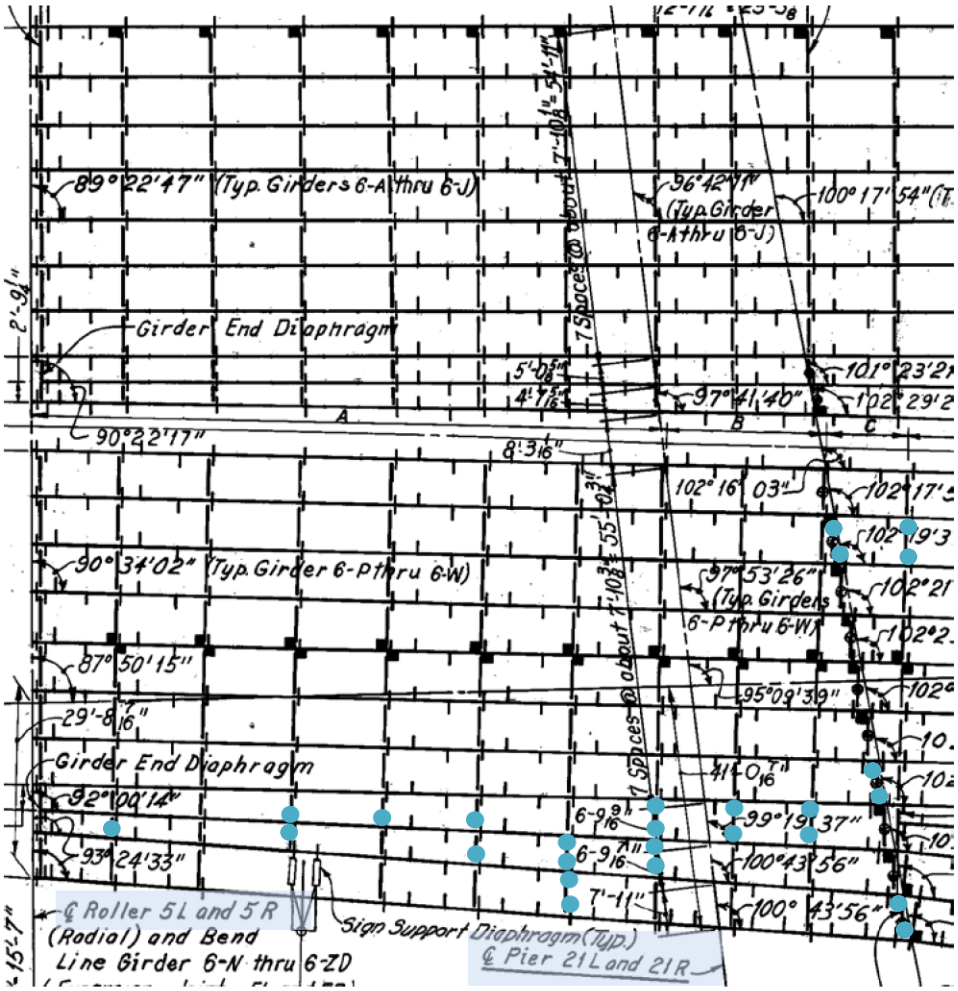
Unit 5 (Part 4)

- Loose Bolt
- Missing Bolt
- Misdrilled Holes



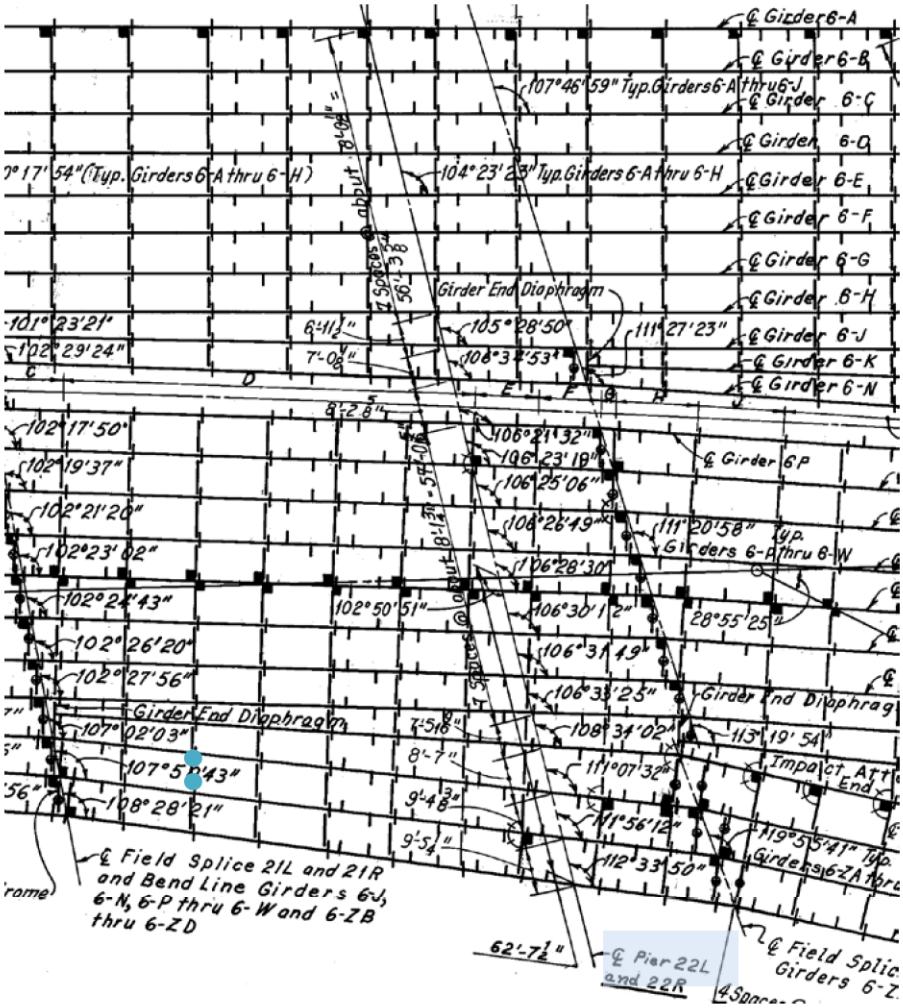
Unit 5 (Part 5)

- Loose Bolt
- Missing Bolt
- Misdrilled Holes



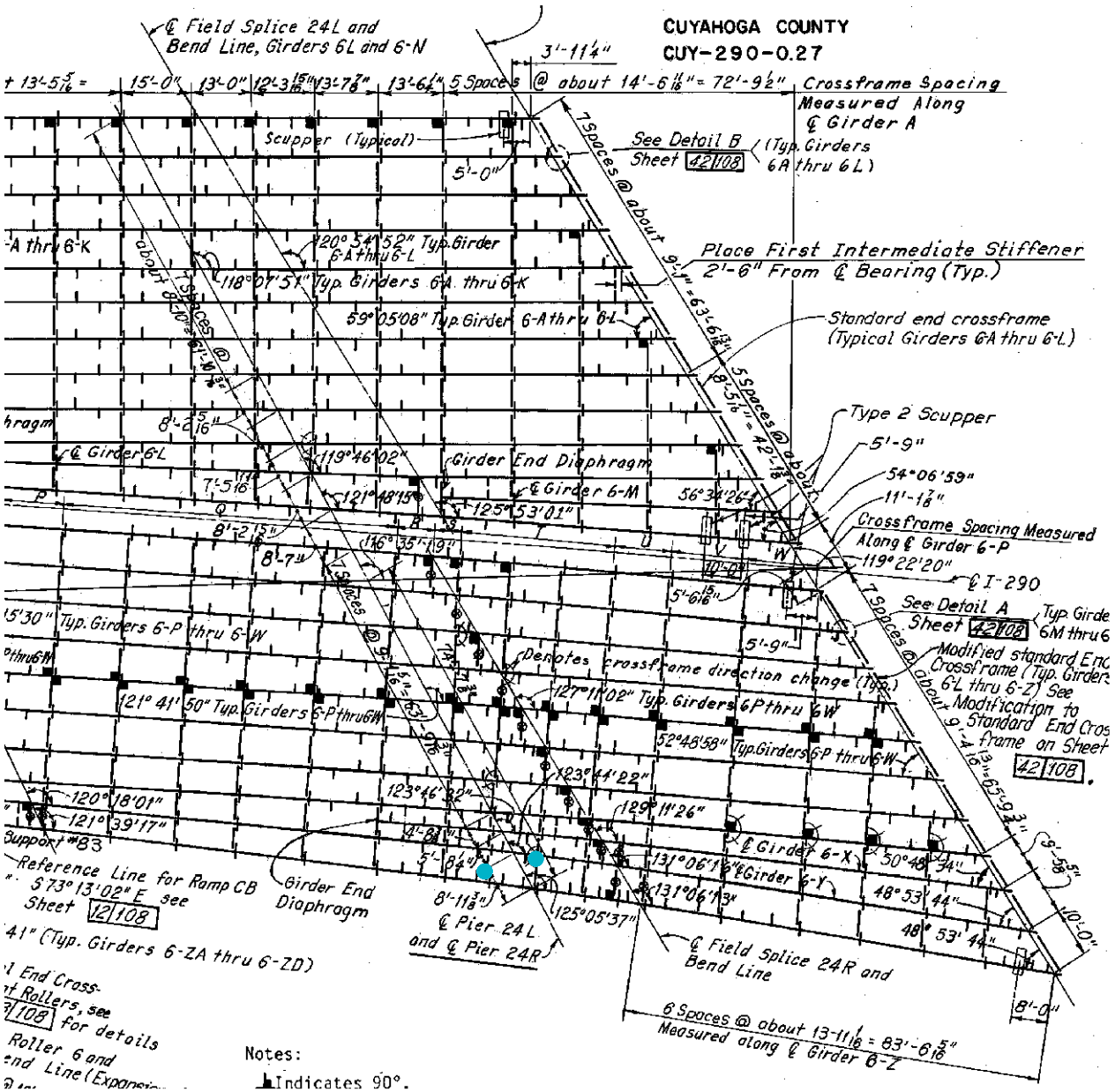
Unit 6 (Part 1)

- Loose Bolt
- Missing Bolt
- Misdrilled Holes



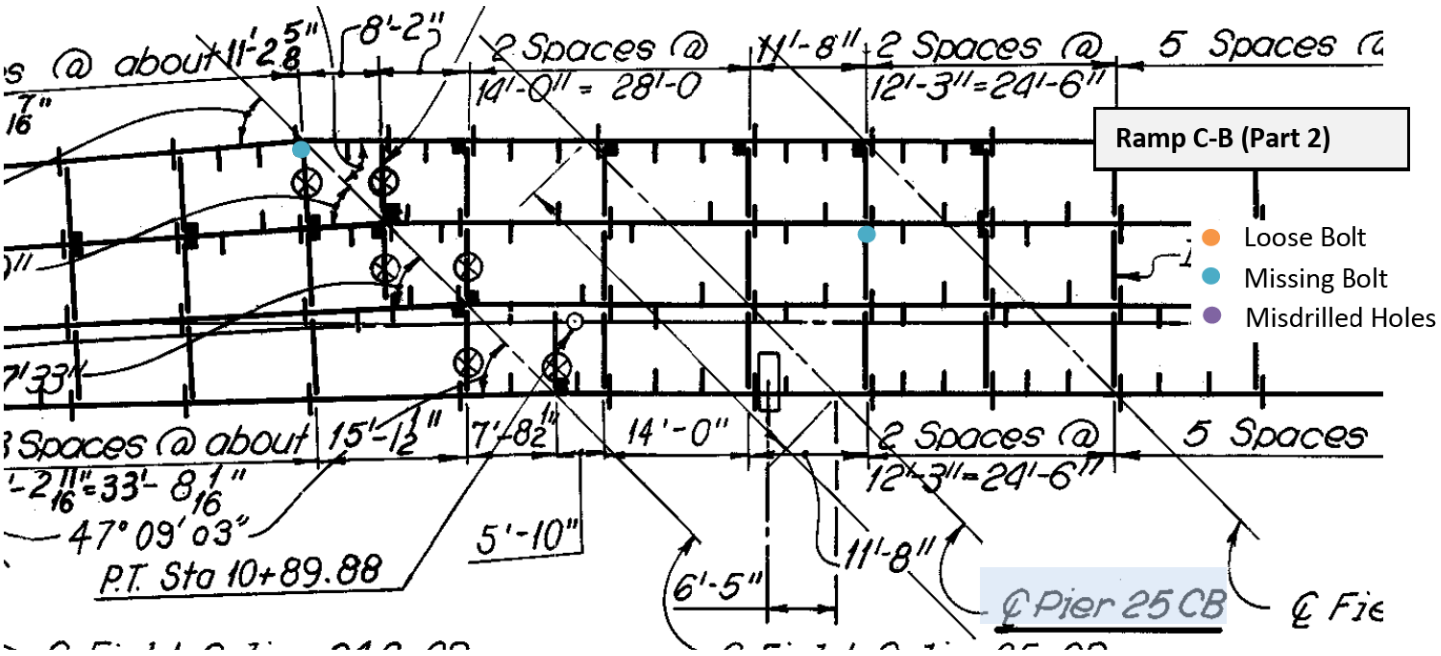
Unit 6 (Part 2)

- Loose Bolt
- Missing Bolt
- Misdrilled Holes



Unit 6 (Part 3)

- Loose Bolt
- Missing Bolt
- Misdrilled Holes


Ramp C-B (Part 2)
Loose Bolt
Missing Bolt
Misdrilled Holes
@ about 11'-2 5/8"
8'-2"
2 Spaces @ 14'-0" = 28'-0
11'-8"
2 Spaces @ 12'-3" = 24'-6"
5 Spaces
Spaces @ about 15'-1 1/2"
7'-8 1/2"
14'-0"
2 Spaces @ 12'-3" = 24'-6"
5 Spaces
47° 09' 03"
P.T. Sta 10+89.88
5'-10"
6'-5"
11'-8"
℄ Pier 25 CB

Superstructure - Ramp C-B

Legend:

- Loose Bolt
- Missing Bolt
- Misdrilled Holes

(1) Transverse crack 2 SF CS2

(2) Missing erection bolt Top horizontal at splice plate (0625)

(4) Missing erection bolt

(3) Minor delam around catch basin 8 SF CS2

(5) 6 - Transverse cracks w/ minor delam 6 x 6' wide = 36 SF CS2 (0626)

(6) 0627 - delam and spall 6'x2' = 12 SF CS2

Superstructure - Ramp C-B

Legend:

- Loose Bolt
- Missing Bolt
- Misdrilled Holes

(1) 0607-0608 8 LF CS2 spall @ top flange of beam

(2) 0609 - Rust along bottom of web and bottom flange typical full length CS2

(3) X-frame exhibits moderate rust 1 Ea. CS2 (3 total)

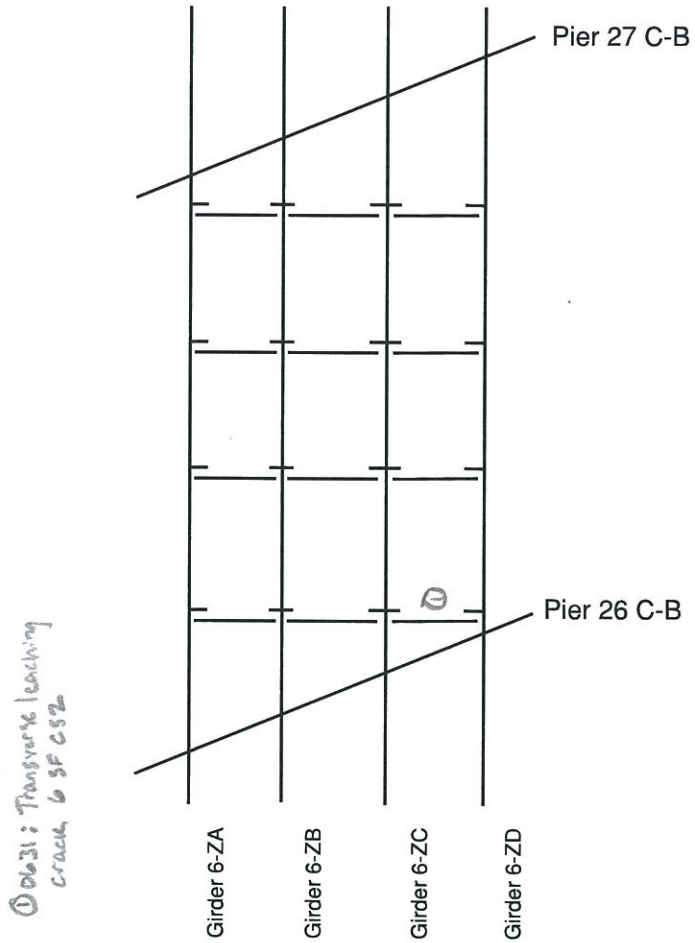
(4) misdrilled holes in stiffener (0620) (0622)

(5) 0621 - Misaligned X-frame due to downspout (as-built)

Superstructure - Ramp C-B

Legend:

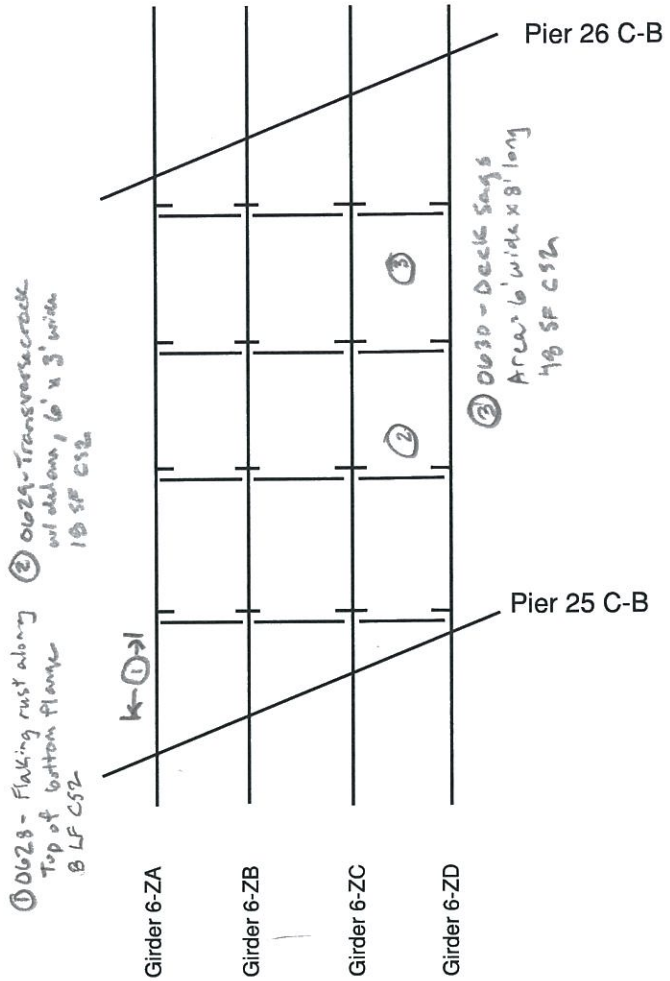
- Loose Bolt
- Missing Bolt
- Misdrilled Holes



Superstructure - Ramp C-B

Legend:

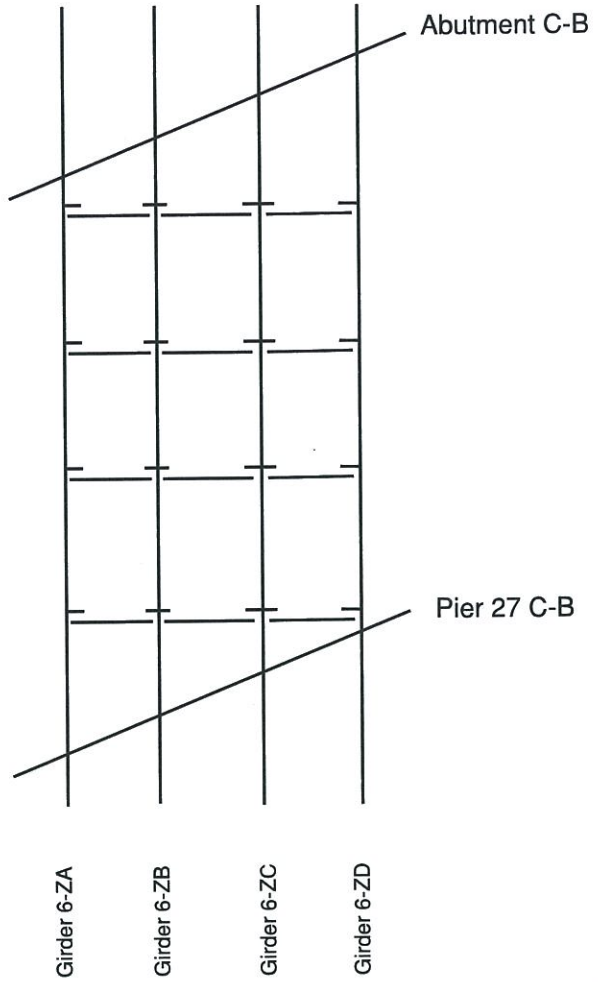
- Loose Bolt
- Missing Bolt
- Misdrilled Holes



Superstructure - Ramp C-B

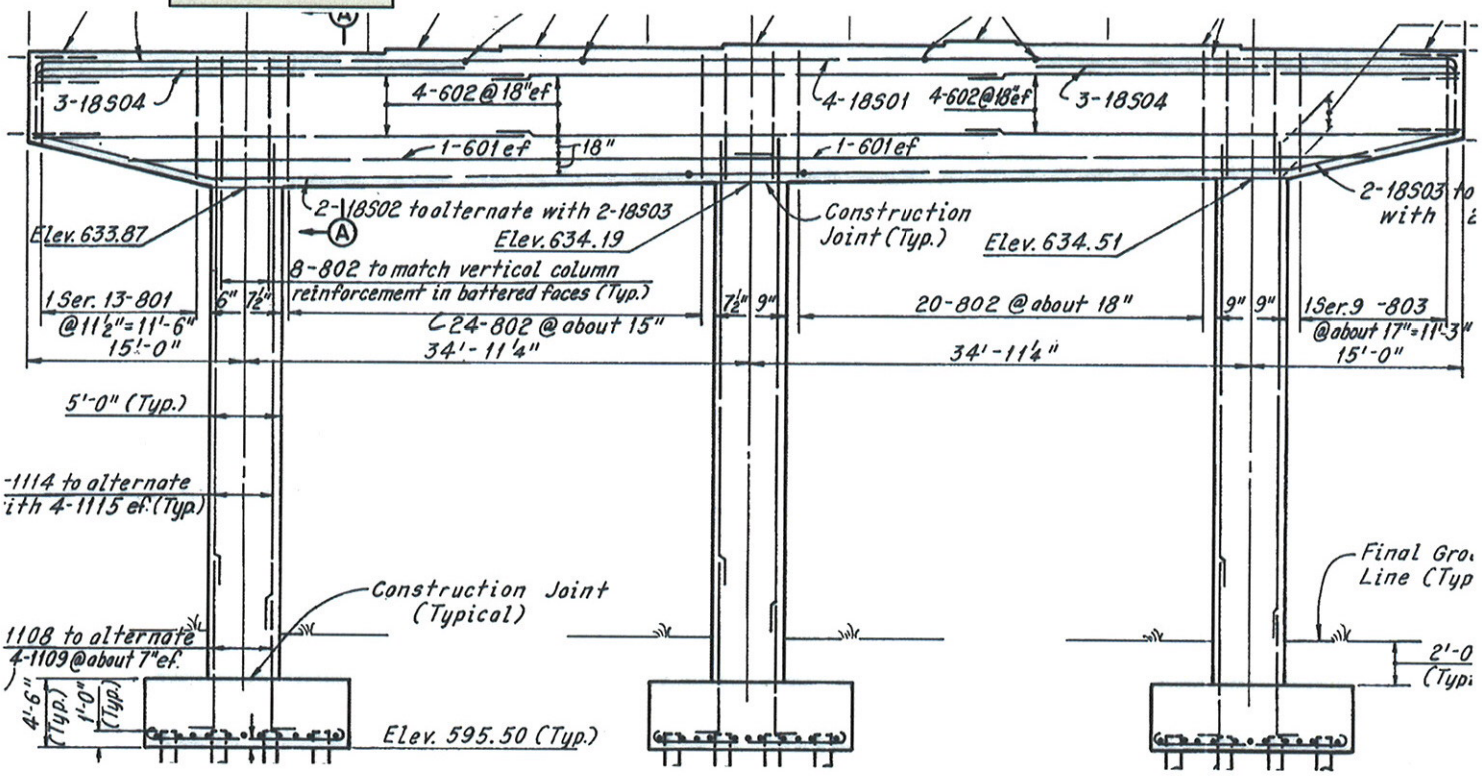
Legend:

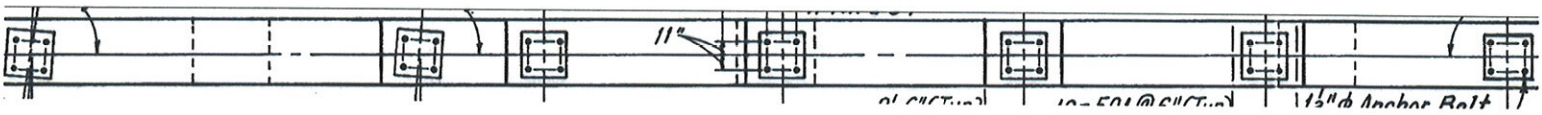
- Loose Bolt
- Missing Bolt
- Misdrilled Holes

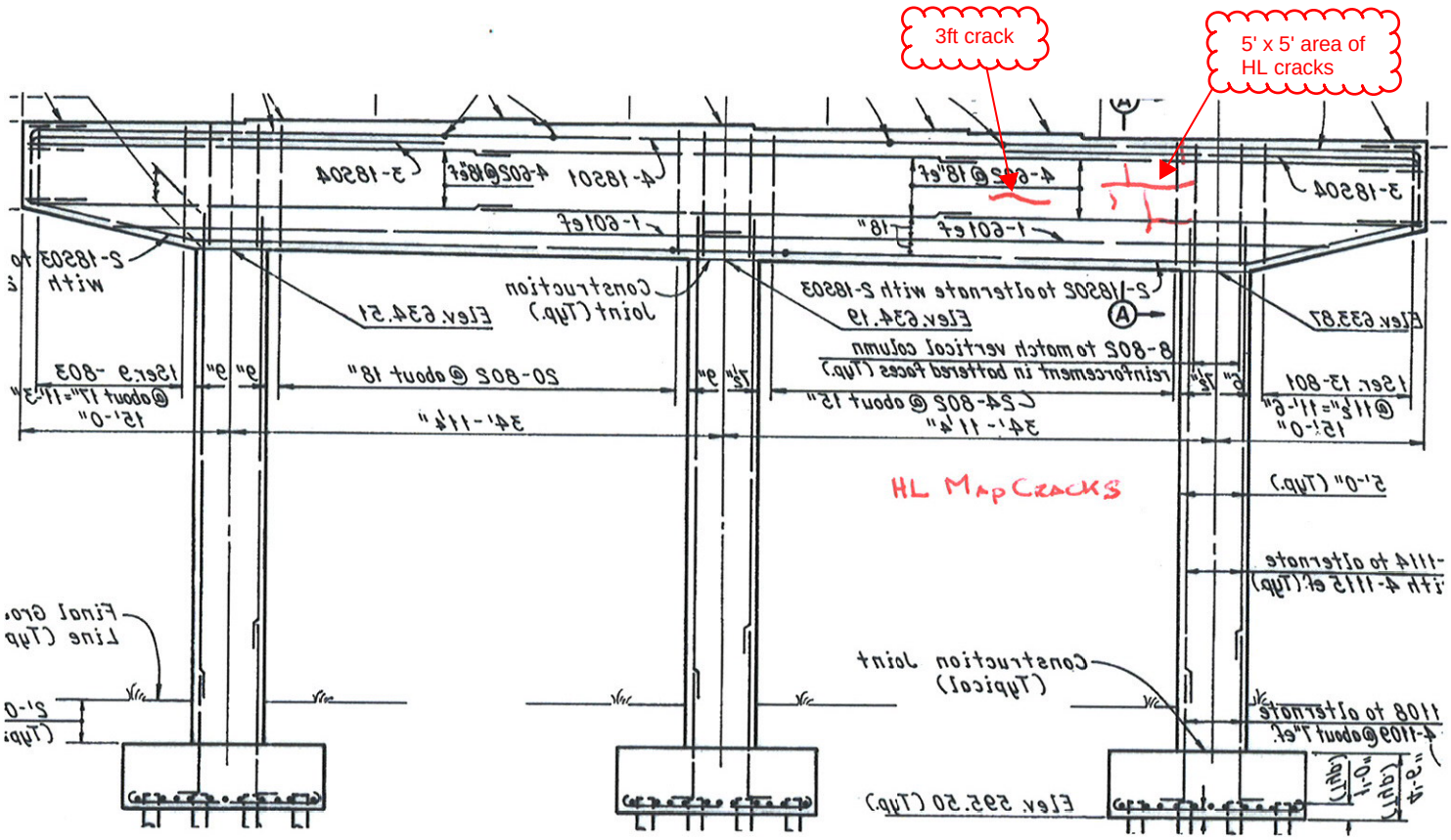


APPENDIX V – Substructure Drawings

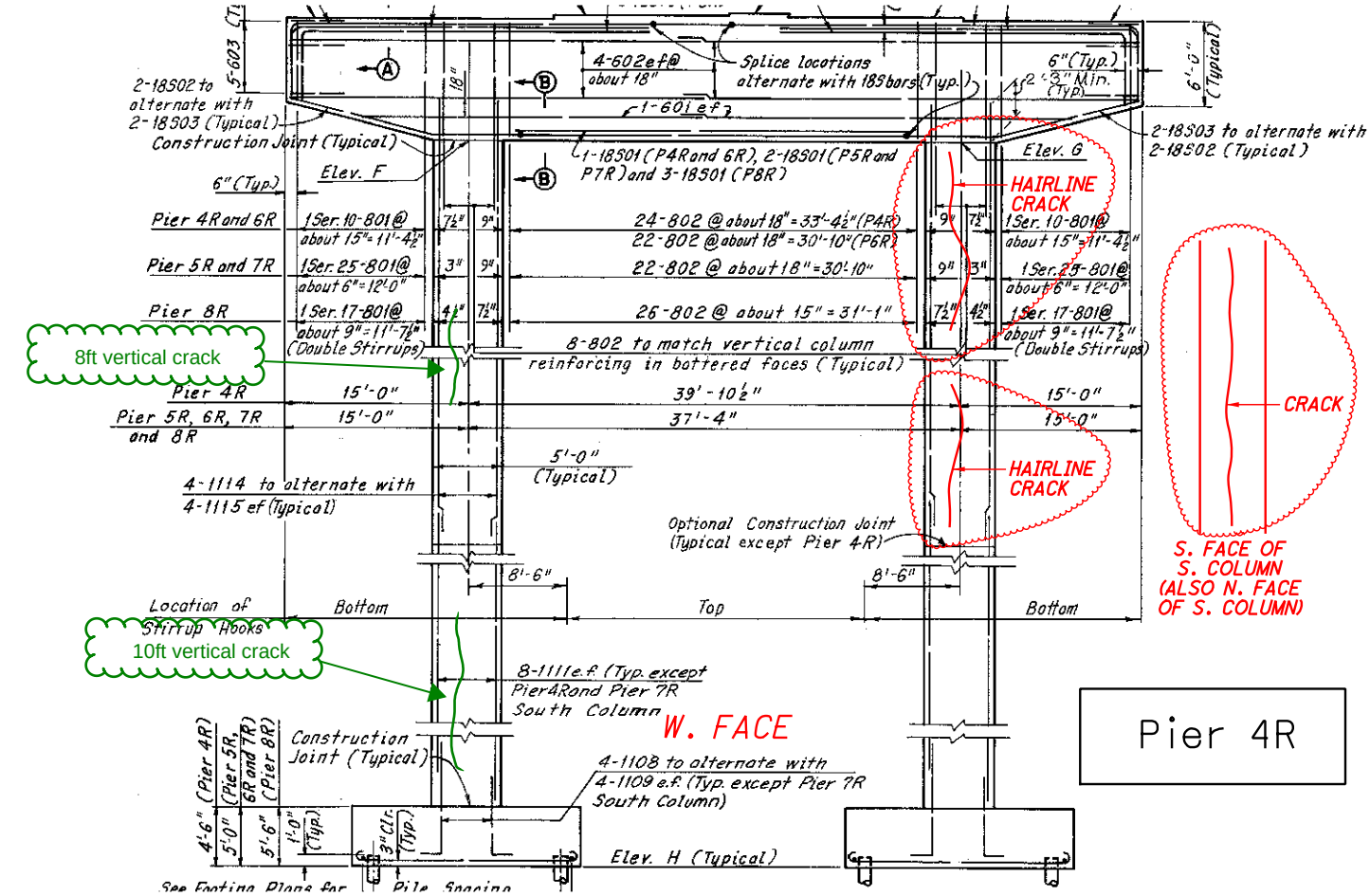
Pier 4L

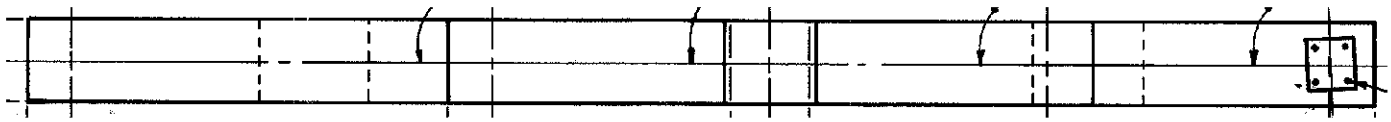


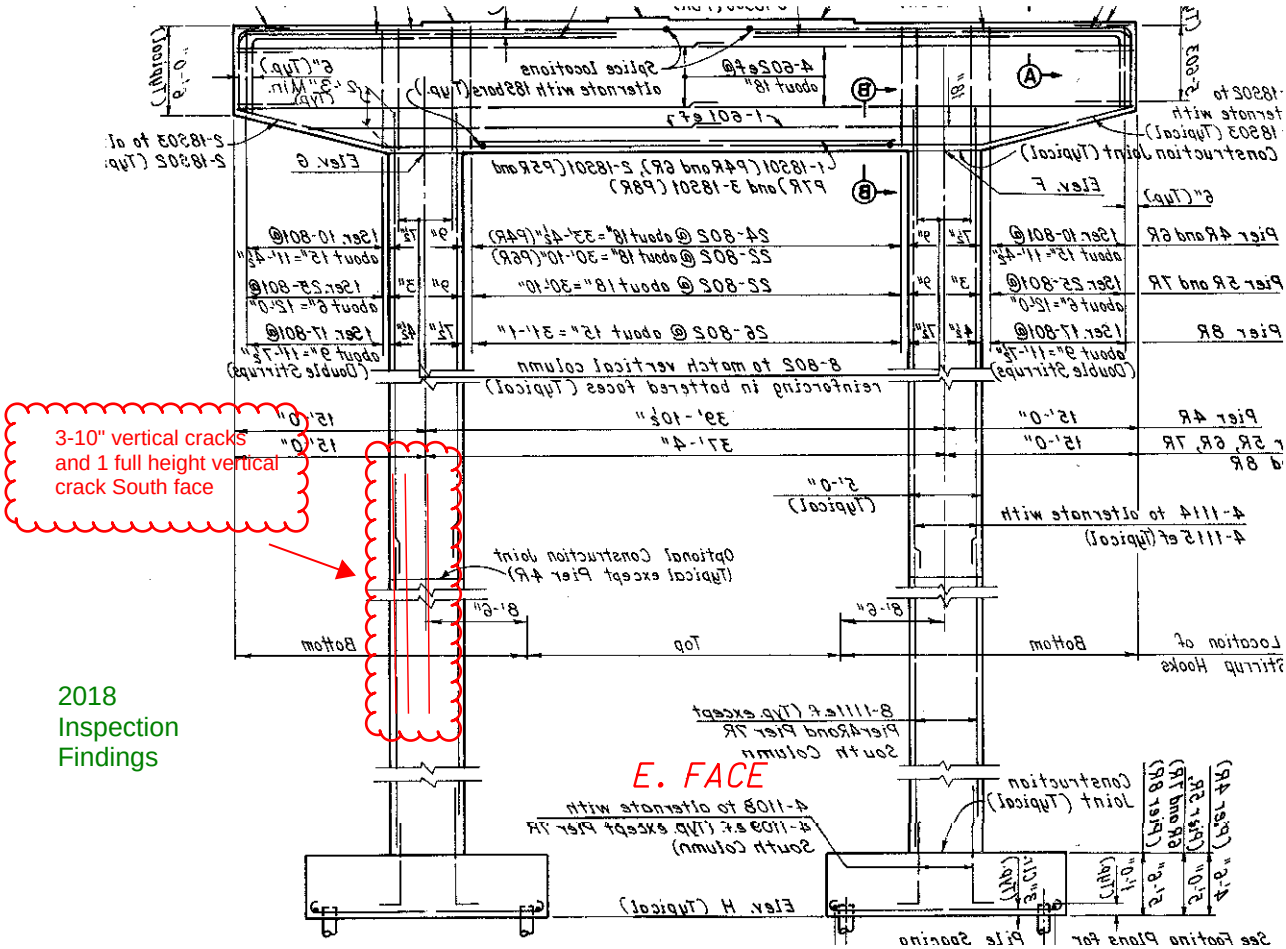




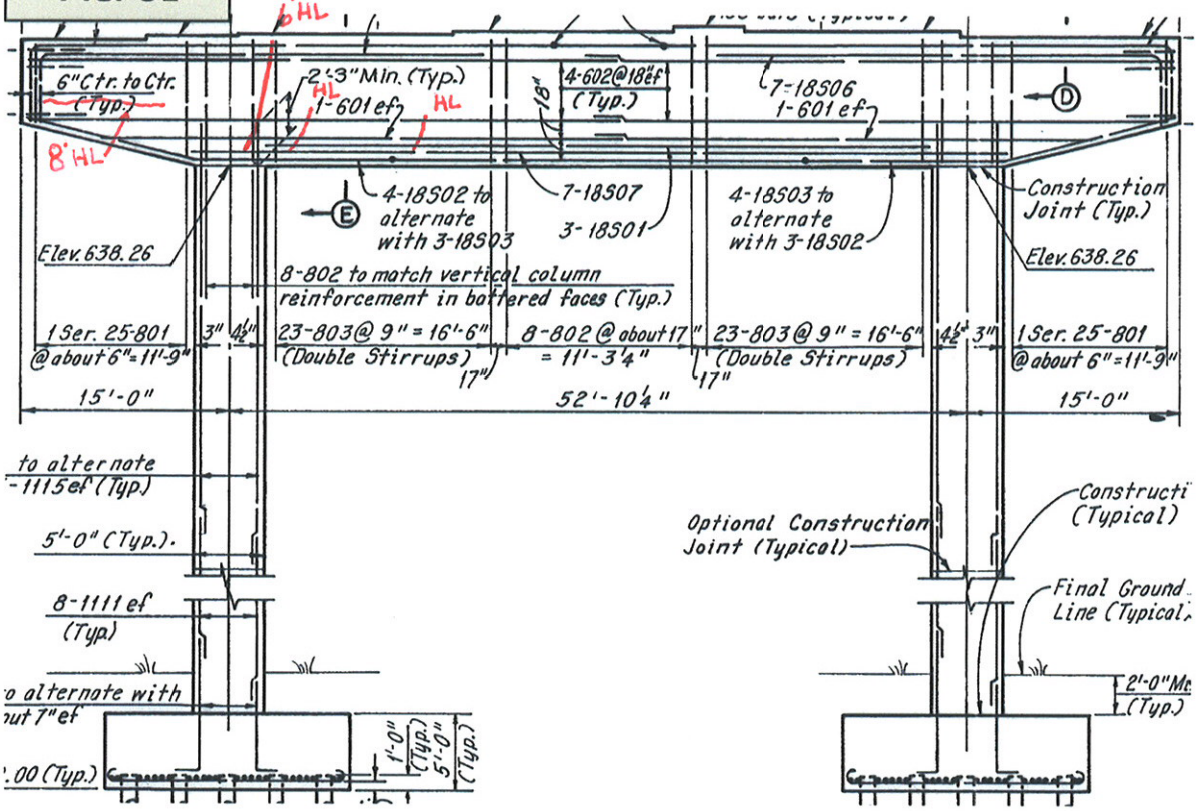
E Face


8ft vertical crack
10ft vertical crack
HAIRLINE CRACK
HAIRLINE CRACK
CRACK
S. FACE OF S. COLUMN (ALSO N. FACE OF S. COLUMN)
W. FACE
Pier 4R
Construction Joint (Typical)
Optional Construction Joint (Typical except Pier 4R)
Location of Stirrup Hooks
Bottom
Top
Bottom
Elev. H (Typical)

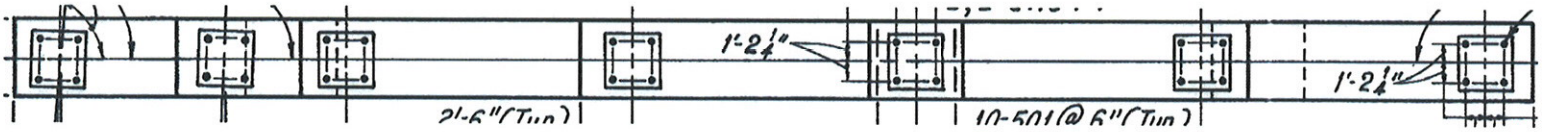


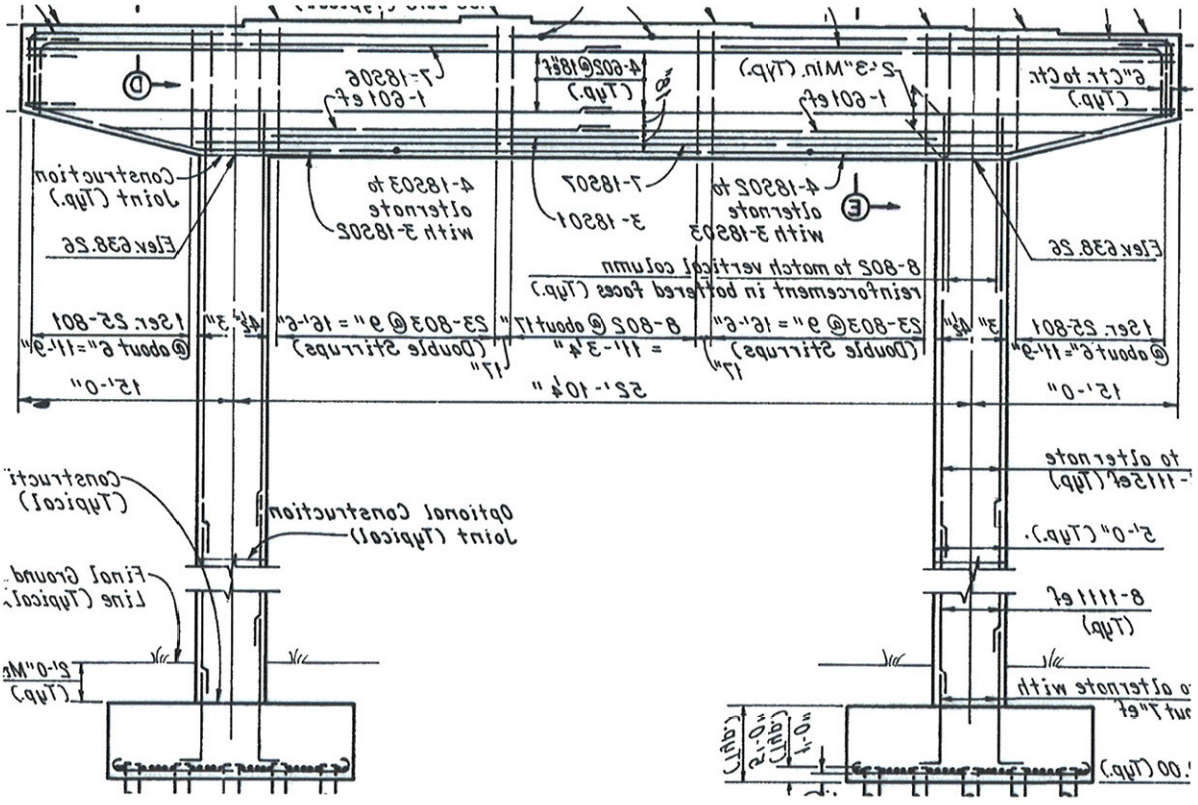

3-10" vertical cracks and 1 full height vertical crack South face
2018 Inspection Findings
E. FACE

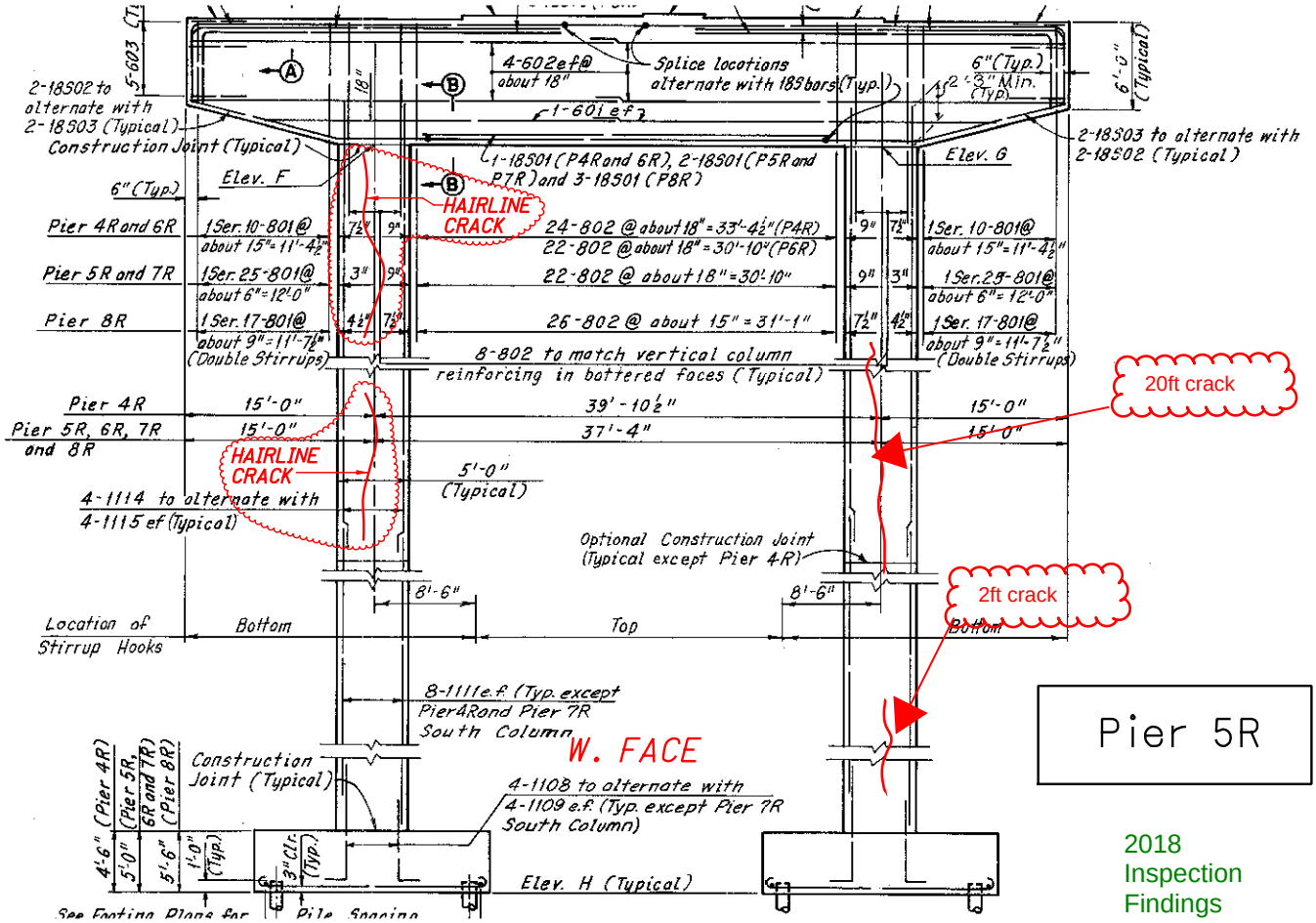
Pier 5L

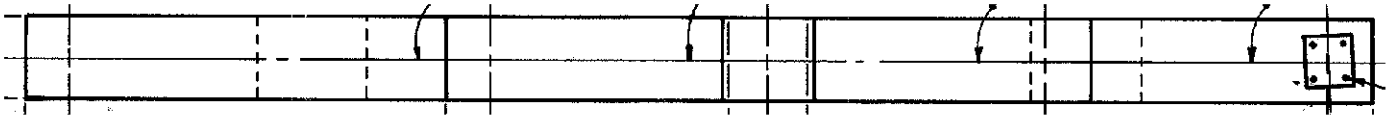


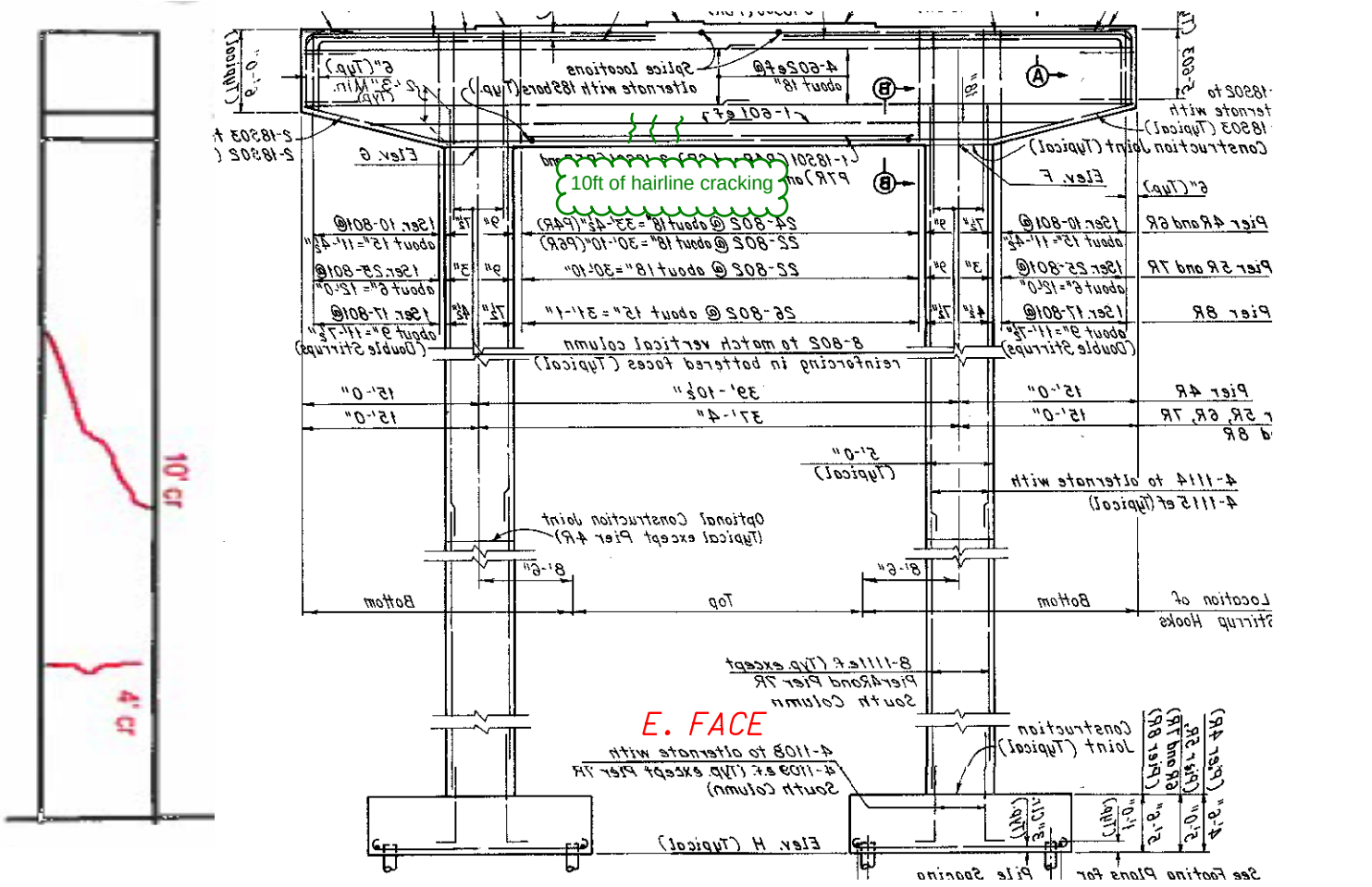
W FACE



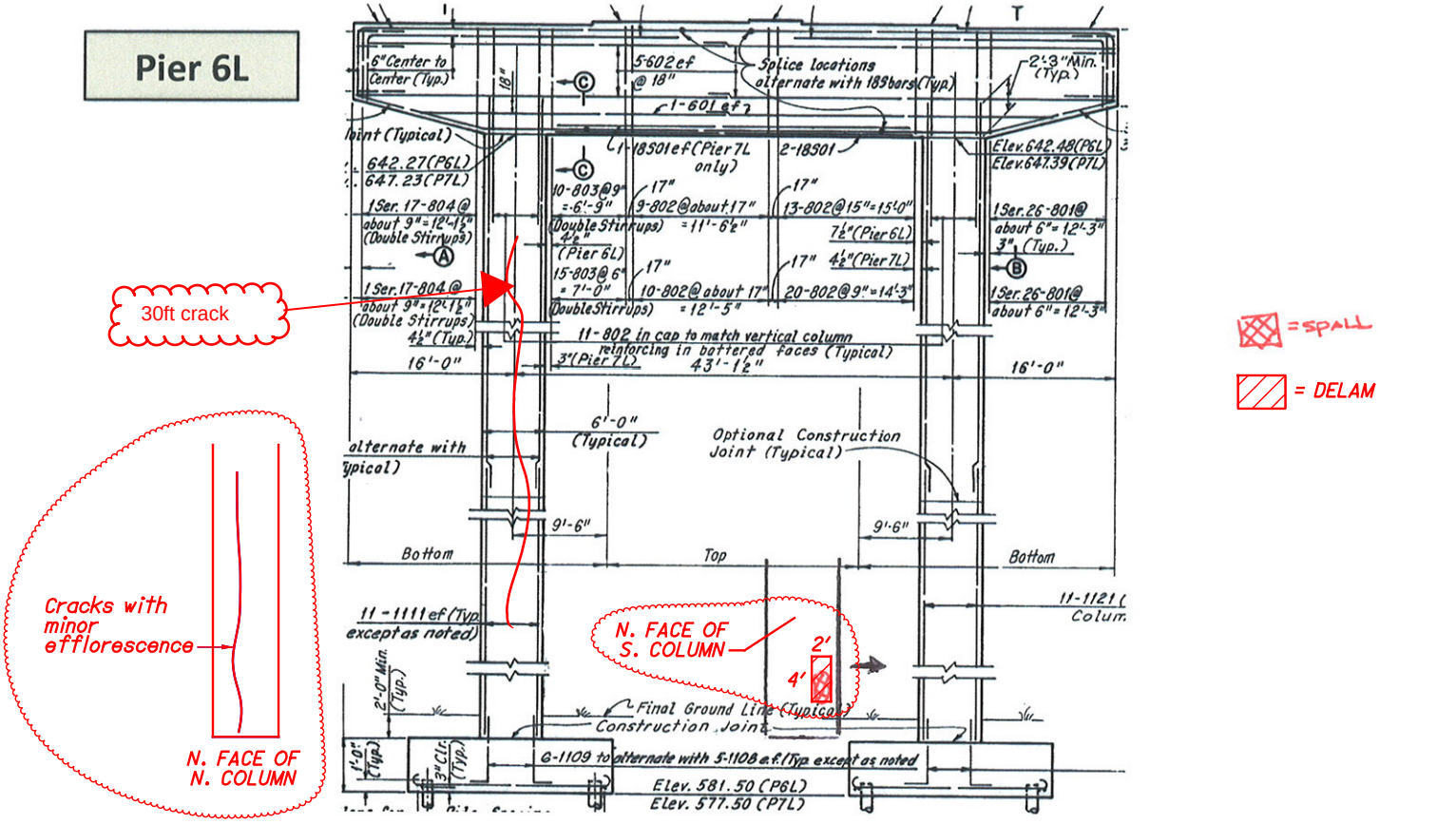



HAIRLINE CRACK
HAIRLINE CRACK
20ft crack
2ft crack
Pier 5R
W. FACE
2018 Inspection Findings

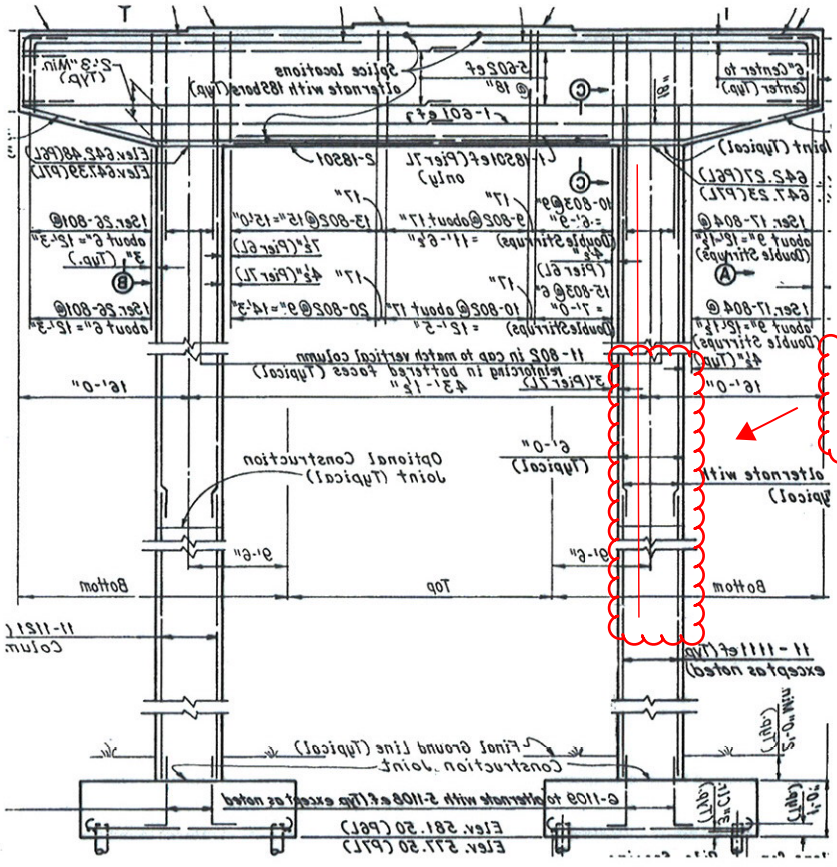



10ft of hairline cracking
10' ct
4' ct
E. FACE

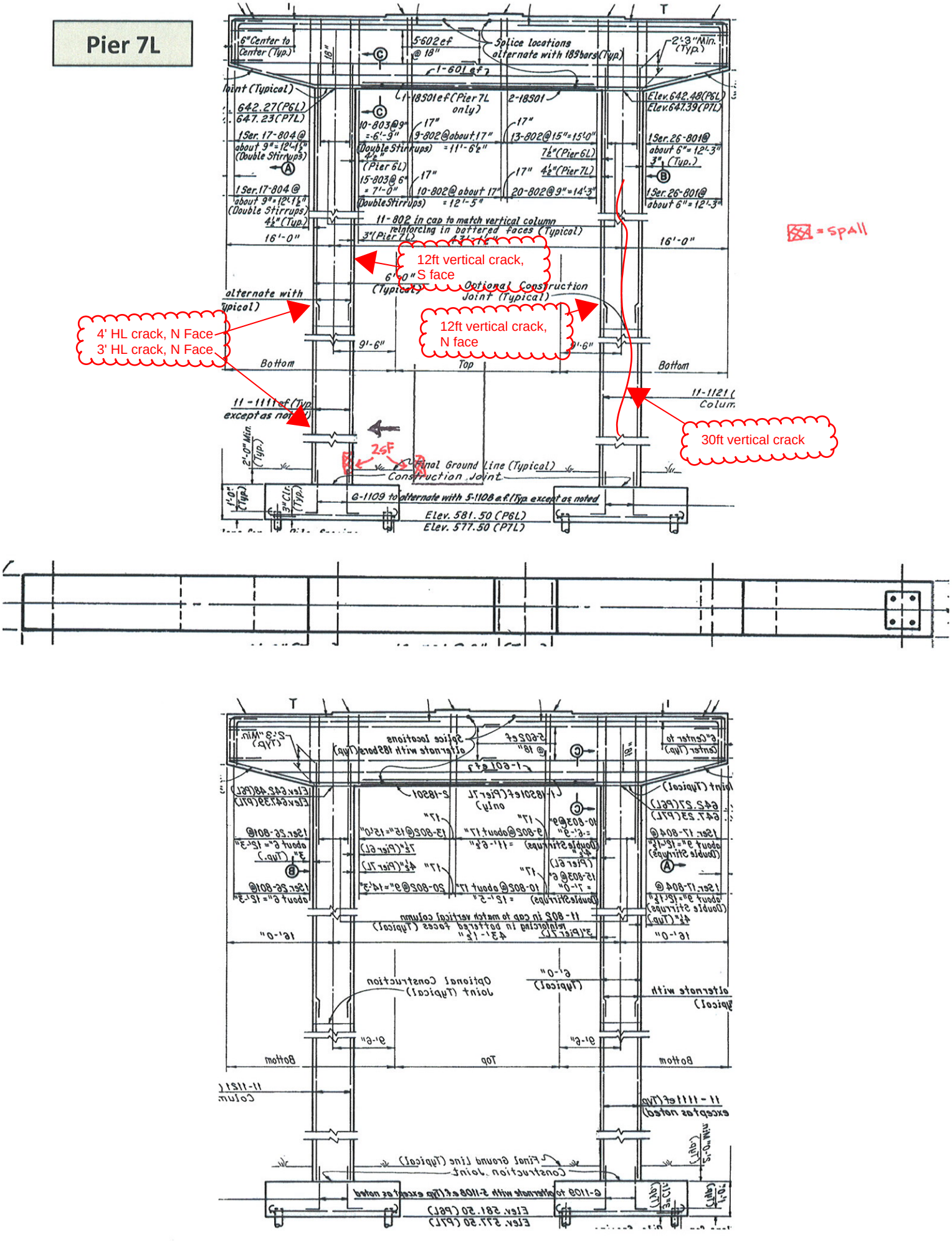
Pier 6L



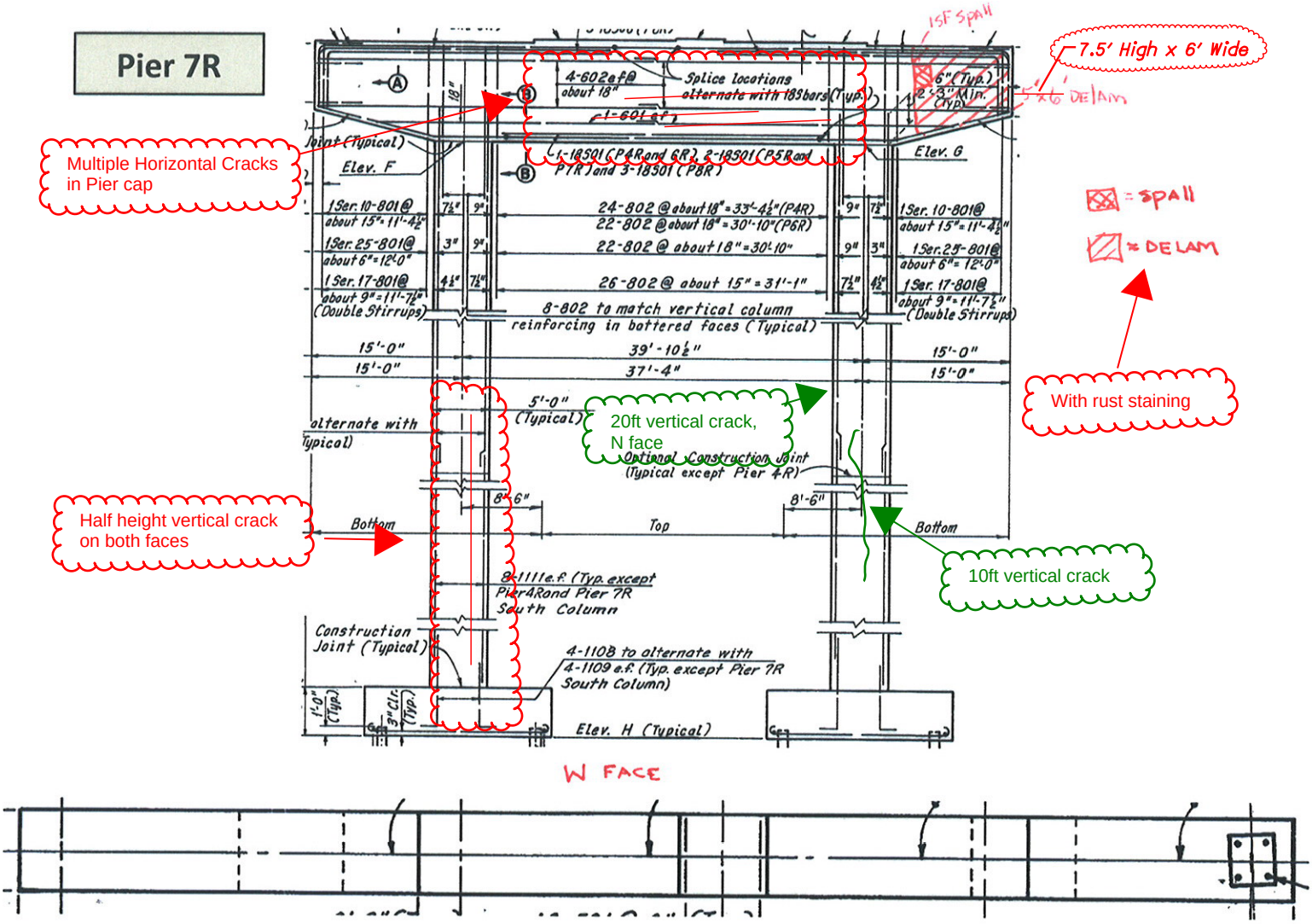
6R: East Face



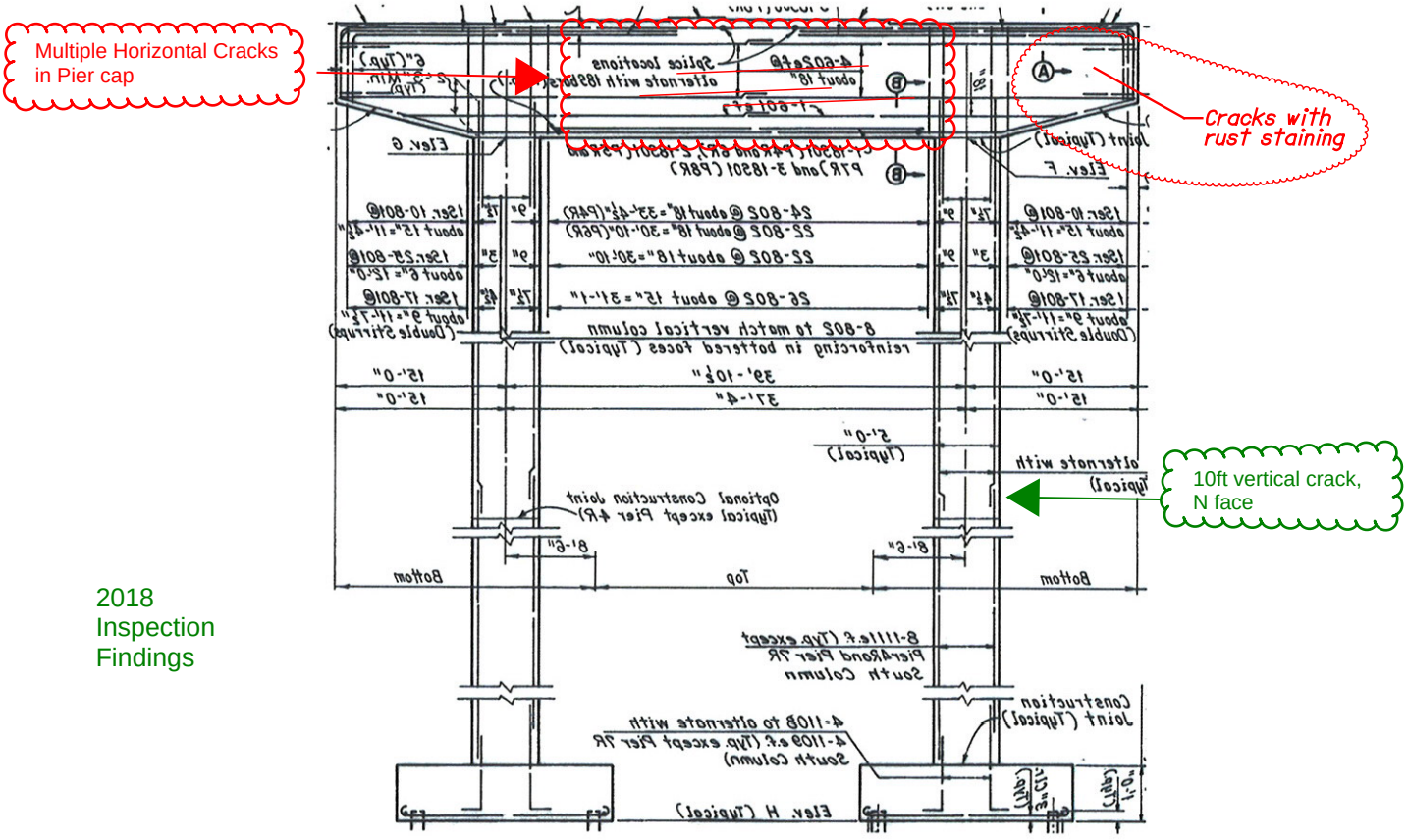
Pier 7L


12ft vertical crack, S face
4' HL crack, N Face
3' HL crack, N Face
12ft vertical crack, N face
30ft vertical crack
= spall

Pier 7R

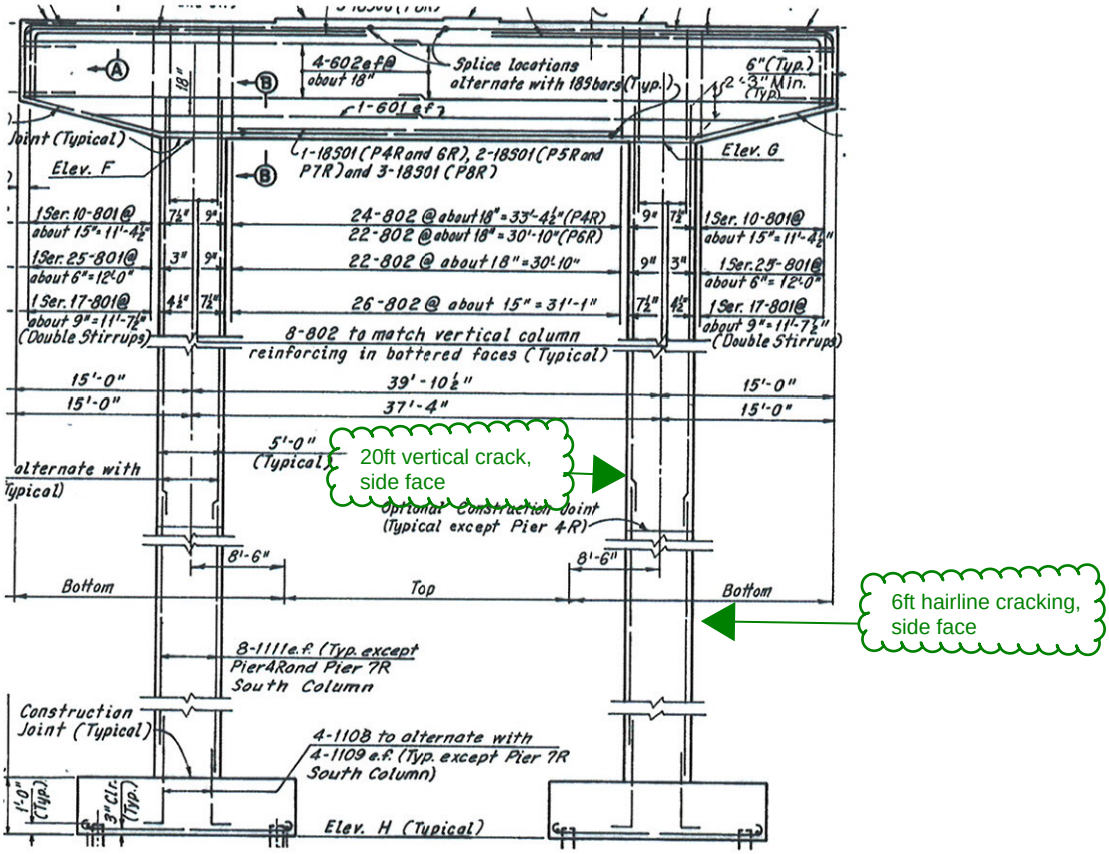


7R: East Face

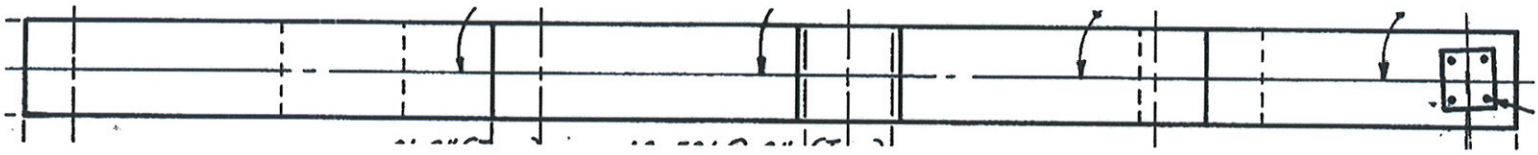


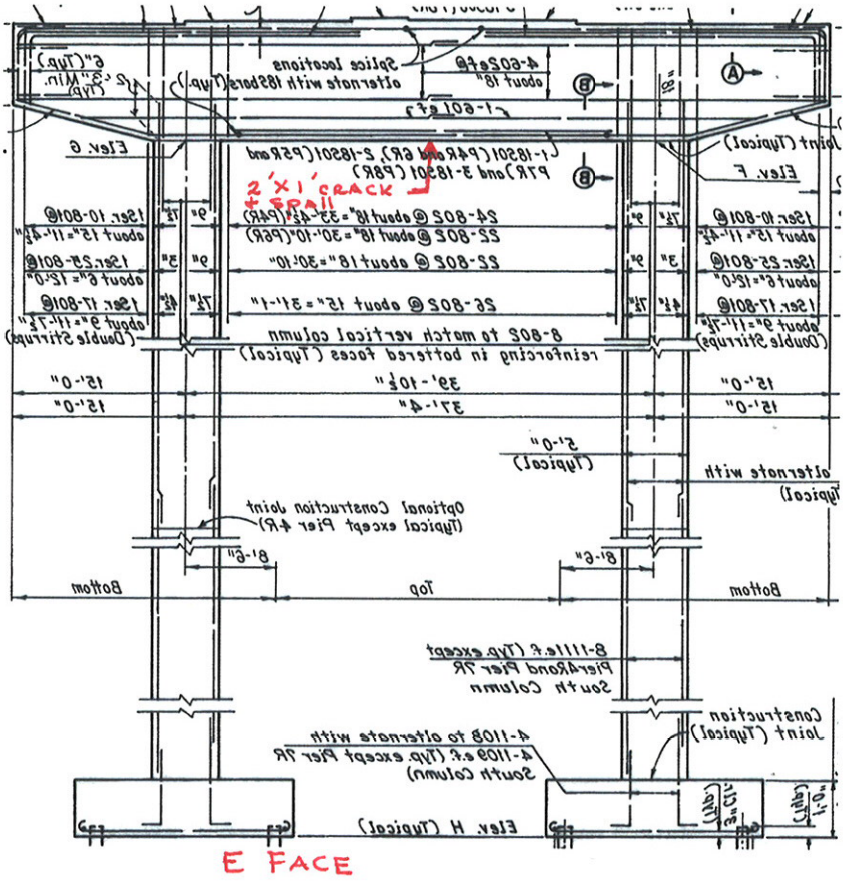
2018 Inspection Findings

Pier 8R

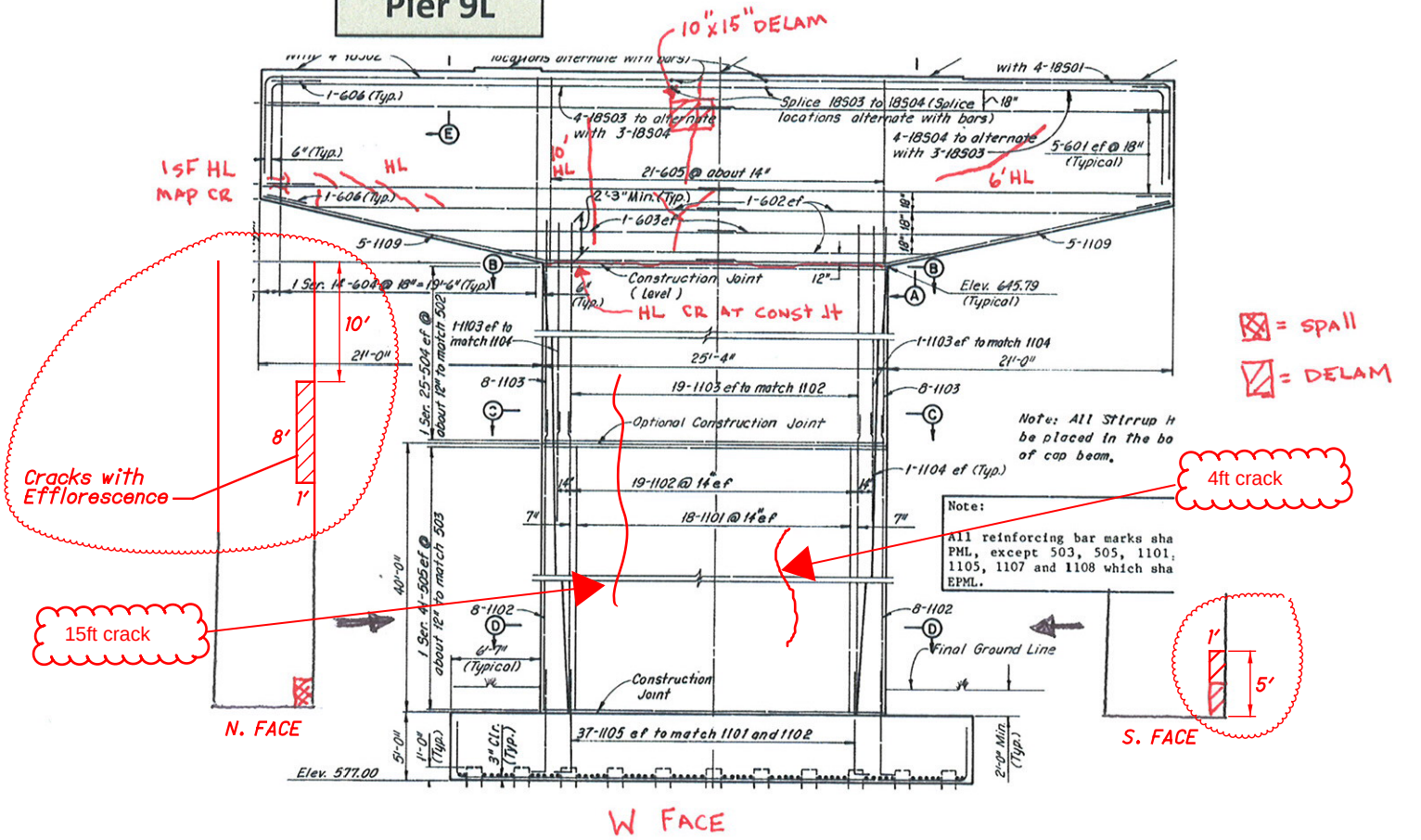


2018 Inspection Findings

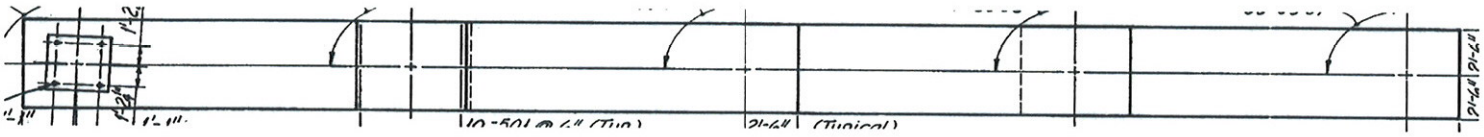


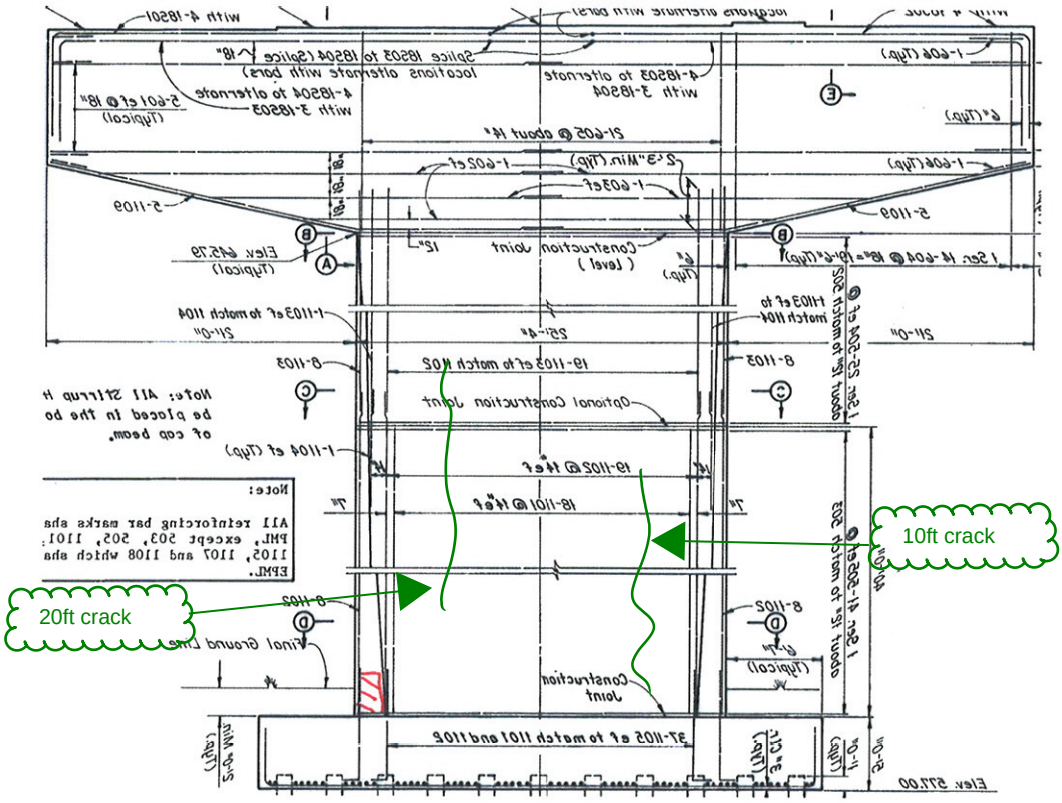


Pier 9L



W FACE

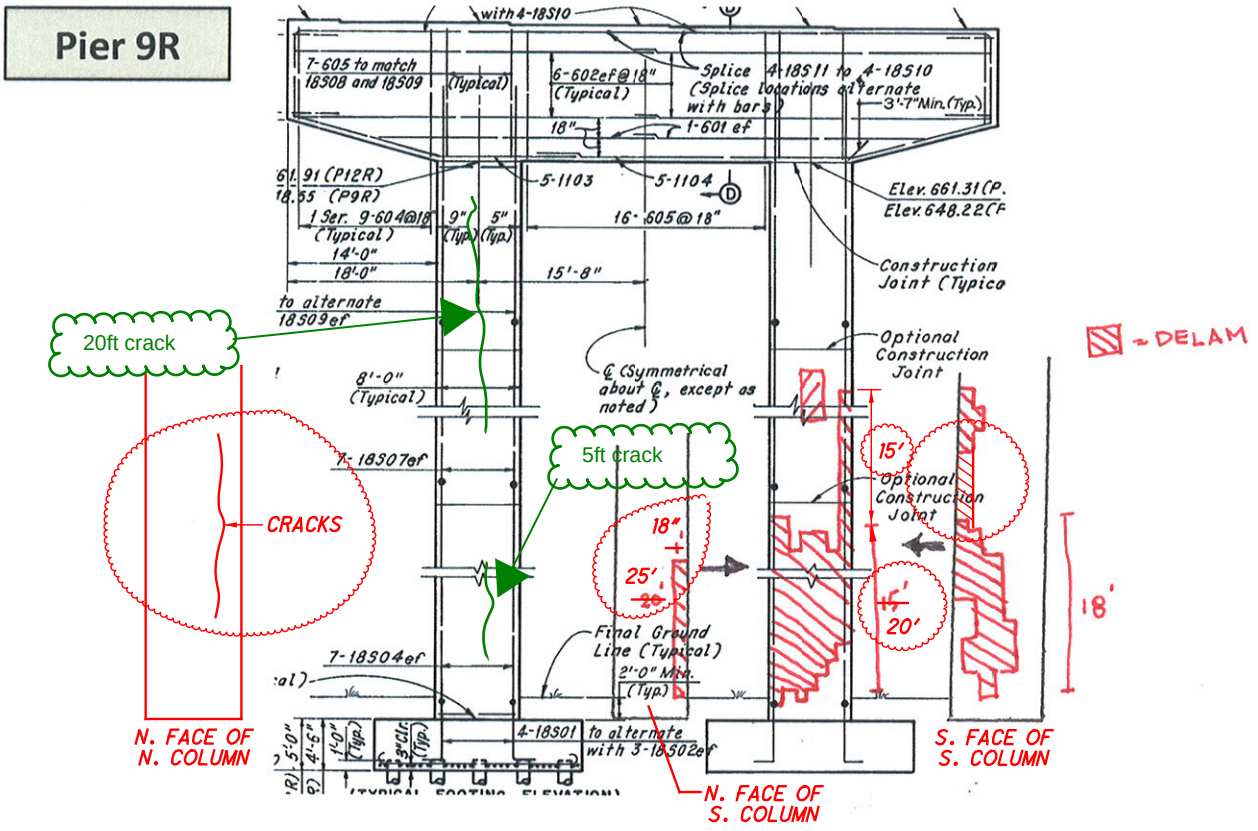




E FACE

2018 Inspection Findings

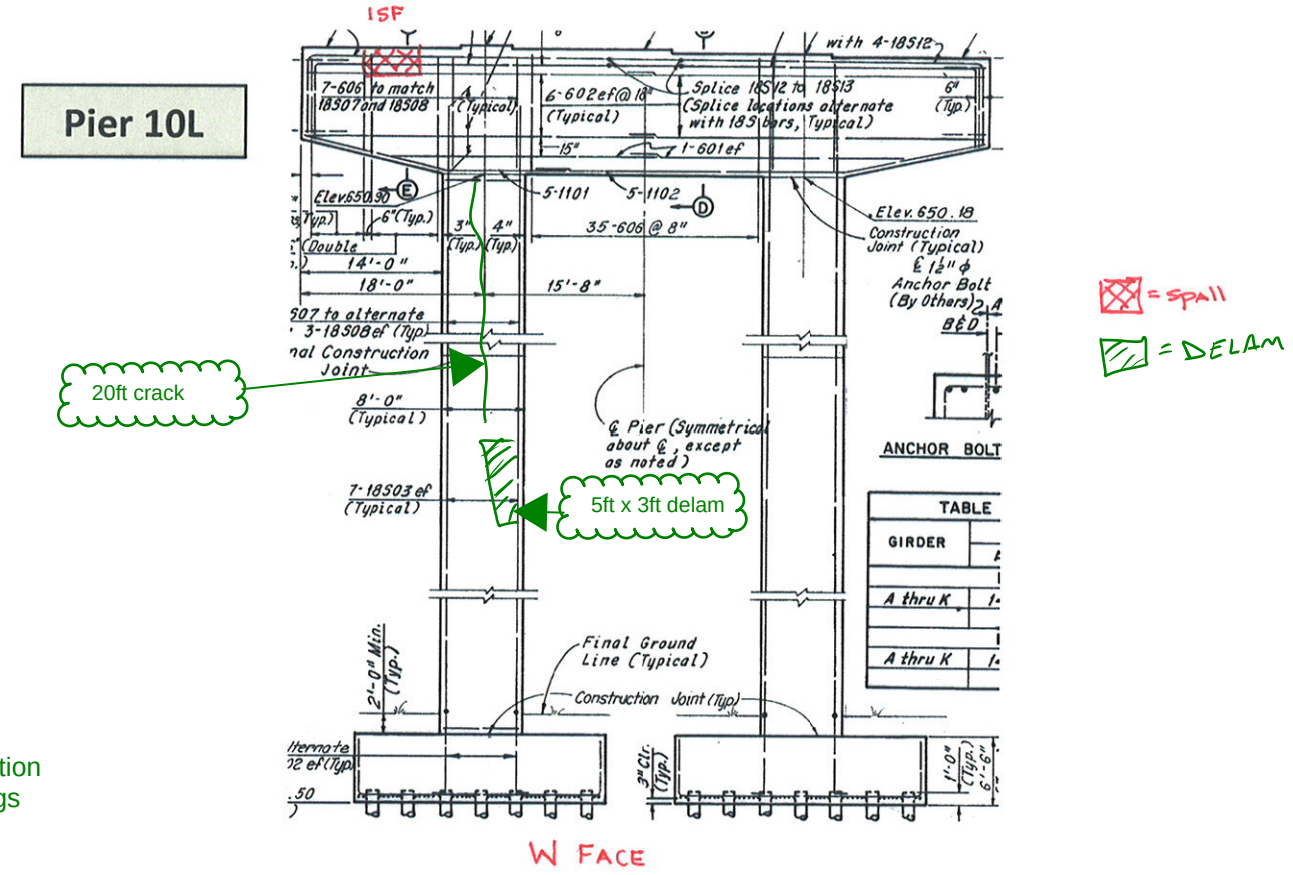
Pier 9R

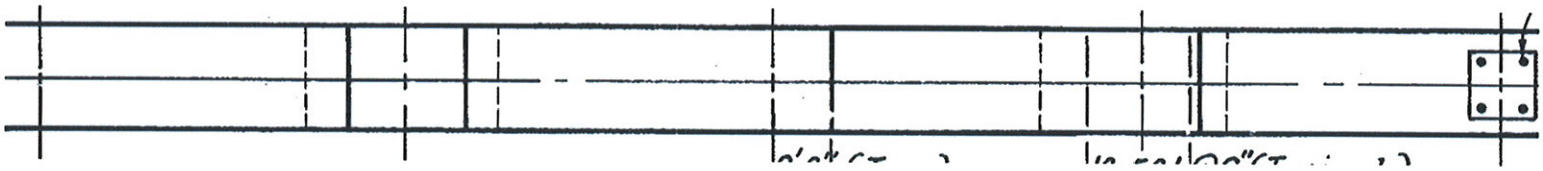


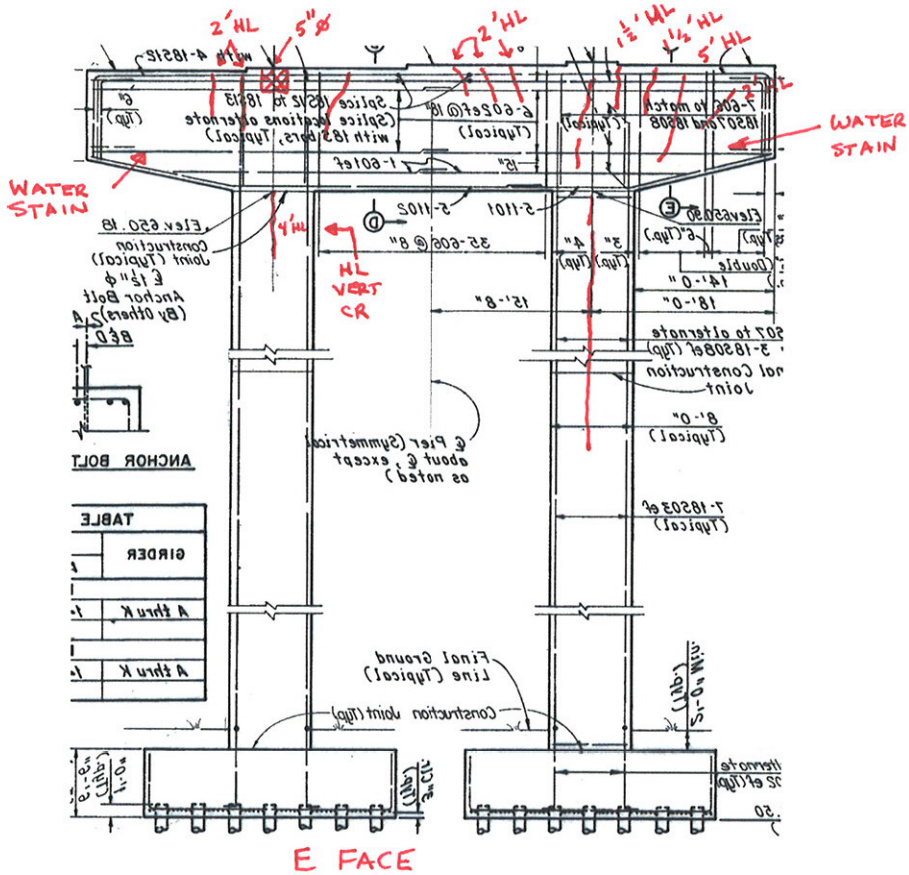
2018 Inspection Findings

Pier 10L

2018 Inspection Findings

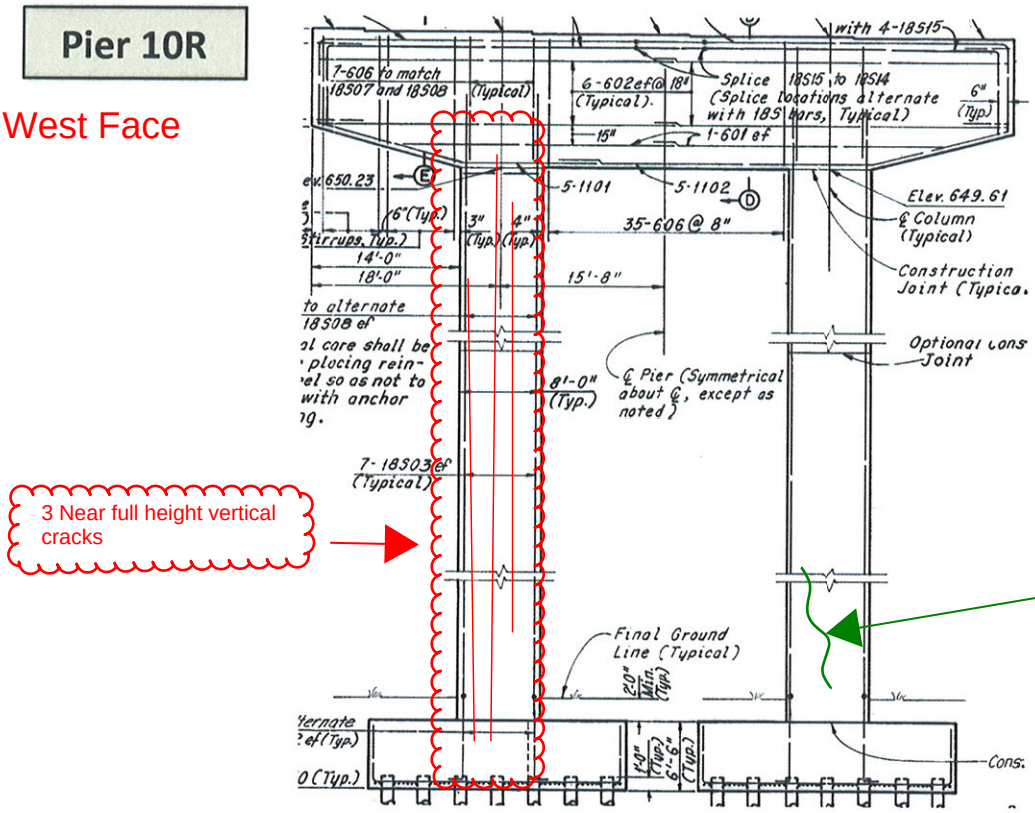






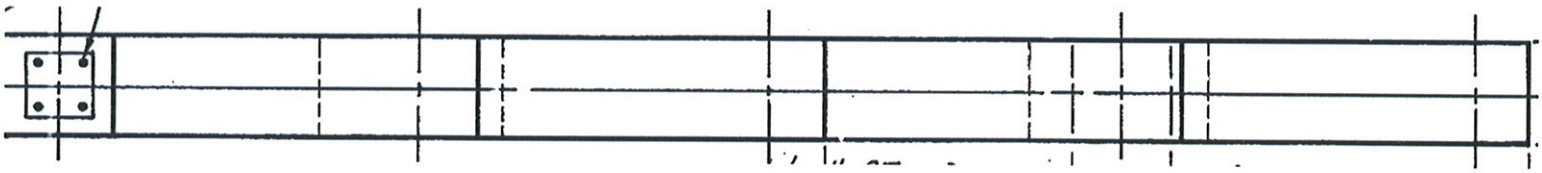
Pier 10R

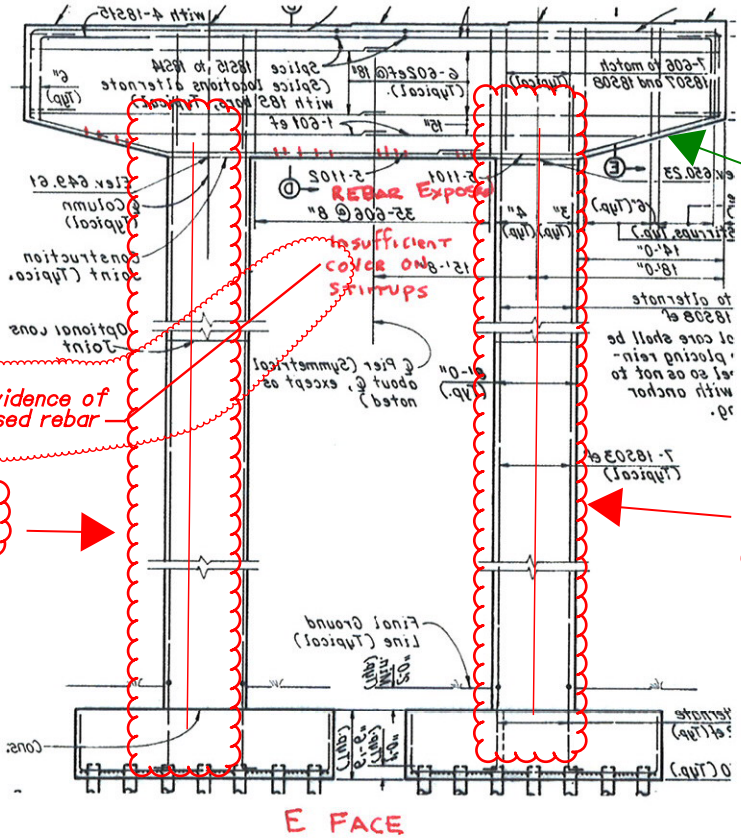
West Face



3 Near full height vertical cracks

10ft crack





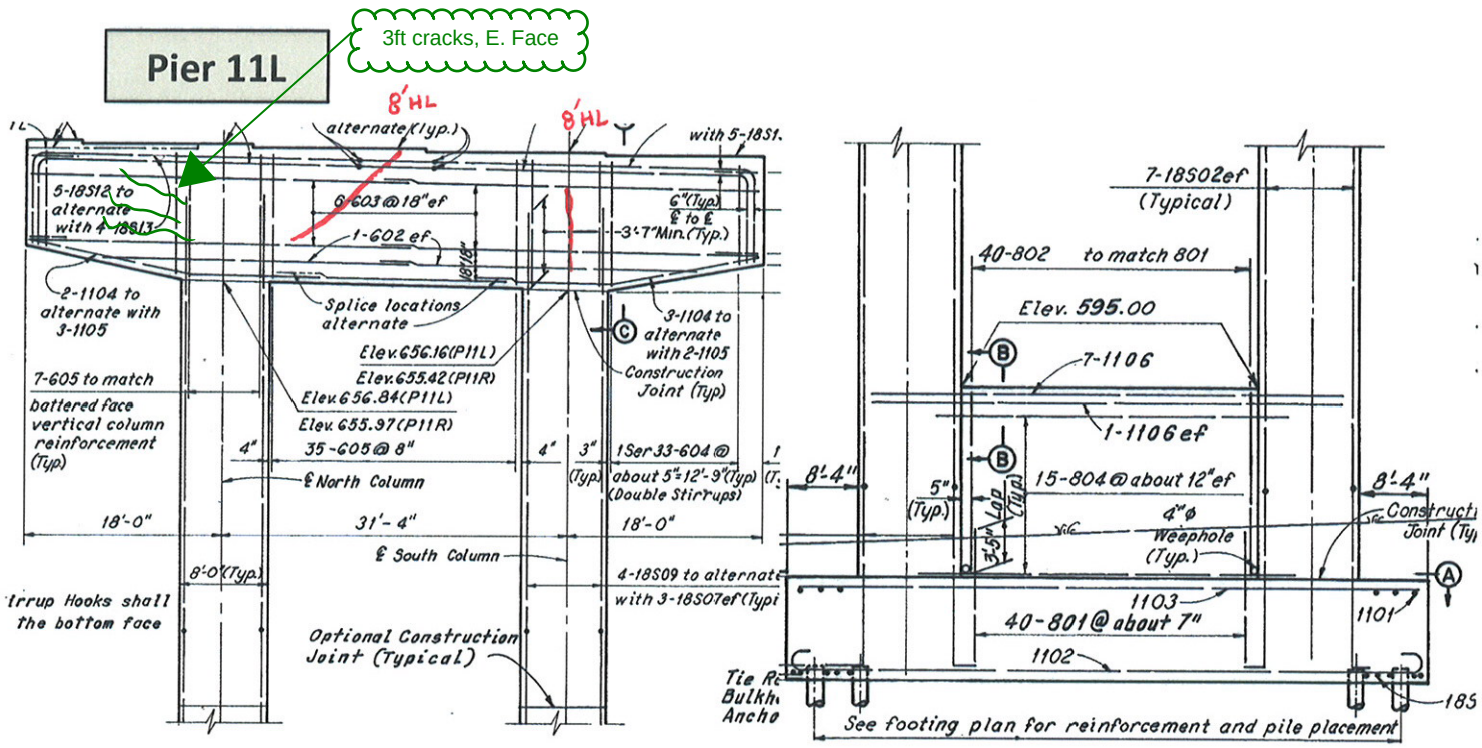
7ft crack underside

Full height vertical crack

Full height vertical crack

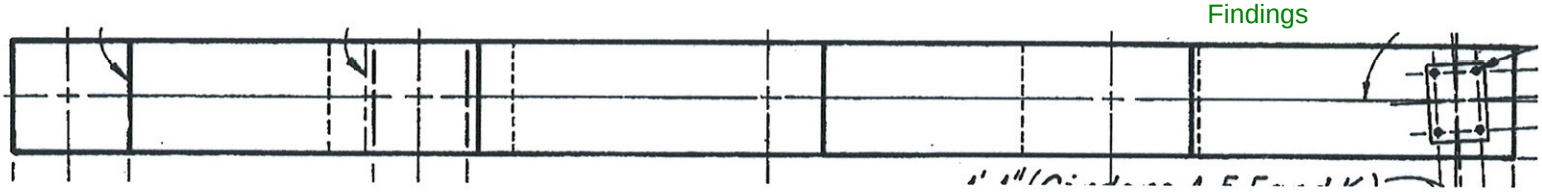
2018 Inspection Findings

Pier 11L

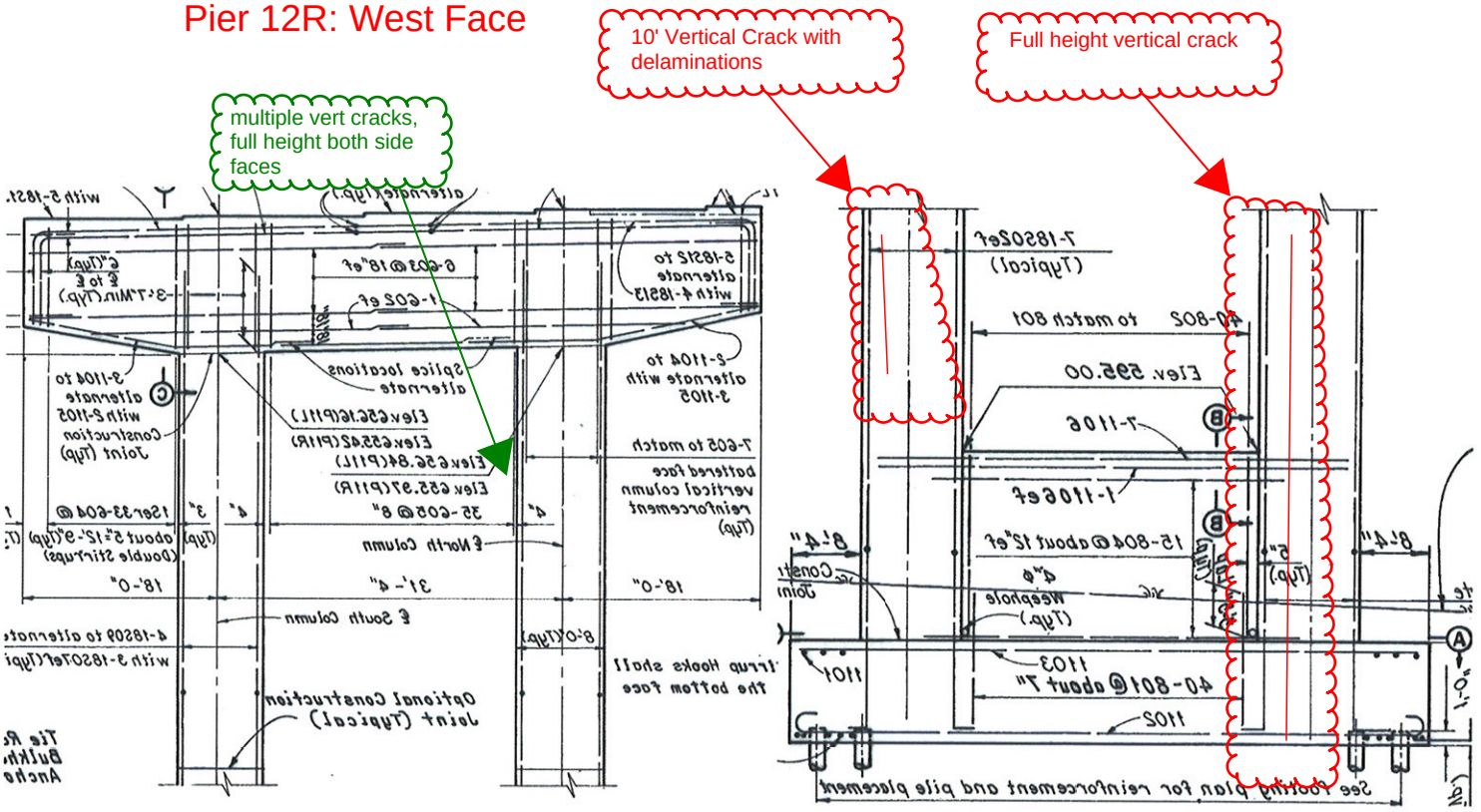


W FACE

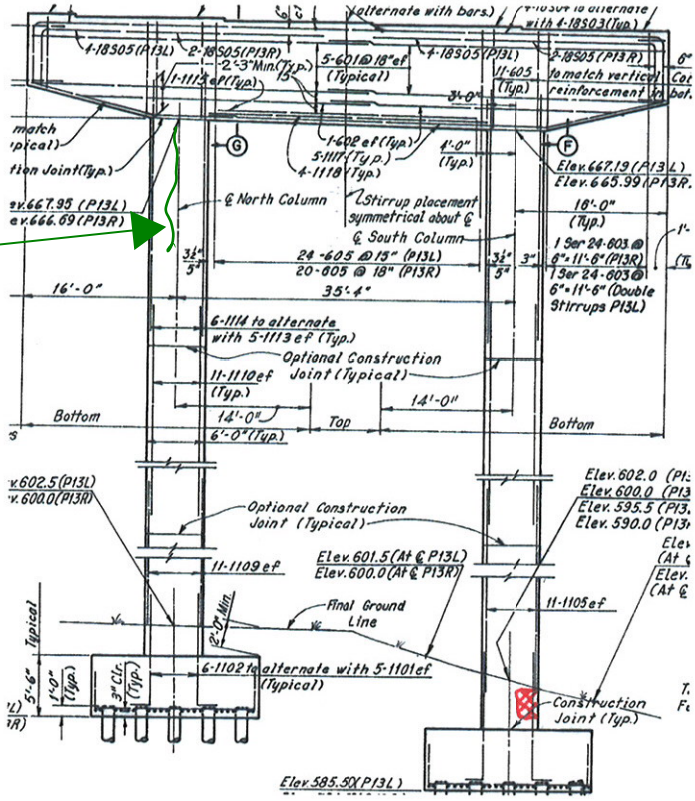
2018 Inspection Findings



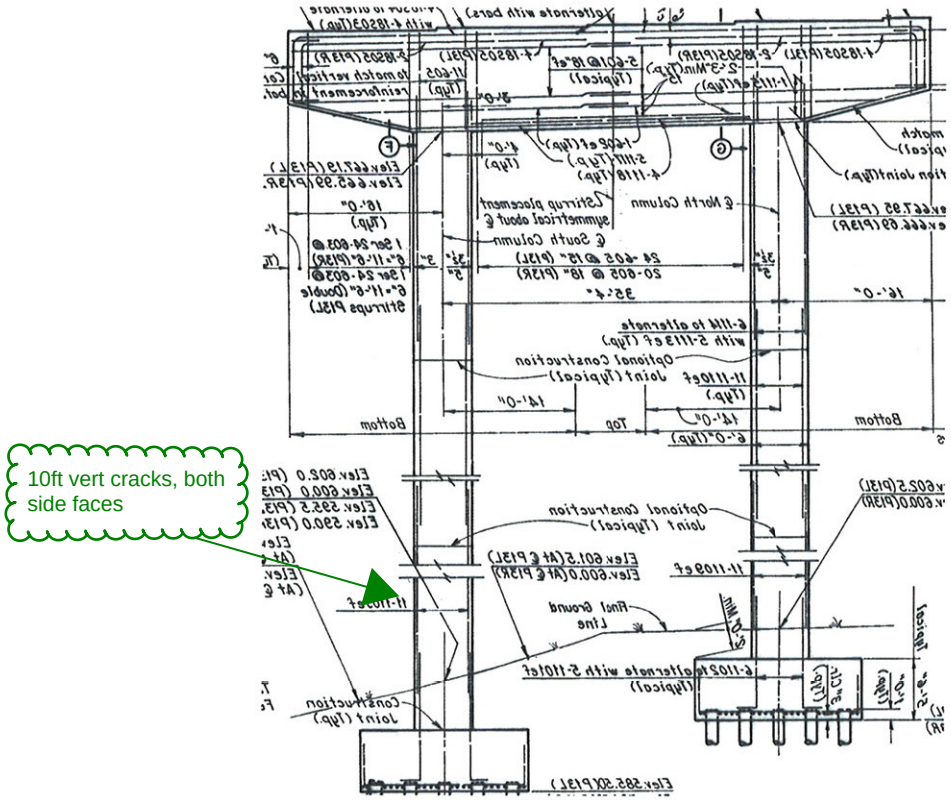
Pier 12R: West Face



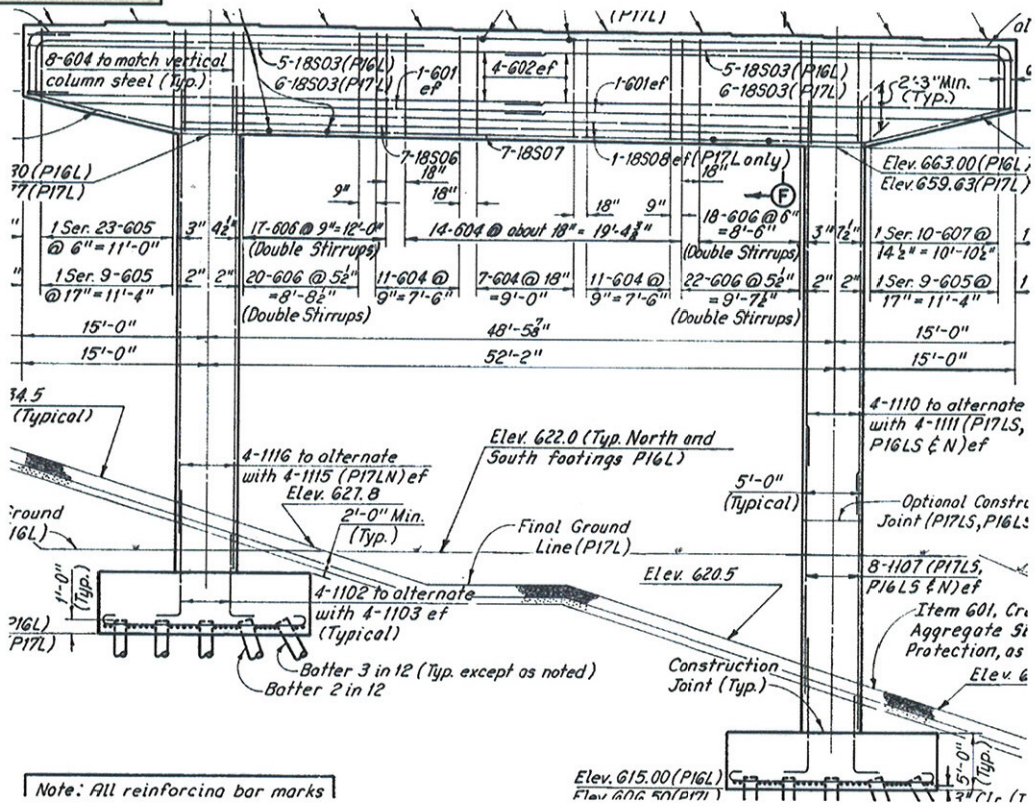
Pier 13R

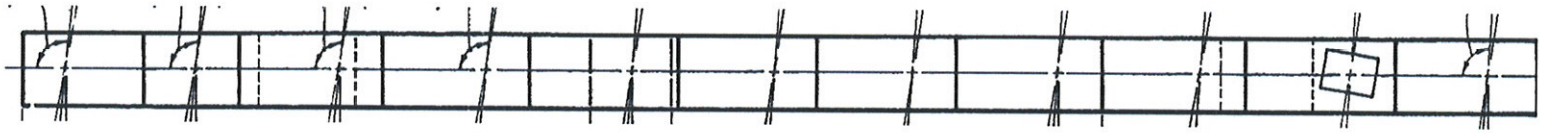


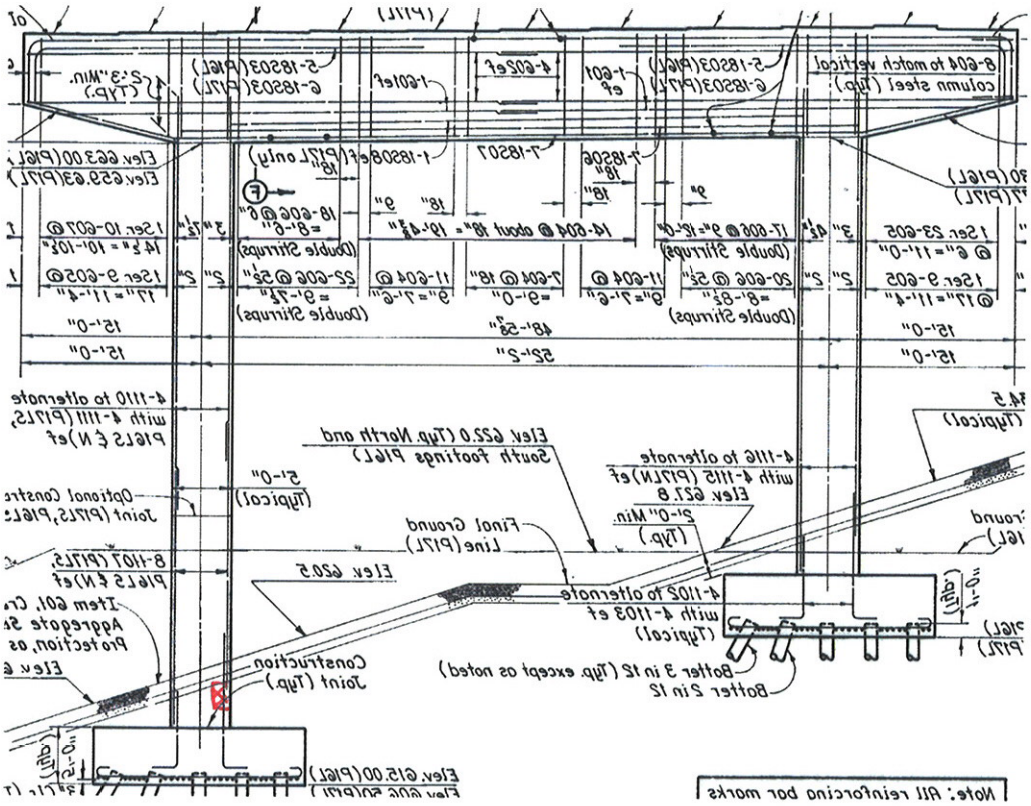
2018
Inspection
Findings



Pier 17L



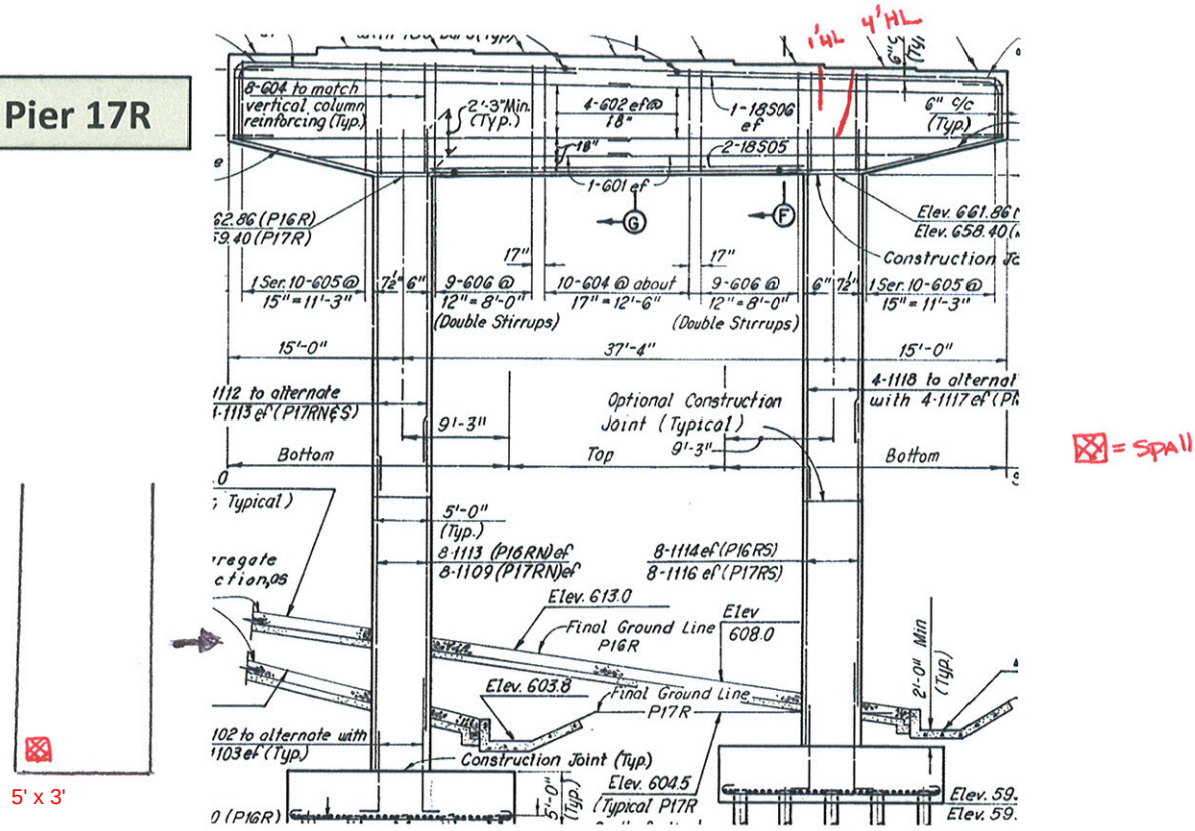




= spall

E FACE

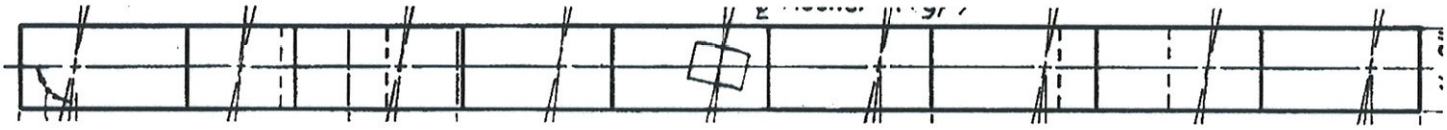
Pier 17R



5' x 3'

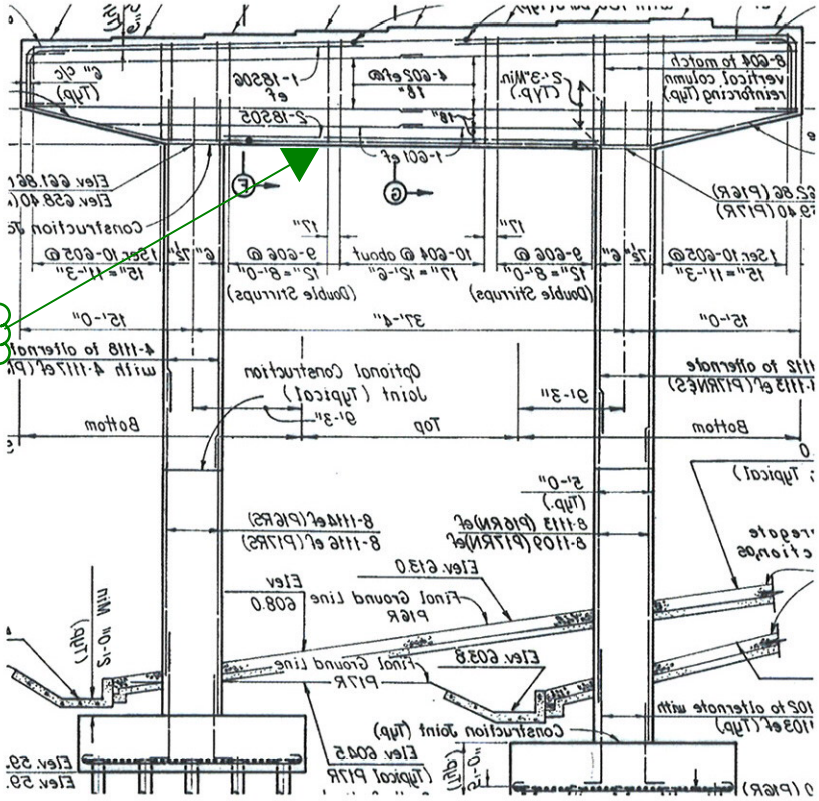
= spall

W FACE



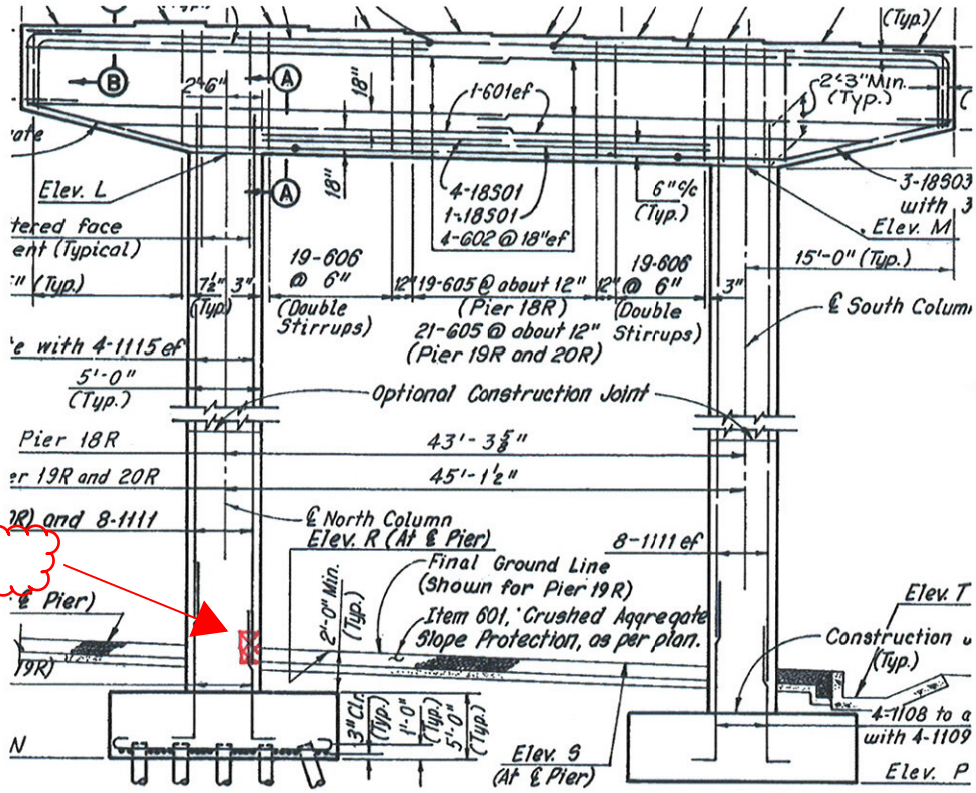
cracking similar on LT piers 16, 18, 19, 20, 21, 22, 23 and on RT piers 18, 19, 20, 21, 22

trans cracking on underside

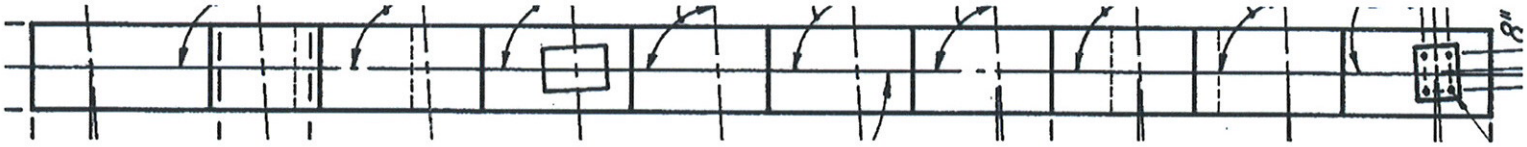


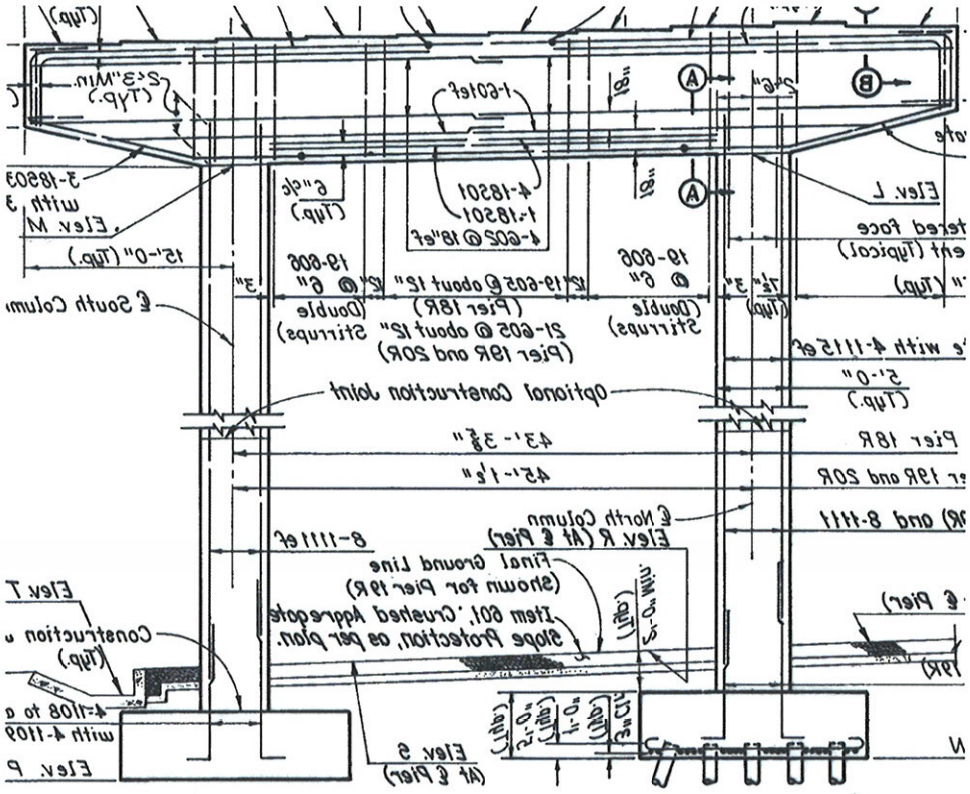
2018 Inspection Findings

Pier 18R

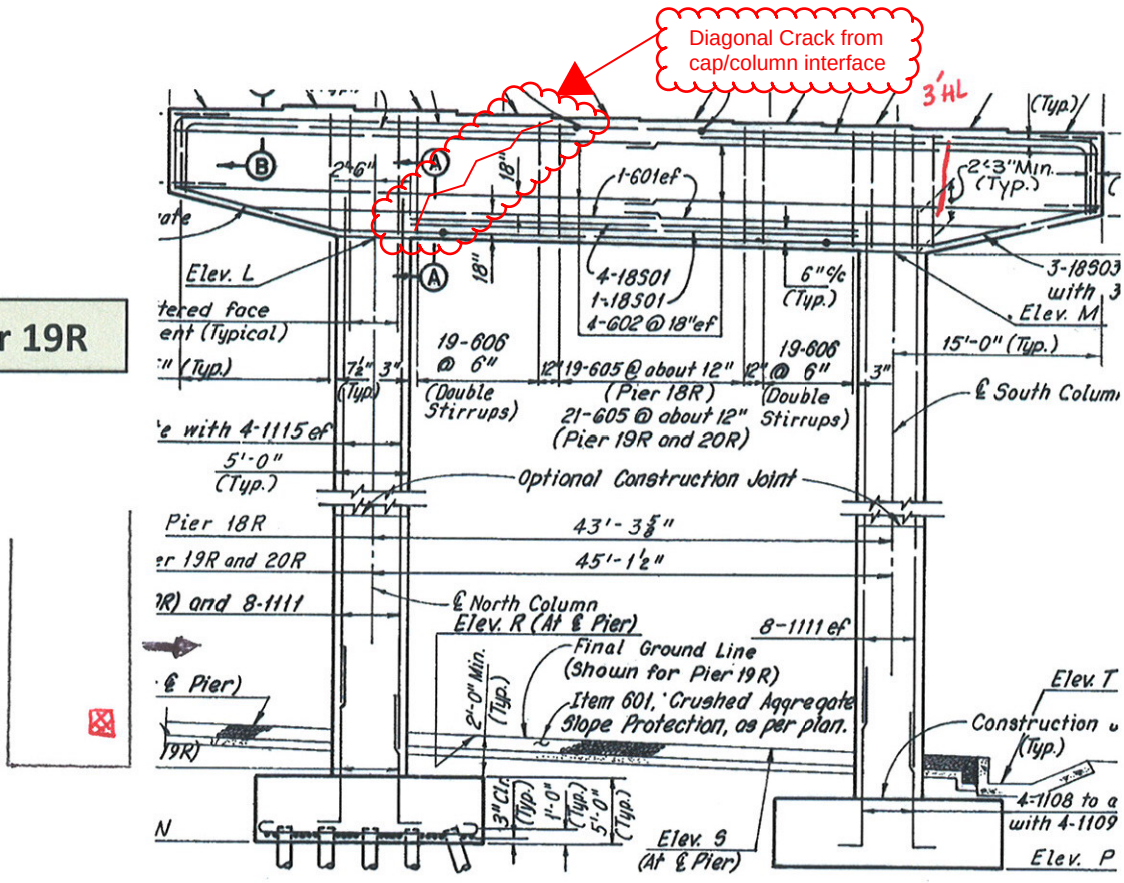


W FACE

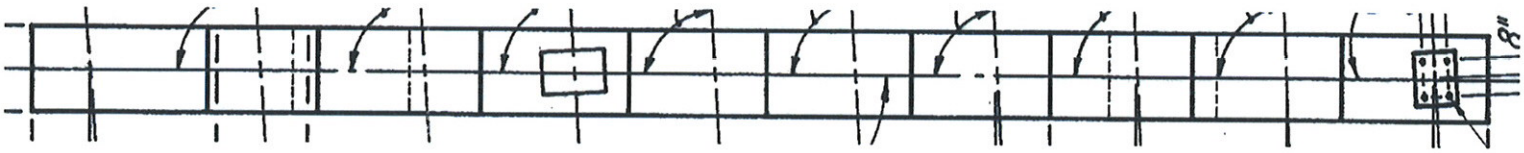




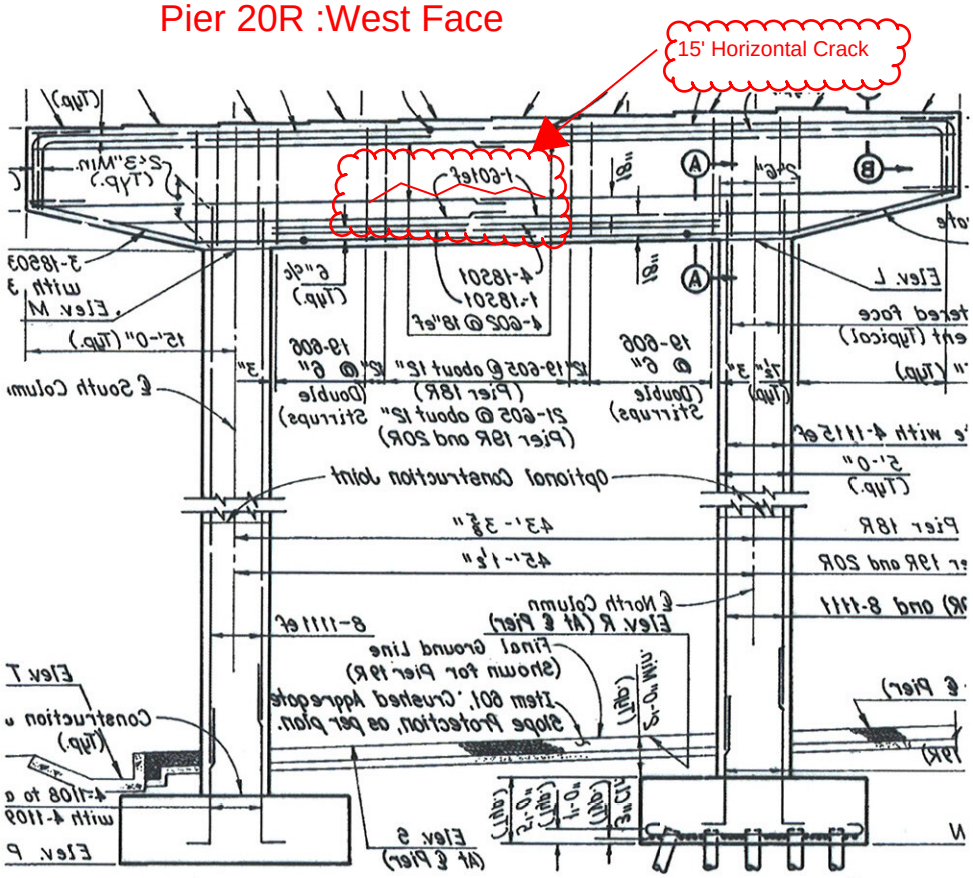
Pier 19R

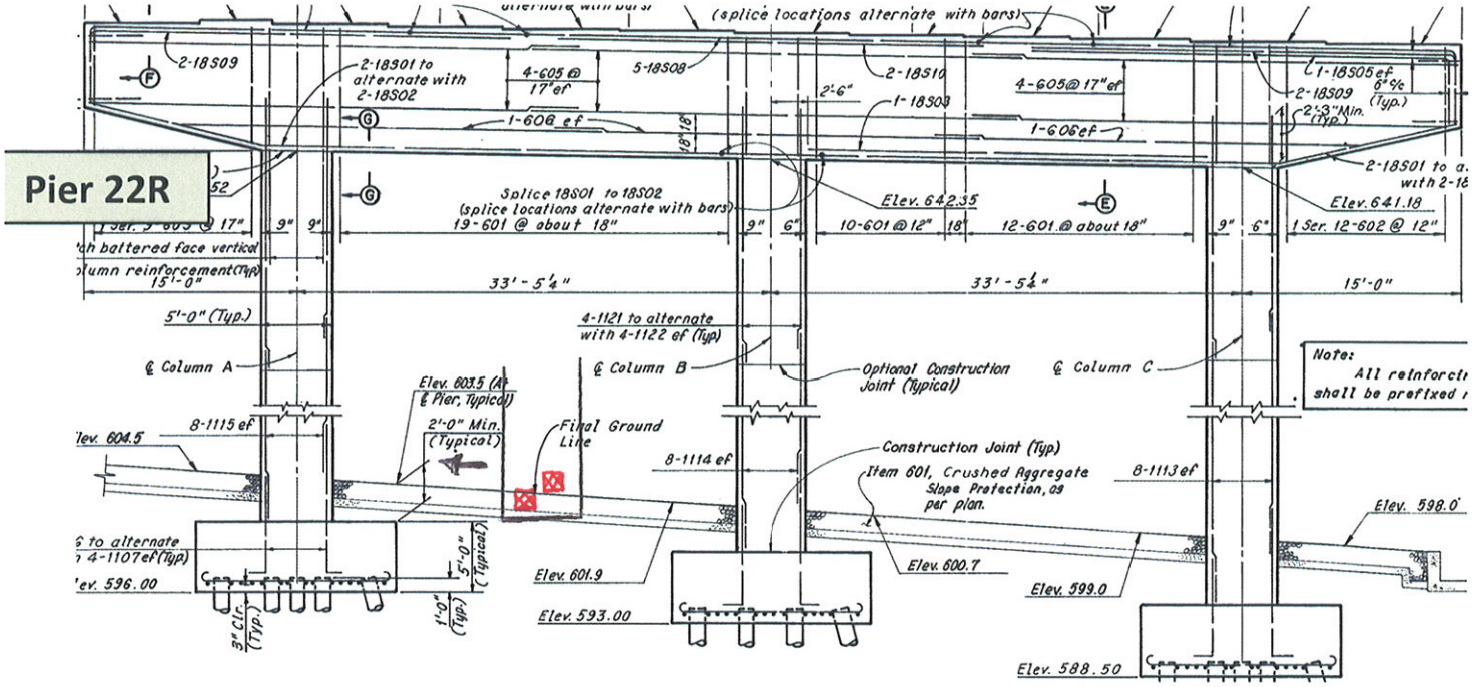


W FACE



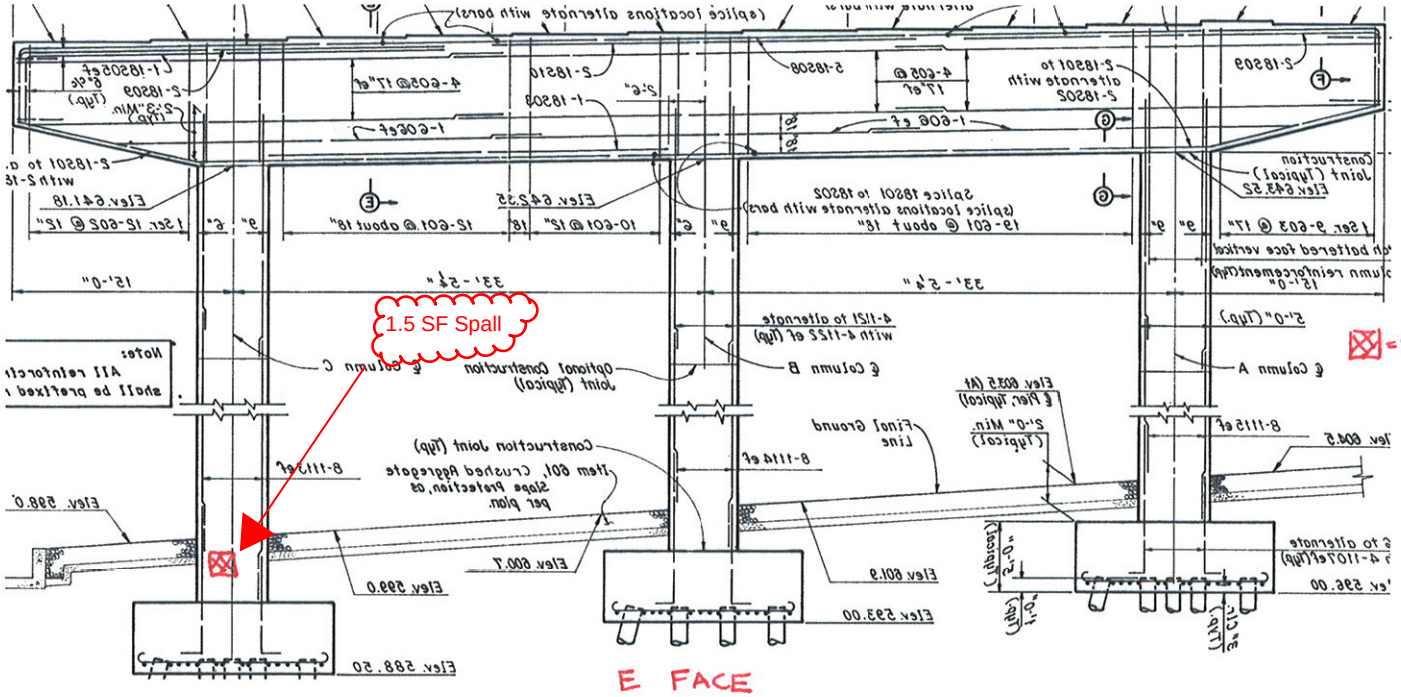
Pier 20R :West Face



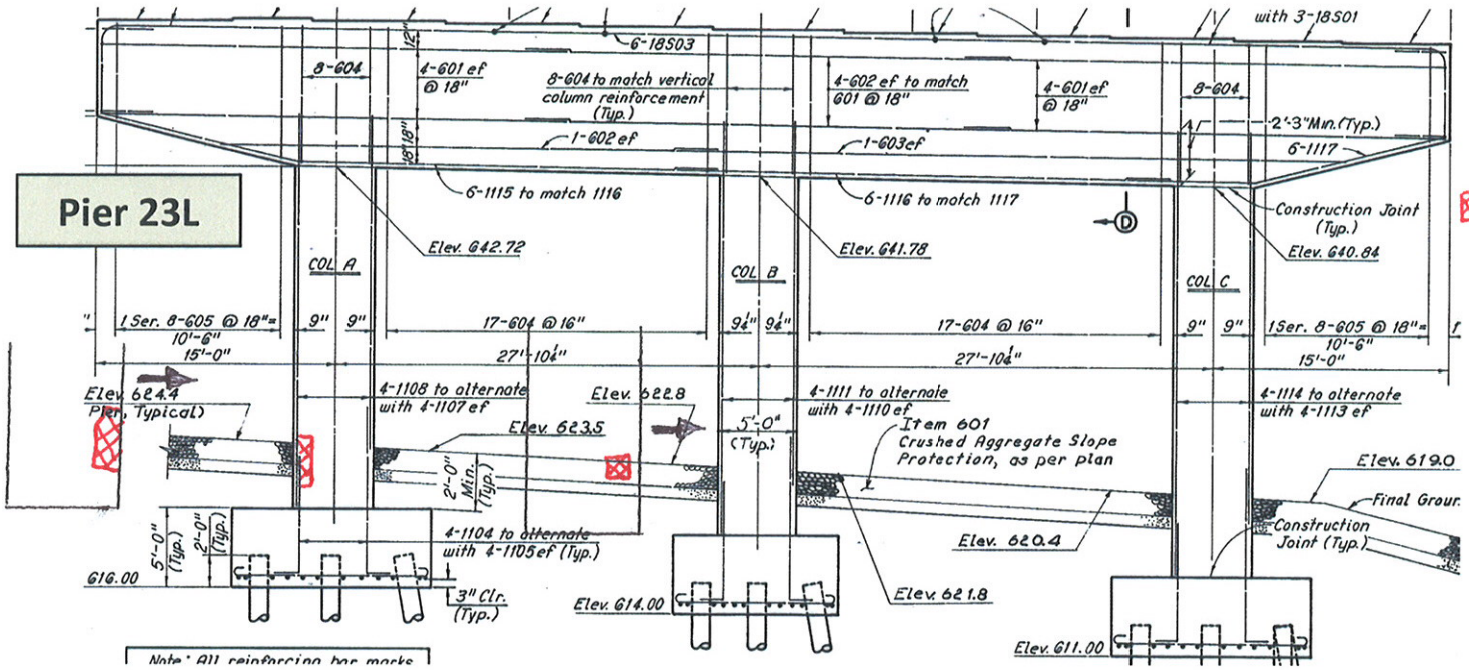


W FACE

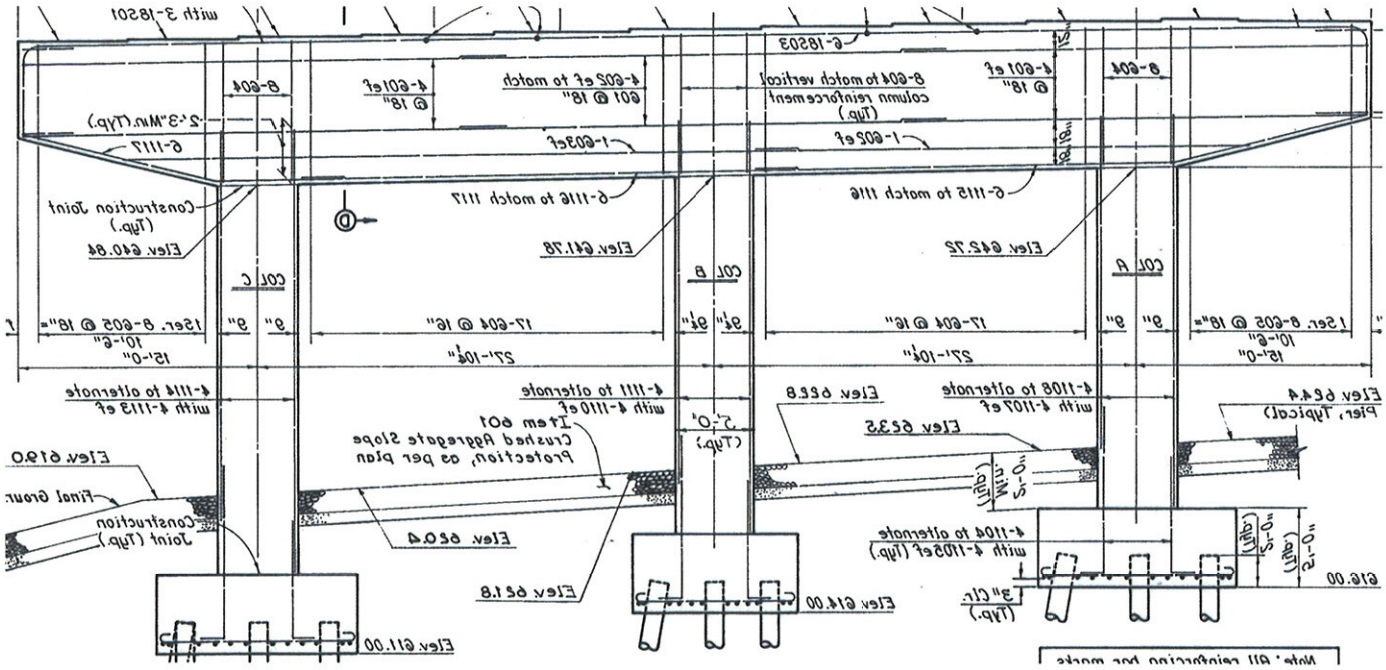
Pier 22R: East Face

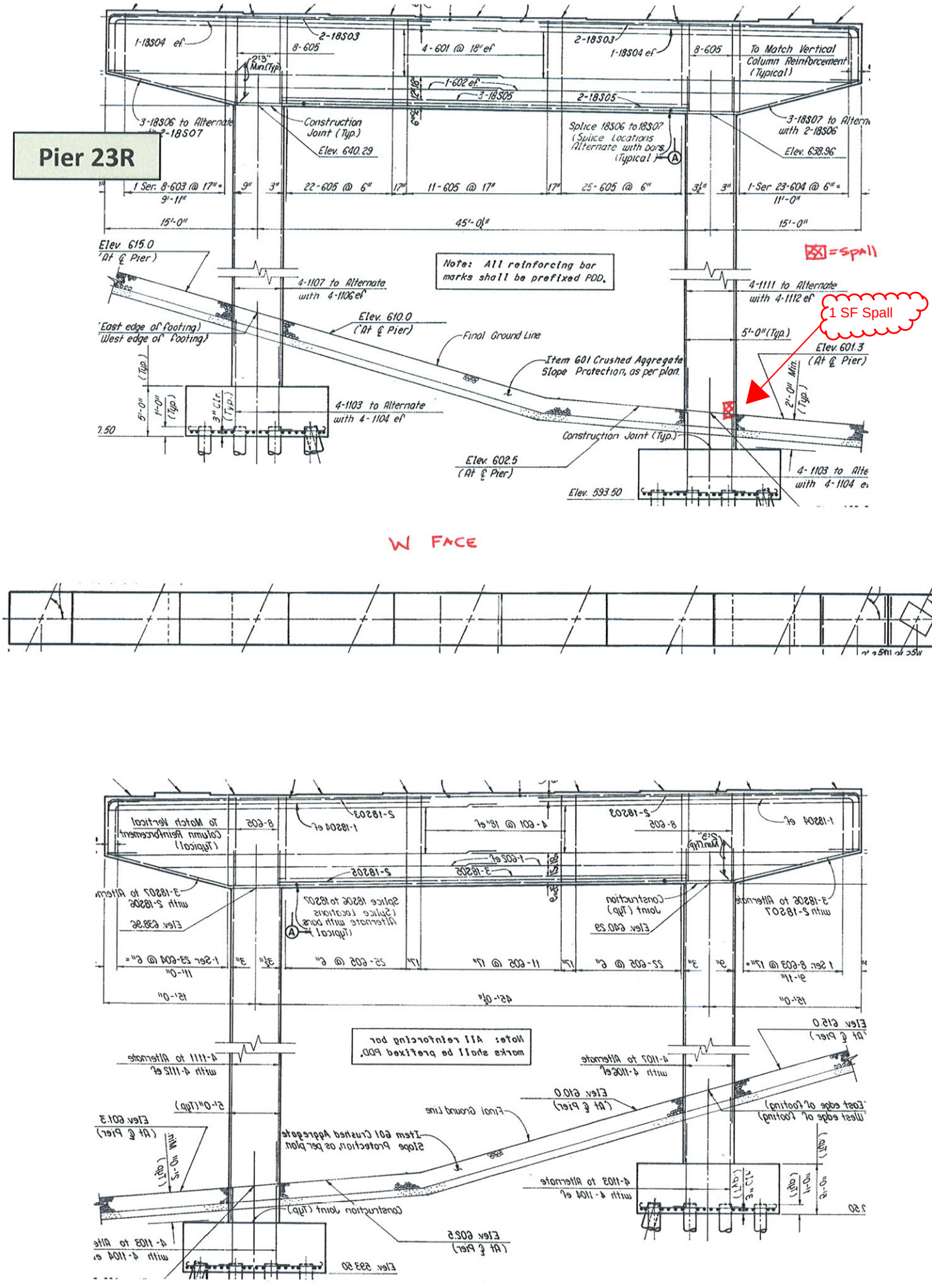


E FACE


Pier 23L
6-18S03
with 3-18S01
8-604
4-601 ef @ 18"
8-604 to match vertical column reinforcement (Typ.)
4-602 ef to match 601 @ 18"
4-601 ef @ 18"
8-604
2'-3" Min. (Typ.)
6-1117
1-602 ef
1-603 ef
6-1115 to match 1116
6-1116 to match 1117
Construction Joint (Typ.)
Elev. 642.72
Elev. 641.78
Elev. 640.84
COL A
COL B
COL C
15 Ser. 8-605 @ 18" = 10'-6" 15'-0"
9"
9"
17-604 @ 16" 27'-10¼"
9¼"
9¼"
17-604 @ 16" 27'-10¼"
9"
9"
15 Ser. 8-605 @ 18" = 10'-6" 15'-0"
Elev. 624.4 Pier, Typical)
4-1108 to alternate with 4-1107 ef
Elev. 622.8
Elev. 623.5
4-1111 to alternate with 4-1110 ef
Item 601 Crushed Aggregate Slope Protection, as per plan
4-1114 to alternate with 4-1113 ef
Elev. 619.0
Final Grour
Construction Joint (Typ.)
5'-0" (Typ.)
2'-0" (Typ.)
2'-0" Min. (Typ.)
5'-0" (Typ.)
4-1104 to alternate with 4-1105 ef (Typ.)
616.00
3" Clr. (Typ.)
Elev. 614.00
Elev. 620.4
Elev. 621.8
Elev. 611.00
Note: All reinforcing bar marks

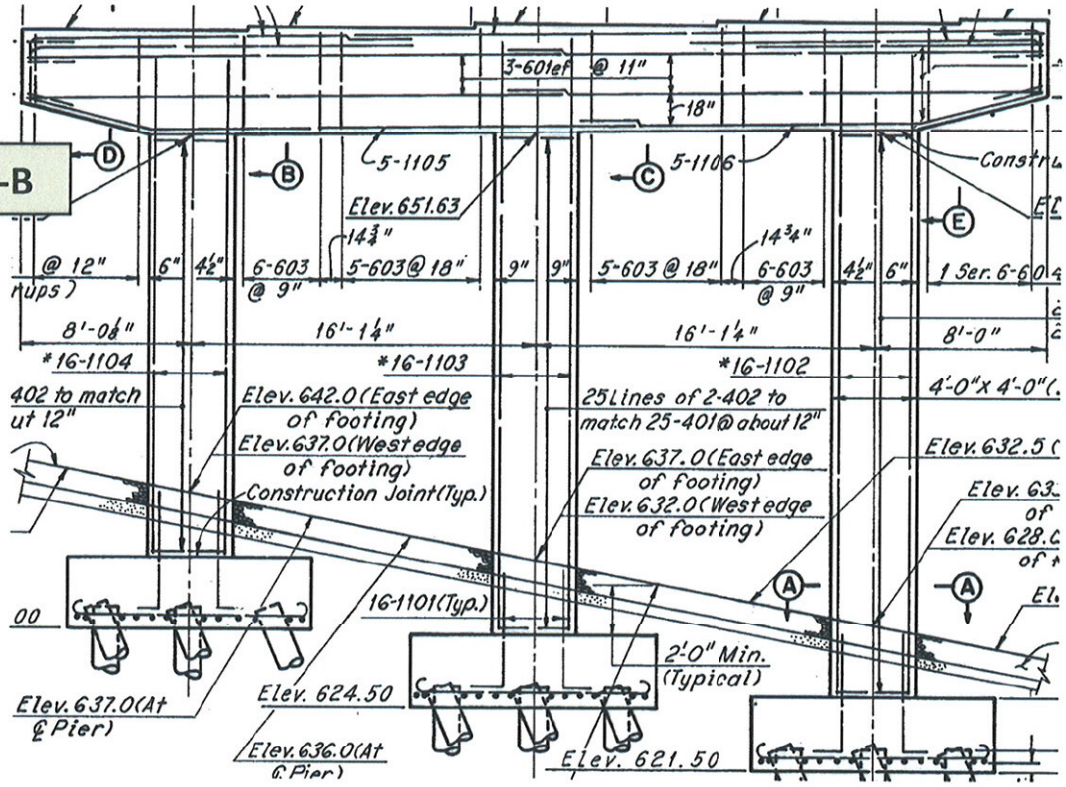
W FACE

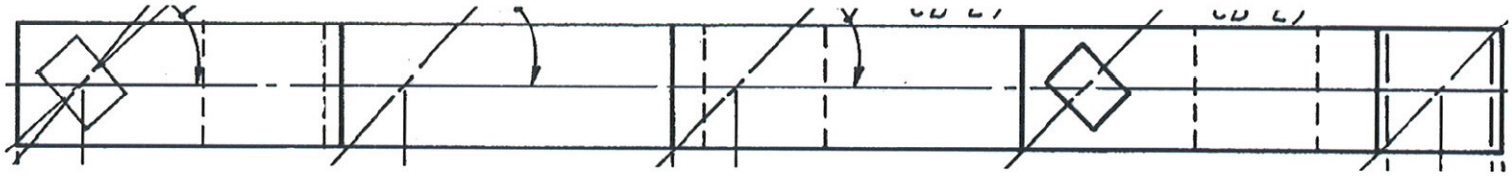


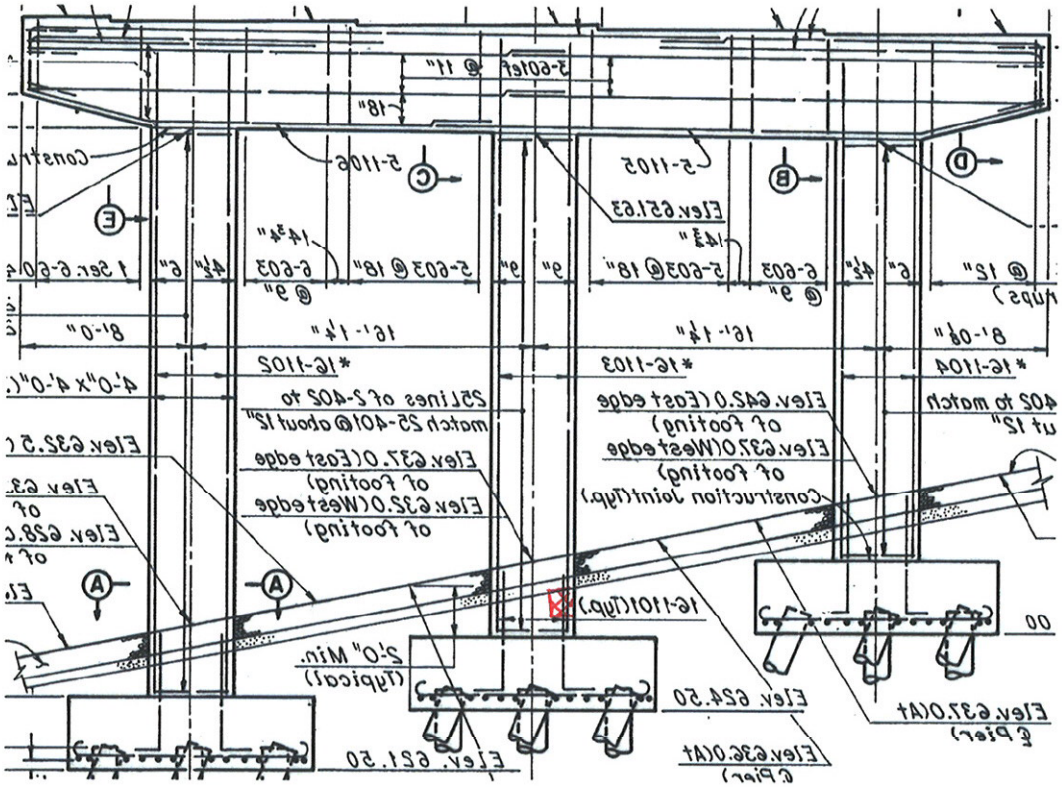

Pier 23R
1-18S04 ef
2-18S03
8-605
4-601 @ 18" ef
1-602 ef
3-18S05
2-18S05
1-18S04 ef
8-605
To Match Vertical Column Reinforcement (Typical)
3-18S06 to Alternate 2-18S07
Construction Joint (Typ.)
Elev. 640.29
Splice 18S06 to 18S07 (Splice Locations Alternate with bars) (Typical)
3-18S07 to Alternate with 2-18S06
Elev. 638.96
1 Ser. 8-603 @ 17" = 9'-11"
9"
3"
22-605 @ 6"
17"
11-605 @ 17"
17"
25-605 @ 6"
3½"
3"
1 Ser 23-604 @ 6" = 11'-0"
15'-0"
45'-0½"
15'-0"
Elev 615.0 (At ℄ Pier)
Note: All reinforcing bar marks shall be prefixed PDD.
=Spall
4-1107 to Alternate with 4-1106 ef
4-1111 to Alternate with 4-1112 ef
1 SF Spall
Elev. 610.0 (At ℄ Pier)
Final Ground Line
East edge of footing
West edge of footing
5'-0" (Typ.)
Item 601 Crushed Aggregate Slope Protection, as per plan
5'-0" (Typ.)
1'-0" (Typ.)
3" Clr. (Typ.)
4-1103 to Alternate with 4-1104 ef
Construction Joint (Typ.)
Elev. 601.3 (At ℄ Pier)
2'-0" Min. (Typ.)
Elev. 602.5 (At ℄ Pier)
Elev. 593.50
4-1103 to Alte with 4-1104 e

W FACE

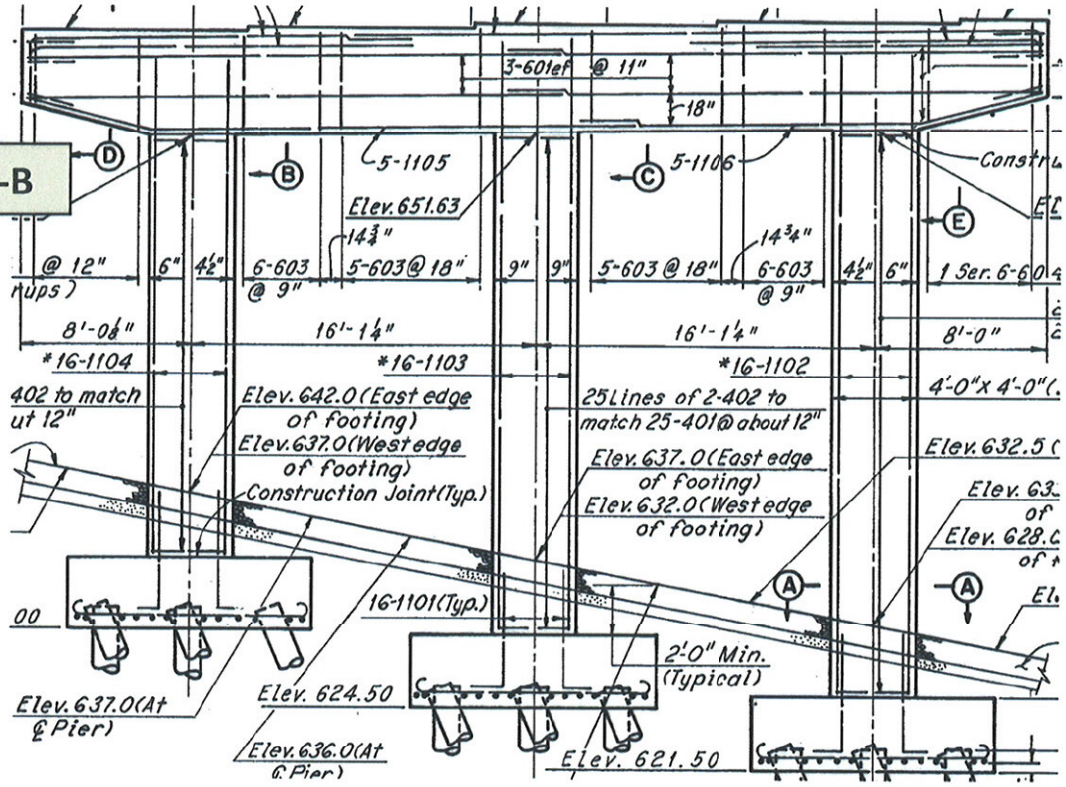
Pier 27C-B

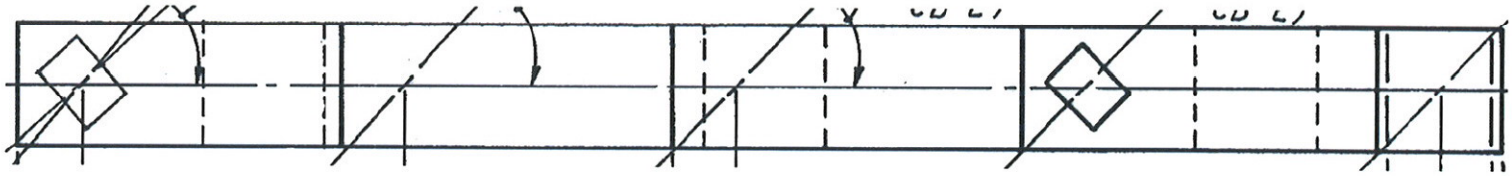

3-601ef @ 11"
18"
5-1105
5-1106
Elev. 651.63
14¾"
@ 12"
6"
4½"
6-603 @ 9"
5-603 @ 18"
9"
9"
5-603 @ 18"
6-603 @ 9"
4½"
6"
8'-0⅛"
16'-1¼"
16'-1¼"
8'-0"
*16-1104
*16-1103
*16-1102
402 to match ut 12"
Elev. 642.0 (East edge of footing)
Elev. 637.0 (West edge of footing)
Construction Joint (Typ.)
25 Lines of 2-402 to match 25-401 @ about 12"
Elev. 637.0 (East edge of footing)
Elev. 632.0 (West edge of footing)
Elev. 632.5
4'-0"x 4'-0"
16-1101 (Typ.)
2'-0" Min. (Typical)
Elev. 637.0 (At ℄ Pier)
Elev. 624.50
Elev. 636.0 (At ℄ Pier)
Elev. 621.50

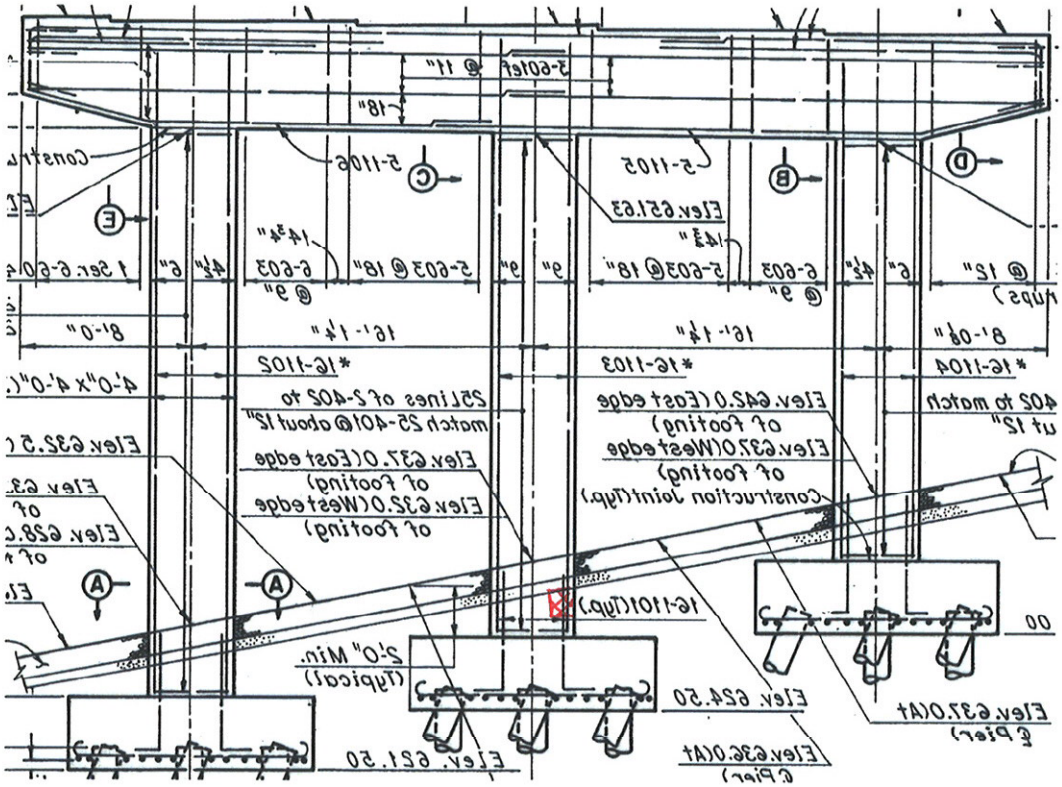



= spall
E FACE

Pier 27C-B


3-601ef @ 11"
18"
5-1105
5-1106
Elev. 651.63
14¾"
@ 12"
6"
4½"
6-603 @ 9"
5-603 @ 18"
9"
9"
5-603 @ 18"
6-603 @ 9"
4½"
6"
8'-0⅛"
16'-1¼"
16'-1¼"
8'-0"
*16-1104
*16-1103
*16-1102
402 to match ut 12"
Elev. 642.0 (East edge of footing)
Elev. 637.0 (West edge of footing)
Construction Joint (Typ.)
25 Lines of 2-402 to match 25-401 @ about 12"
Elev. 637.0 (East edge of footing)
Elev. 632.0 (West edge of footing)
Elev. 632.5
4'-0"x 4'-0"
16-1101 (Typ.)
2'-0" Min. (Typical)
Elev. 637.0 (At ℄ Pier)
Elev. 624.50
Elev. 636.0 (At ℄ Pier)
Elev. 621.50




= spall
E FACE

APPENDIX VI – Loose Bolts, Missing Bolts and Misdrilled Holes

Weastbound Left Bridge

Loose Bolts, Missing Bolts and Misdrilled Holes

Item	Unit	Span	Girder/Stringer	Floorbeam	Side
Loose Bolt	1	4	Beam 1-H	3	North
Loose Bolt	1	4	Beam 1-J	3	North
Loose Bolt	1	4	Beam 1-H	4	North
Loose Bolt	1	4	Beam 1-H	4	South
Loose Bolt	1	4	Beam 1-J	4	South
Loose Bolt	1	4	Beam 1-K	4	North
Misdrilled Hole	1	4	Beam 1-D	5	South
Missing Bolt	1	4	Beam 1-F	5	South
Loose Bolt	1	4	Beam 1-G	5	South
Missing Bolt	1	4	Beam 1-G	5	South
Misdrilled Hole	1	4	Beam 1-H	5	South
Missing Bolt	1	4	Beam 1-H	5	South
Missing Bolt	1	4	Beam 1-J	5	South
Missing Bolt	1	4	Beam 1-K	5	South
Missing Bolt	1	4	Beam 1-L	5	South
Missing Bolt	1	4	Beam 1-M	5	South
Missing Bolt	1	4	Beam 1-N	5	South
Loose Bolt	2	2	Stringer 2-1	0	North
Missing Bolt	2	3	Girder 2-F	3	South
Missing Bolt	2	3	Girder2-A	9	South
Loose Bolt	2	3	Girder 2-D	10	North
Loose Bolt	2	3	Girder 2-D	11	North
Loose Bolt	2	3	Girder 2-A	12	South
Loose Bolt	2	3	Girder 2-D	12	North
Misdrilled Hole	2	4	Girder 2-D	0	North
Missing Bolt	2	4	Girder 2-D	3	North
Misdrilled Hole	2	4	Girder 2-G	13	South
Misdrilled Hole	3	1	Girder 3-C	2	North
Misdrilled Hole	3	1	Girder 3-A	3	South
Misdrilled Hole	3	1	Girder 3-C	3	North
Misdrilled Hole	3	1	Girder 3-A	4	South
Misdrilled Hole	3	1	Girder 3-A	5	South
Misdrilled Hole	3	1	Girder 3-B	5	South
Loose Bolt	3	1	Girder 3-C	6	South
Misdrilled Hole	3	2	Girder 3-D	4	North
Misdrilled Hole	3	2	Girder 3-B	5	South
Misdrilled Hole	3	2	Girder 3-D	5	South
Misdrilled Hole	3	3	Girder 3-C	4	North
Missing Bolt	4	1	Girder 4-D	0	South
Missing Bolt	4	1	Girder 4-E	0	North
Missing Bolt	4	1	Girder 4-D	Hinge	Norh
Missing Bolt	4	1	Girder 4-D	Hinge	South
Missing Bolt	4	1	Girder 4-E	Hinge	North
Loose Bolt	4	1	Girder 4-C	4	South
Loose Bolt	4	1	Girder 4-D	10	North
Loose Bolt	4	1	Girder 4-A	11	South
Loose Bolt	4	1	Girder 4-C	11	South
Misdrilled Hole	4	3	Girder 4-C	11	South
Loose Bolt	5	2	Girder 5-E	2	North
Loose Bolt	5	3	Girder 5-K	2	South

Items in Red found in 2018 Inspection

Total Loose Bolt Locations	19
Total Missing Bolt Locations	16
Total Misdrilled Locations Holes	15

Eastbound Right Bridge

Loose Bolts, Missing Bolts and Misdrilled Holes

Item	Unit	Span	Girder/Stringer	Floorbeam	Side
Loose Bolt	1	1	Beam 1-Q	3	South
Misdrilled Hole	1	2	Beam 1-V	1	South
Misdrilled Hole	1	2	Beam 1-W	1	North
Loose Bolt	1	2	Beam 1-W	2	North
Loose Bolt	1	2	Beam 1-V	3	South
Loose Bolt	1	2	Beam 1-X	3	North
Loose Bolt	1	2	Beam 1-V	4	North
Loose Bolt	1	2	Beam 1-Q	5	South
Misdrilled Hole	1	3	Beam 1-V	3	South
Misdrilled Hole	1	3	Beam 1-X	3	North
Misdrilled Hole	2	3	Girder 2-L	10	South
Misdrilled Hole	2	4	Girder 2-L	0	South
Loose Bolt	2	4	Girder 2-K	1	North
Loose Bolt	2	5	Girder 2-M	1	North
Misdrilled Hole	2	5	Stringer 2-12	10	South
Misdrilled Hole	2	5	Stringer 2-13	10	South
Misdrilled Hole	3	1	Girder 3-G	14	South
Loose Bolt	3	2	Girder 3-J	5	North
Loose Bolt	3	2	Girder 3-J	5	South
Loose Bolt	3	2	Girder 3-K	5	North
Missing Bolt	3	2	Stringer 3-5	7	South
Loose Bolt	3	2	Stringer 3-7	22	North
Loose Bolt	3	2	Stringer 3-8	22	South
Misdrilled Hole	3	2	Girder 3-J	23	North
Missing Bolt	3	2	Girder 3-J	23	South
Misdrilled Hole	3	3	Girder 3-H	2	North
Misdrilled Hole	3	3	Girder 3-J	2	North
Misdrilled Hole	3	3	Girder 3-J	5	South
Misdrilled Hole	3	3	Girder 3-K	5	North
Missing Bolt	3	3	Girder 3-J	6	North
Missing Bolt	3	3	Girder 3-H	7	South
Misdrilled Hole	3	3	Girder 3-G	10	North
Loose Bolt	4	1	Girder 4-H	0	South
Missing Bolt	4	1	Girder 4-K	Hinge	South
Loose Bolt	4	1	Girder 4-F	9	South
Loose Bolt	4	2	Girder 4-H	0	South
Loose Bolt	4	2	Girder 4-J	1	North
Misdrilled Hole	4	2	Girder 4-J	1	South
Misdrilled Hole	4	2	Girder 4-J	3	North
Misdrilled Hole	4	2	Girder 4-J	3	South
Misdrilled Hole	4	2	Girder 4-G	4	South
Loose Bolt	4	2	Girder 4-G	4	South
Misdrilled Hole	4	2	Girder 4-H	4	South
Misdrilled Hole	4	2	Girder 4-J	4	North
Misdrilled Hole	4	2	Girder 4-J	4	South
Misdrilled Hole	4	2	Girder 4-K	4	North
Misdrilled Hole	4	2	Girder 4-H	11	North
Loose Bolt	4	3	Girder 4-J	1	South
Missing Bolt	5	2	Girder 5-N	2	South
Missing Bolt	5	2	Girder 5-P	2	North
Missing Bolt	5	2	Girder 5-W	0	North
Missing Bolt	5	2	Girder 5-X	0	North
Missing Bolt	5	2	Girder 5-X	2	North
Missing Bolt	5	3	Girder 5-P	3	South
Loose Bolt	5	3	Girder 5-X	6	North
Missing Bolt	5	3	Girder 5-P	10	South

Item	Unit	Span	Girder/Stringer	Floorbeam	Side
Loose Bolt	5	3	Girder 5-P	10	South
Missing Bolt	5	3	Girder 5-Q	10	South
Missing Bolt	5	3	Girder 5-R	10	South
Missing Bolt	5	3	Girder 5-S	10	South
Missing Bolt	5	3	Girder 5-T	10	South
Missing Bolt	5	3	Girder 5-U	10	South
Missing Bolt	5	3	Girder 5-V	10	South
Missing Bolt	5	4	Girder 5-P	2	South
Missing Bolt	5	4	Girder 5-Q	2	North
Missing Bolt	5	4	Girder 5-U	2	South
Missing Bolt	5	4	Girder 5-V	2	North
Missing Bolt	5	4	Girder 5-W	2	South
Missing Bolt	5	4	Girder 5-P	4	South
Missing Bolt	5	4	Girder 5-Q	4	North
Missing Bolt	5	4	Girder 5-Q	4	South
Misdrilled Hole	5	5	Girder 5-T	2	South
Missing Bolt	5	5	Girder 5-T	2	South
Missing Bolt	5	5	Girder 5-U	2	North
Missing Bolt	6	1	Girder 6-ZC	1	North
Missing Bolt	6	1	Girder 6-ZB	3	North
Missing Bolt	6	1	Girder 6-ZB	3	South
Missing Bolt	6	1	Girder 6-ZB	4	North
Missing Bolt	6	1	Girder 6-ZB	5	North
Missing Bolt	6	1	Girder 6-ZC	5	North
Missing Bolt	6	1	Girder 6-ZB	6	South
Missing Bolt	6	1	Girder 6-ZC	6	South
Missing Bolt	6	1	Girder 6-ZD	6	North
Missing Bolt	6	1	Girder 6-W	7	South
Missing Bolt	6	1	Girder 6-ZB	7	North
Missing Bolt	6	1	Girder 6-ZB	7	South
Missing Bolt	6	2	Girder 6-W	1	South
Missing Bolt	6	2	Girder 6-ZB	1	North
Missing Bolt	6	2	Girder 6-W	2	South
Missing Bolt	6	2	Girder 6-ZB	2	North
Missing Bolt	6	2	Girder 6-Q	3	South
Missing Bolt	6	2	Girder 6-R	3	North
Missing Bolt	6	2	Girder 6-V	3	South
Missing Bolt	6	2	Girder 6-W	3	North
Missing Bolt	6	2	Girder 6-ZC	3	South
Missing Bolt	6	2	Girder 6-ZD	3	North
Missing Bolt	6	2	Girder 6-Q	4	South
Missing Bolt	6	2	Girder 6-R	4	North
Missing Bolt	6	2	Girder 6-ZB	6	South
Missing Bolt	6	2	Girder 6-ZC	6	North
Missing Bolt	6	5	Girder 6-X	0	South
Missing Bolt	6	5	Girder 6-Y	1	North
Misdrilled Hole	Ramp	C-B	Girder 6-ZC	4	North
Missing Bolt	Ramp	C-B	Girder 6-ZD	0	North
Missing Bolt	Ramp	C-B	Girder 6-ZB	1	North
Missing Bolt	Ramp	C-B	Girder 6-ZB	2	North

Items in Red found in 2018 Inspection

Total Loose Bolt Locations	21
Total Missing Bolt Locations	59
Total Misdrilled Locations Holes	26

APPENDIX VII – Bearing/Hinge Condition

2018 Bridge Bearing/Hinges:
Condition Rating Left Bridge

Unit 1: Bearings and Hinges (Table 1) Rate Bearings: CS1, CS2, CS3 or CS4

Westbound Beams

Location	1-A	1-B	1-C	1-D	1-E	1-EA	1-EB	1-EC	1-ED
Rear Abutment	CS3	CS2	CS3	CS4	CS2	CS3	CS2	CS2	CS1
Pier 1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 2	CS1		CS1	CS1	CS1	CS1		CS1	CS1
Pier 3	CS1		CS1	CS1	CS1	CS1		CS1	CS1

Unit 1: Bearings and Hinges (Table 2)

Location	1-F	1-G	1-H	1-J	1-K	1-L	1-M	1-N	1-P
Rear Abutment	CS3	CS2	CS2	CS2	CS2	CS2	CS4	CS4	CS3
Pier 1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 2	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 3	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1

Unit 2: Bearings and Hinges

Westbound Beams

Location	2-A	2-B	2-C	2-D	2-E	2-F	2-G
Expansion Joint 1	CS2	CS2	CS2	CS2	CS2	CS2	CS2
Pier 4	CS2	CS2	CS2	CS1	CS1	CS1	CS1
Pier 5	CS2	CS1	CS1	CS1	CS1	CS1	CS1
Pier 6	CS1			CS1	CS1	CS1	CS1
Pier 7	CS1			CS1	CS1	CS1	CS1
Pier 8							

Unit 3: Bearings and Hinges

Westbound Beams

Location	3-A	3-B	3-C	3-D	3-E
Expansion Joint 2	CS2	CS2	CS2	CS2	CS2
Pier 9	CS2	CS3	CS3	CS3	CS3
Pier 10	CS1	CS1	CS1	CS1	CS2
Pier 11	CS2	CS2	CS2	CS2	CS2
Pier 12	CS3	CS3	CS2	CS2	CS3
Expansion Joint 3	CS2	CS2	CS2	CS3	CS3

Unit 4: Bearings and Hinges

Westbound Beams

Location	4-A	4-B	4-C	4-D	4-E
Pier 13	CS2	CS1	CS1	CS1	CS1
Pier 14	CS2	CS2	CS1	CS2	CS2
Pier 15	CS2	CS1	CS2	CS2	CS2
Expansion Joint 4	CS2	CS2	CS2	CS2	CS2

Unit 5: Bearings and Hinges

Westbound Beams

Location	5-A	5-B	5-C	5-D	5-E	5-F	5-G	5-H	5-J	5-K	5-L	5-M
Pier 16	CS1		CS1	CS1	CS2	CS2	CS2	CS1	CS1	CS1	CS1	CS1
Pier 17	CS1		CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 18	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 19	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 20	CS3	CS3	CS3	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Expansion Joint 5	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2

Unit 6: Bearings and Hinges

Westbound Beams

Location	6-A	6-B	6-C	6-D	6-E	6-F	6-G	6-H	6-J	6-K	6-L	6-N
Pier 21	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1			CS1
Pier 22	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1			CS1
Pier 23	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1		CS1
Pier 24	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Forward Abutment	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3

Left Bearings			
CS1 Total	CS2 Total	CS3 Total	CS4 Total
176	34	27	3
Total	240		

Left Hinges			
CS1 Total	CS2 Total	CS3 Total	CS4 Total
0	32	2	0
Total	34		

2018 Bridge Bearing/Hinges:
Condition Rating Left Bridge

Unit 1: Bearings and Hinges (Table 1) Rate Bearings: CS1, CS2, CS3 or CS4

Westbound Beams

Location	1-A	1-B	1-C	1-D	1-E	1-EA	1-EB	1-EC	1-ED
Rear Abutment	8° E	5° E	13° E	2° W	7° E	18° E	4° E	2° W	5° W
Pier 1									
Pier 2	Fixed		Fixed	Fixed	Fixed	Fixed			Fixed
Pier 3									

Unit 1: Bearings and Hinges (Table 2)

Location	1-F	1-G	1-H	1-J	1-K	1-L	1-M	1-N	1-P
Rear Abutment	6° E	5° E	1° E	9° E	3° E	3° E	7° E	7° E	7° E
Pier 1									
Pier 2	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 3									

Unit 2: Bearings and Hinges

Westbound Beams

Location	2-A	2-B	2-C	2-D	2-E	2-F	2-G
Expansion Joint 1							
Pier 4	0°	0°	5° W				
Pier 5	3° E	0°	2° E	1° W	5° E	0°	1° W
Pier 6	Fixed			Fixed	Fixed	Fixed	Fixed
Pier 7	Fixed			Fixed	Fixed	Fixed	Fixed
Pier 8							

Unit 3: Bearings and Hinges

Westbound Beams

Location	3-A	3-B	3-C	3-D	3-E
Expansion Joint 2	2° E	5° E	2° E	4° E	3° E
Pier 9	1° W	2° W	5° W	5° W	5° W
Pier 10	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 11	3° E	5° E	7° E	9° E	8° E
Pier 12	7°W	6° W	10° W	2° W	1° W
Expansion Joint 3	3° W	1° W	2° W	4° W	6° W

Unit 4: Bearings and Hinges

Westbound Beams

Location	4-A	4-B	4-C	4-D	4-E
Pier 13	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 14	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 15	2° W	0°	5° E	3° W	3° W
Expansion Joint 4	1° E	0°	1° E	2° E	2° W

Unit 5: Bearings and Hinges

Westbound Beams

Location	5-A	5-B	5-C	5-D	5-E	5-F	5-G	5-H	5-J	5-K	5-L	5-M
Pier 16												
Pier 17												
Pier 18	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 19												
Pier 20												
Expansion Joint 5												

Unit 6: Bearings and Hinges

Westbound Beams

Location	6-A	6-B	6-C	6-D	6-E	6-F	6-G	6-H	6-J	6-K	6-L	6-N
Pier 21												
Pier 22	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed			Fixed
Pier 23												
Pier 24												
Forward Abutment	6° E	6° E	8° E	6° E	8° E	8° E	10° E	6° E	6° E	11° E	13° E	8° E

2018 Bridge Bearing/Hinges:
Condition Rating Right Bridge

Unit 1: Bearings and Hinges

Rate Bearings: CS1, CS2, CS3 or CS4

Eastbound Beams

Location	1-Q	1-R	1-S	1-T	1-U	1-V	1-W	1-X	1-Y
Rear Abutment	CS2	CS1	CS2	CS2	CS1	CS1	CS2	CS1	CS2
Pier 1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 2	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 3	CS1	CS1	CS1	CS1	CS1	CS1	CS2	CS2	CS2

Unit 2: Bearings and Hinges

Eastbound Beams

Location	2-H	2-J	2-K	2-L	2-M
Expansion Joint 1	CS2	CS2	CS2	CS2	CS2
Pier 4	CS1	CS1	CS1	CS1	CS1
Pier 5	CS1	CS1	CS1	CS1	CS1
Pier 6	CS1	CS1	CS1	CS1	CS1
Pier 7	CS1	CS1	CS1	CS1	CS1
Pier 8	CS1	CS1	CS1	CS1	CS1

Unit 3: Bearings and Hinges

Eastbound Beams

Location	3-F	3-G	3-H	3-J	3-K
Expansion Joint 2	CS2	CS2	CS2	CS2	CS2
Pier 9	CS2	CS2	CS2	CS2	CS1
Pier 10	CS2	CS2	CS2	CS2	CS2
Pier 11	CS2	CS2	CS2	CS2	CS2
Pier 12	CS2	CS3	CS3	CS3	CS2
Expansion Joint 3	CS2	CS2	CS2	CS2	CS2

Unit 4: Bearings and Hinges

Eastbound Beams

Location	4-F	4-G	4-H	4-J	4-K
Pier 13	CS1	CS1	CS1	CS1	CS1
Pier 14	CS2	CS2	CS2	CS2	CS3
Pier 15	CS2	CS2	CS2	CS2	CS2
Expansion Joint 4	CS2	CS3	CS2	CS2	CS2

Unit 5: Bearings and Hinges

Eastbound Beams

Location	5-N	5-P	5-Q	5-R	5-S	5-T	5-U	5-V	5-W	5-X
Pier 16	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2		CS2
Pier 17	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2		CS2
Pier 18	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS2
Pier 19	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1
Pier 20	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2
Expansion Joint 5	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2

Unit 6: Bearings and Hinges

Eastbound Beams

Location	6-P	6-Q	6-R	6-S	6-T	6-U	6-V	6-W	6-X	6-Y	6-Z
Pier 21	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	
Pier 22	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	
Pier 23	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	CS1	
Pier 24	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	CS2	
Forward Abutment	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3	CS3

Ramp C-B Pier Abutment

Eastbound Beams

Location	6-ZA	6-ZB	6-ZC	6-ZD	6-ZE
Ramp C-B 23	CS2	CS1	CS1	CS1	CS1
Ramp C-B 24	CS1	CS1	CS1	CS1	CS1
Ramp C-B 25	CS1	CS1	CS1	CS1	CS1
Ramp C-B 26	CS1	CS1	CS1	CS1	CS1
Ramp C-B 27	CS1	CS1	CS1	CS1	CS1
Ramp C-B F.A.	CS3	CS3	CS3	CS3	CS3

Right Bearings			
CS1 Total	CS2 Total	CS3 Total	CS4 Total
132	72	15	0
Total	219		

Right Hinges			
CS1 Total	CS2 Total	CS3 Total	CS4 Total
0	29	1	0
Total	30		

2018 Bridge Bearing/Hinges:
Condition Rating Right Bridge

Unit 1: Bearings and Hinges — Rate Bearings: CS1, CS2, CS3 or CS4

Eastbound Beams

Location	1-Q	1-R	1-S	1-T	1-U	1-V	1-W	1-X	1-Y
Rear Abutment	1° E	3° E	1° E	4° W	2° W	1° W	1° E	2° E	10° E
Pier 1									
Pier 2	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 3									

Unit 2: Bearings and Hinges

Eastbound Beams

Location	2-H	2-J	2-K	2-L	2-M
Expansion Joint 1	3° E	2° E	3° E	2° E	2° E
Pier 4	4° W	4° W	4° W	1° E	2° W
Pier 5	0°	3° E	0°	2° W	1° W
Pier 6	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 7	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 8	0°	1° E	4° E	3° E	0°

Unit 3: Bearings and Hinges

Eastbound Beams

Location	3-F	3-G	3-H	3-J	3-K
Expansion Joint 2	6° E	8° E	7° E	9° E	4° E
Pier 9	5° W	5° W	5° W	2° W	4° W
Pier 10	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 11	4° E	5° E	3°E	5° E	5° E
Pier 12	0°	1° E	1° E	4° E	6° E
Expansion Joint 3	2° W	2°W	2° W	2° W	2° W

Unit 4: Bearings and Hinges

Eastbound Beams

Location	4-F	4-G	4-H	4-J	4-K
Pier 13	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 14	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 15	4° W	7° W	5° W	12° W	4° W
Expansion Joint 4	0° E	0° E	2° E	3° E	0° E

Unit 5: Bearings and Hinges

Eastbound Beams

Location	5-N	5-P	5-Q	5-R	5-S	5-T	5-U	5-V	5-W	5-X
Pier 16										
Pier 17										
Pier 18	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pier 19										
Pier 20										
Expansion Joint 5	2° W	2° W	2° W	2° W	2° W	2° W	2° W	2° W	3° W	2° W

Unit 6: Bearings and Hinges

Eastbound Beams

Location	6-P	6-Q	6-R	6-S	6-T	6-U	6-V	6-W	6-X	6-Y	6-Z
Pier 21											
Pier 22	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	
Pier 23											
Pier 24											
Forward Abutment	3° E	10° E	5° E	11° E	6° E	4° E	7° E	3° E	5° E	6° E	5° E

Ramp C-B Pier Abutment

Eastbound Beams

Location	6-ZA	6-ZB	6-ZC	6-ZD	6-ZE
Ramp C-B 23					
Ramp C-B 24					
Ramp C-B 25	Fixed	Fixed	Fixed	Fixed	Fixed
Ramp C-B 26					
Ramp C-B 27					
Ramp C-B F.A.	8° E	7° E	7° E	6° E	6° E

APPENDIX VIII – Fracture Critical Member Identification Plan

OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 12 • 5500 TRANSPORTATION BLVD. • GARFIELD HEIGHTS, OHIO 44125-5396 • (216) 581-2100

Fracture Critical Member and Fatigue Prone Connection Identification Plan

District:	12
County-Route-SLM:	CUY-490-0100
Structural File Number:	181991
Access:	Snooper inspection, Manlift, Climbing Techniques
Fatigue Life Study:	**Year of Study:** Not calculated **Remaining Fatigue Life:** Not calculated
Load Path Redundant:	No, structure is fracture critical; inspect FCM's every 24 months.
Structurally Redundant:	Yes, Continuous Spans

Location: Structure carries I-490 over the Cuyahoga River Valley in Cleveland, Ohio.

Structure Description:	The existing bridge is 3,462'(±) long and divided into six (6) units. The Westbound (left) superstructure consists of twenty-five (25) spans and the Eastbound (right) superstructure consists of twenty-four (24) spans plus 5 additional spans on Ramp C-B. The spans range from a minimum of 53' to a maximum of 340'. The bridge deck width varies, carrying five lanes of traffic Eastbound and four lanes Westbound over CSX Railroad, Norfolk Southern Railroad, Quigley Road, West 3rd Street, Independence Road and the Cuyahoga River. The average daily traffic for the bridge is 61,890 vehicles with average truck traffic of 4,230 vehicles (2010).

Additional Instructions:
Floorbeam spacing in units 2-5 is greater than 14'. Use snooper or climbing techniques to access fracture critical locations.

APPENDIX IX – Fatigue Prone Details

Fatigue Prone Details

Category Reference: AASHTO LRFD Bridge Design Specs Table 6.6.1.2.3-1

Photo Reference (photos on following pages)	**Category** (E, E' or R for Retrofit)	**Distribution**	**Description**
Photo 1	E		The end terminations of the longitudinal stiffener weld to the webs of the girders without a radius termination
Photo 2	E		Short longitudinal stiffener welded to the girder web where L>12t or 4" and t<0.8"
Photo 3	E'		Plate welded to bottom flange (used at seated hinge as a guide)
Photo 4	E		The stringer bottom flange to floorbeam top flange weld, flange thickness ≥ 0.8 in.
Photo 5	E		Expansion Joint Roller 5 was constructed with tri-axial welds

Photo 1 - End termination of longitudinal stiffener without a radius

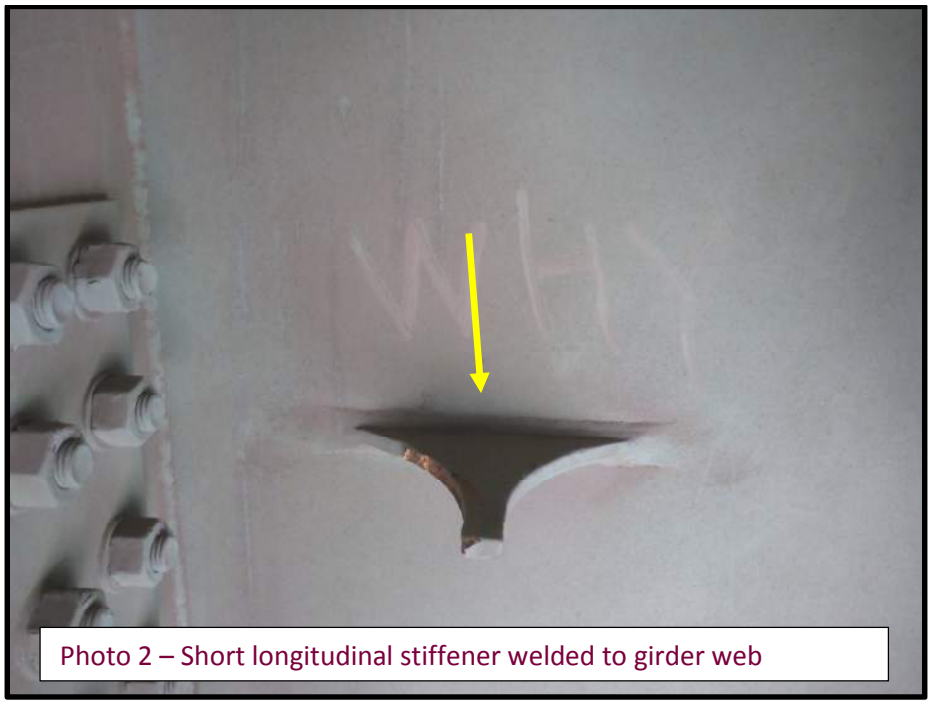


Photo 2 – Short longitudinal stiffener welded to girder web

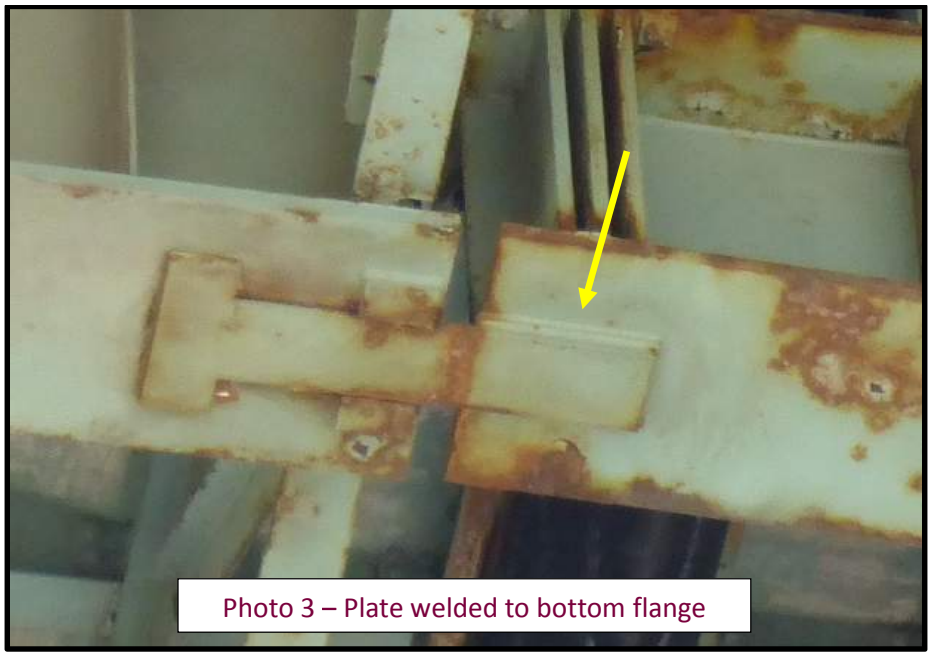


Photo 3 – Plate welded to bottom flange

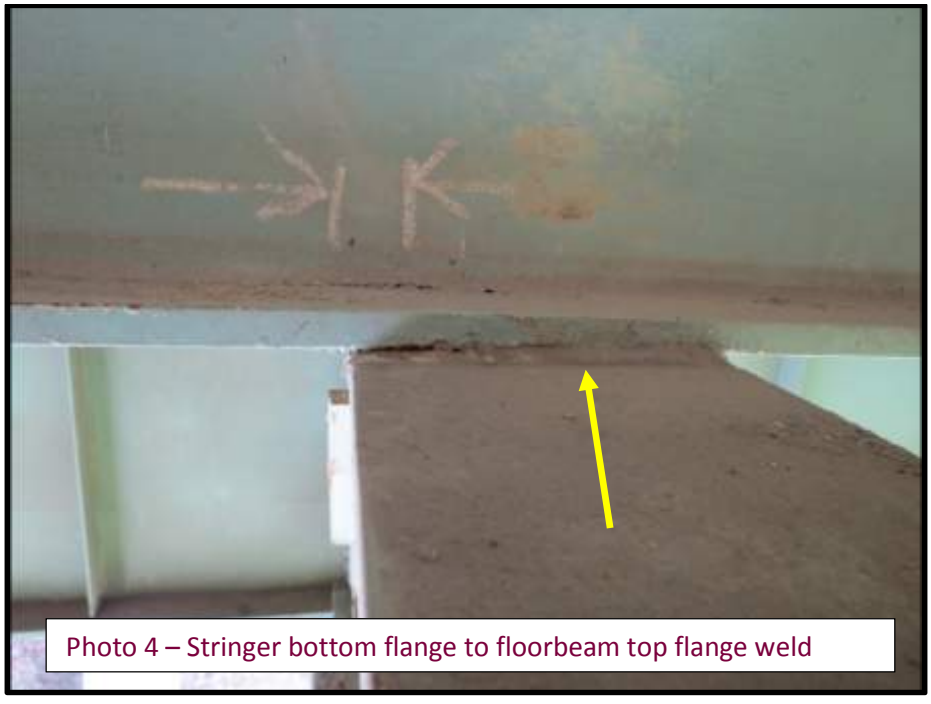


Photo 4 – Stringer bottom flange to floorbeam top flange weld

Photo 5 - Tri-axial weld at Expansion Joint 5

APPENDIX X – Element Level Inspection Data

Westbound: Left Bridge Approach Items

Approach Slab Summary	condition state cr					
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (EA	4	0	4	0	0	
c2 Approach Slabs (SF)	6116.8	5684	411	22	0	
c3. Relief Joint (LF)	244.7	207	38.0	0.0	0	
c4. Embankment (EA)	5	5	0	0	0	
c5. Guardrail (EA)	4	1	3	0	0	
c. Bridge Approach Pavement (EA)	4	4	0	0	0	
c.13 Expansion Joint (LF)	0	0	0	0	0	

Mainline Rear Approach Slab	condition state cr					
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (EA	1	0	1	0	0	
c2 Approach Slabs (SF)	1757.4	1556	181	20	0	
c3. Relief Joint (LF)	70.3	42	28	0	0	
c4. Embankment (EA)	1	1	0	0	0	
c5. Guardrail (EA)	1	0	1	0	0	
c. Bridge Approach Pavement (EA)	1	1	0	0	0	
c.13 Expansion Joint (LF)	0	0	0	0	0	

Mainline Forward Approach Slab	condition state cr					
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (EA	1	0	1	0	0	
c2 Approach Slabs (SF)	2829.2	2648	179	2	0	
c3. Relief Joint (LF)	113.2	103	10	0	0	
c4. Embankment (EA)	1	1	0	0	0	
c5. Guardrail (EA)	1	0	1	0	0	
c. Bridge Approach Pavement (EA)	1	1	0	0	0	
c13. Expansion Joint (LF)	0	0	0	0	0	

Ramp C-7 Rear Approach Slab	condition state cr					
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (EA	1	0	1	0	0	
c2 Approach Slabs (SF)	893	858	35	0	0	
c3. Relief Joint (LF)	35.7	36	0	0	0	
c4. Embankment (EA)	1	1	0	0	0	
c5. Guardrail (EA)	1	0	1	0	0	
c. Bridge Approach Pavement (EA)	1	1	0	0	0	
c13. Expansion Joint (LF)	0	0	0	0	0	

Ramp B-C Forward Approach Slab	condition state cr					
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (EA	1	0	1	0	0	
c2 Approach Slabs (SF)	637.2	621	16	0	0	
c3. Relief Joint (LF)	25.5	25	0	0	0	
c4. Embankment (EA)	2	2	0	0	0	
c5. Guardrail (EA)	1	1	0	0	0	
c. Bridge Approach Pavement (EA)	1	1	0	0	0	
c13. Expansion Joint (LF)	0	0	0	0	0	

Eastbound: Right Bridge Approach Items

Approach Slab Summary	condition state	cr				
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (	3.0	0.0	1.0	2.0	0.0	
c2 Approach Slabs (SF)	5717.6	5491.6	37.0	189.0	0.0	
c3. Relief Joint (LF)	216.5	76.5	140.0	0.0	0.0	
c4. Embankment (EA)	4.0	4.0	0.0	0.0	0.0	
c5. Guardrail (EA)	6.0	2.0	3.0	1.0	0.0	
c. Bridge Approach Pavement (E	3.0	3.0	0.0	0.0	0.0	
c.13 Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Mainline Rear Approach Slab	condition state	cr				
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (	1.0	0.0	0.0	1.0	0.0	
c2 Approach Slabs (SF)	1923.3	1722.3	12.0	189.0	0.0	
c3. Relief Joint (LF)	70.3	10.3	60.0	0.0	0.0	
c4. Embankment (EA)	1.0	1.0	0.0	0.0	0.0	
c5. Guardrail (EA)	2.0	1.0	1.0	0.0	0.0	
c. Bridge Approach Pavement (E	1.0	1.0	0.0	0.0	0.0	
c.13 Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Mainline Forward Approach Slab	condition state	cr				
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (	1.0	0.0	1.0	0.0	0.0	
c2 Approach Slabs (SF)	2562.8	2557.8	5.0	0.0	0.0	
c3. Relief Joint (LF)	113.2	53.2	60.0	0.0	0.0	
c4. Embankment (EA)	1.0	1.0	0.0	0.0	0.0	
c5. Guardrail (EA)	2.0	1.0	1.0	0.0	0.0	
c. Bridge Approach Pavement (E	1.0	1.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Ramp C-B Forward Approach Slab	condition state	cr				
	QTY.	1	2	3	4	TR
c1. Approach Wearing Surface (	1.0	0.0	0.0	1.0	0.0	
c2 Approach Slabs (SF)	1231.5	1211.5	20.0	0.0	0.0	
c3. Relief Joint (LF)	33.0	13.0	20.0	0.0	0.0	
c4. Embankment (EA)	2.0	2.0	0.0	0.0	0.0	
c5. Guardrail (EA)	2.0	0.0	1.0	1.0	0.0	
c. Bridge Approach Pavement (E	1.0	1.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Westbound: Left Bridge Deck Items 2018

Deck Summary	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	262933	250188	6797	5948	0	
c7.2 Edge of Floor/Slab (LF)	6914	6892.6	21	0	0	
c8. Wearing Surface (SF)	262933	261241	1534	158	0	
c9. Curb/sidewalk/Walkway (LF)	0	0	0	0	0	
c10. Median (LF)	3457	3236.8	220	0	0	
c11.Railing (LF)	3457	3236.1	203	18	0	
c12. Drainage (EA)	17	12	3	2	0	
c13. Expansion Joint (LF)	654	494	52	108	0	

Deck Span 1: Rear Abutment to Pier 1	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	6372.4	6359.4	13	0	0	
c7.2 Edge of Floor/Slab (LF)	106	106.0	0	0	0	
c8. Wearing Surface (SF)	6372.4	6368.4	4	0	0	
c10. Median (LF)	53	53.0	0	0	0	
c11.Railing (LF)	53.0	53.0	0.0	0.0	0.0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	144	134.0	10	0	0	

Deck Span 2: Pier 1 to Pier 2	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8054.9	7785.9	269	0	0	
c7.2 Edge of Floor/Slab (LF)	134	134.0	0	0	0	
c8. Wearing Surface (SF)	8054.9	8045.9	9	0	0	
c10. Median (LF)	67	67.0	0	0	0	
c11.Railing (LF)	67	47.0	20.0	0.0	0.0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 3: Pier 2 to Pier 3	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8054.9	8030.9	24	0	0	
c7.2 Edge of Floor/Slab (LF)	134	134.0	0	0	0	
c8. Wearing Surface (SF)	8054.9	8049.9	3	2	0	
c10. Median (LF)	67	67.0	0	0	0	
c11.Railing (LF)	67	67.0	0.0	0.0	0.0	
c12. Drainage (EA)	2	2.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 4: Pier 3 to Pier 4	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	7521.118	7465.1	56	0	0	
c7.2 Edge of Floor/Slab (LF)	136	136.0	0	0	0	
c8. Wearing Surface (SF)	7521.1	7403.1	116	2	0	
c10. Median (LF)	68	68.0	0	0	0	
c11.Railing (LF)	68	18.0	50.0	0.0	0.0	
c12. Drainage (EA)	2	2.0	0	0	0	
c13. Expansion Joint (LF)	100	98.0	2	0	0	

Deck Span 5: Pier 4 to Pier 5	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	10075.81	9807.8	268	0	0	
c7.2 Edge of Floor/Slab (LF)	263	263.0	0	0	0	
c8. Wearing Surface (SF)	10075.8	10069.8	6	0	0	
c10. Median (LF)	131.5	131.5	0	0	0	
c11.Railing (LF)	131.5	105.5	26	0	0	
c12. Drainage (EA)	1	0.0	1	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 6: Pier 5 to Pier 6	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	13830.29	13654.3	176	0	0	
c7.2 Edge of Floor/Slab (LF)	361	361.0	0	0	0	
c8. Wearing Surface (SF)	13830.3	13800.3	28	2	0	
c10. Median (LF)	180.5	180.5	0	0	0	
c11.Railing (LF)	180.5	171.5	9	0	0	
c12. Drainage (EA)	1	0.0	1	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 7: Pier 6 to Pier 7	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	13830.29	11318.1	596	1916	0	
c7.2 Edge of Floor/Slab (LF)	361	361.0	0	0	0	
c8. Wearing Surface (SF)	13830.3	13819.3	11	0	0	
c10. Median (LF)	180.5	180.5	0	0	0	
c11.Railing (LF)	180.5	174.5	6	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 8: Pier 7 to Pier 9	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	15136.02	12598	464	2074	0	
c7.2 Edge of Floor/Slab (LF)	401	401	0	0	0	
c8. Wearing Surface (SF)	15136	14989	147	0	0	
c10. Median (LF)	200.5	201	0	0	0	
c11.Railing (LF)	200.5	176	25	0	0	
c12. Drainage (EA)	0	0	0	0	0	
c13. Expansion Joint (LF)	66	59	6	1	0	

Deck Span 9: Pier 9 to Pier 10	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	15472.97	15255	218	0	0	
c7.2 Edge of Floor/Slab (LF)	474	474	0	0	0	
c8. Wearing Surface (SF)	15473	15365	17	91	0	
c10. Median (LF)	237	146	91	0	0	
c11.Railing (LF)	237	236	1	0	0	
c12. Drainage (EA)	3	2	0	0	1	
c13. Expansion Joint (LF)	0	0	0	0	0	

Deck Span 10: Pier 10 to Pier 11	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	21544.65	20888.6	560	96	0	
c7.2 Edge of Floor/Slab (LF)	660	660.0	0	0	0	
c8. Wearing Surface (SF)	21544.6	21486.1	59	0	0	
c10. Median (LF)	330	330.0	0	0	0	
c11.Railing (LF)	330	328.0	2	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 11: Pier 11 to Pier 12	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	11359.91	10959.9	400	0	0	
c7.2 Edge of Floor/Slab (LF)	348	348.0	0	0	0	
c8. Wearing Surface (SF)	11359.9	11308.9	51	0	0	
c10. Median (LF)	174	155.0	19	0	0	
c11.Railing (LF)	174	171.0	3	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 12: Pier 12 to Pier 13	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	13501.07	13016.1	485	0	0	
c7.2 Edge of Floor/Slab (LF)	396	396.0	0	0	0	
c8. Wearing Surface (SF)	13501.1	13305.1	196	0	0	
c10. Median (LF)	198	183.0	15	0	0	
c11.Railing (LF)	198	190.0	8	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	66	60.0	6	0	0	

Deck Span 13: Pier 13 to Pier 14	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	12948.2	12192.2	372	384	0	
c7.2 Edge of Floor/Slab (LF)	378	372.0	6	0	0	
c8. Wearing Surface (SF)	12948.2	12889.2	59	0	0	
c10. Median (LF)	189	149.0	40	0	0	
c11.Railing (LF)	189	187.0	2	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 14: Pier 14 to Pier 15	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9934.5	9222.5	520	192	0	
c7.2 Edge of Floor/Slab (LF)	290	290.0	0	0	0	
c8. Wearing Surface (SF)	9934.5	9820.5	114	0	0	
c10. Median (LF)	145	145.0	0	0	0	
c11.Railing (LF)	145	145.0	0	0	0	
c12. Drainage (EA)	1	1.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 15: Pier 15 to Pier 16	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	11025.7	10991.7	34	0	0	
c7.2 Edge of Floor/Slab (LF)	268	253.0	15	0	0	
c8. Wearing Surface (SF)	11025.7	10970.7	50	5	0	
c10. Median (LF)	134	134.0	0	0	0	
c11.Railing (LF)	134	81.3	35	18	0	
c12. Drainage (EA)	2	0.0	0	2	0	
c13. Expansion Joint (LF)	74	62.0	12	0	0	

Deck Span 16: Pier 16 to Pier 17	condition state		cr			
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	11342.3	9618.3	632	1092	0	
c7.2 Edge of Floor/Slab (LF)	270	270.0	0	0	0	
c8. Wearing Surface (SF)	11342.3	11320.3	8	14	0	
c10. Median (LF)	135	114.0	21	0	0	
c11.Railing (LF)	135	131.0	4	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 17: Pier 17 to Pier 18	condition state		cr			
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	11358	10502	728	128	0	
c7.2 Edge of Floor/Slab (LF)	270.4	267	3	0	0	
c8. Wearing Surface (SF)	11358	11336	8	14	0	
c10. Median (LF)	135.2	114	21	0	0	
c11.Railing (LF)	135.2	135	0	0	0	
c12. Drainage (EA)	0	0	0	0	0	
c13. Expansion Joint (LF)	0	0	0	0	0	

Deck Span 18: Pier 18 to Pier 19	condition state		cr			
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	11326.9	11098.9	228	0	0	
c7.2 Edge of Floor/Slab (LF)	269.6	257.6	12	0	0	
c8. Wearing Surface (SF)	11326.9	11304.9	8	14	0	
c10. Median (LF)	134.8	134.8	0	0	0	
c11.Railing (LF)	134.8	134.8	0	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 19: Pier 19 to Pier 20	condition state		cr			
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	10501.6	10385.6	110	6	0	
c7.2 Edge of Floor/Slab (LF)	250	250.0	0	0	0	
c8. Wearing Surface (SF)	10501.6	10479.6	8	14	0	
c10. Median (LF)	125	124.0	1	0	0	
c11.Railing (LF)	125	123.0	2	0	0	
c12. Drainage (EA)	1	1.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 20: Pier 20 to Pier 21	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8095	8071	24	0	0	
c7.2 Edge of Floor/Slab (LF)	229.5	230	0	0	0	
c8. Wearing Surface (SF)	8095.0	7967	128	0	0	
c10. Median (LF)	114.8	115	0	0	0	
c11.Railing (LF)	114.8	115	0	0	0	
c12. Drainage (EA)	1	1	0	0	0	
c13. Expansion Joint (LF)	93	81	12	0	0	

Deck Span 21: Pier 21 to Pier 22	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8145.0	8025.0	120	0	0	
c7.2 Edge of Floor/Slab (LF)	235.3	235.3	0	0	0	
c8. Wearing Surface (SF)	8145	8022.0	123	0	0	
c10. Median (LF)	117.6	117.6	0	0	0	
c11.Railing (LF)	117.6	117.6	0	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 22: Pier 22 to Pier 23	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8288.1	8134.1	94	60	0	
c7.2 Edge of Floor/Slab (LF)	239.4	239.4	0	0	0	
c8. Wearing Surface (SF)	8288.1	8189.1	99	0	0	
c10. Median (LF)	119.7	119.7	0	0	0	
c11.Railing (LF)	119.7	114.7	5	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 23: Pier 23 to Pier 24	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8502.7	8232.7	270	0	0	
c7.2 Edge of Floor/Slab (LF)	245.6	245.6	0	0	0	
c8. Wearing Surface (SF)	8502.7	8376.2	127	0	0	
c10. Median (LF)	122.8	122.8	0	0	0	
c11.Railing (LF)	122.8	122.8	0	0	0	
c12. Drainage (EA)	0	0.0	0	0	0	
c13. Expansion Joint (LF)	0	0.0	0	0	0	

Deck Span 24: Pier 24 to Forward Abutment	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	6710.3	6574.3	136	0	0	
c7.2 Edge of Floor/Slab (LF)	193.8	193.8	0	0	0	
c8. Wearing Surface (SF)	6710.3	6554.3	156	0	0	
c10. Median (LF)	96.9	84.9	12	0	0	
c11.Railing (LF)	96.9	91.9	5	0	0	
c12. Drainage (EA)	3	2.0	1	0	0	
c13. Expansion Joint (LF)	111	0.0	4	107	0	

Eastbound: Right Bridge Deck Items 2018

Deck Summary	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	256063.0	247415.4	7222.0	1425.6	2.0	
c7.2 Edge of Floor/Slab (LF)	8224.6	8122.6	102.0	0.0	0.0	
c8. Wearing Surface (SF)	256063.0	255256.2	438.8	368.0	0.0	
c9. Curb/sidewalk/Walkway (LF)		0.0				
c10. Median (LF)	3456.8	3430.8	26.0	0.0	0.0	
c11.Railing (LF)	4767.8	4449.5	256.0	62.3	0.0	
c12. Drainage (EA)	18.0	9.0	9.0	0.0	2.0	
c13. Expansion Joint (LF)	602.0	536.0	44.0	22.0	0.0	

Deck Span 1: Rear Abutment to Pier 1	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	3841.5	3784.5	57.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	106.0	106.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	3841.5	3836.5	5.0	0.0	0.0	
c10. Median (LF)	53.0	53.0	0.0	0.0	0.0	
c11.Railing (LF)	53.0	16.0	21.0	16.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	77.0	59.0	14.0	4.0	0.0	

Deck Span 2: Pier 1 to Pier 2	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	4855.7	4819.7	36.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	134.0	134.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	4855.7	4835.7	10.0	10.0	0.0	
c10. Median (LF)	67.0	67.0	0.0	0.0	0.0	
c11.Railing (LF)	67.0	43.5	18.3	5.3	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 3: Pier 2 to Pier 3	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	4855.7	4811.7	44.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	134.0	134.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	4855.7	4835.7	10.0	10.0	0.0	
c10. Median (LF)	67.0	67.0	0.0	0.0	0.0	
c11.Railing (LF)	67.0	43.5	18.3	5.3	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 4: Pier 3 to Pier 4	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	4827.4	4824.4	3.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	136.0	136.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	4827.4	4807.4	10.0	10.0	0.0	
c10. Median (LF)	68.0	68.0	0.0	0.0	0.0	
c11.Railing (LF)	68.0	44.5	18.3	5.3	0.0	
c12. Drainage (EA)	2.0	1.0	0.0	0.0	1.0	
c13. Expansion Joint (LF)	69.0	69.0	0.0	0.0	0.0	

Deck Span 5: Pier 4 to Pier 5	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8646.4	8224.8	71.0	350.7	0.0	
c7.2 Edge of Floor/Slab (LF)	263.0	263.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	8646.4	8460.4	12.0	174.0	0.0	
c10. Median (LF)	131.5	125.5	6.0	0.0	0.0	
c11.Railing (LF)	131.5	118.5	10.0	3.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 6: Pier 5 to Pier 6	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8646.4	8426.4	220.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	263.0	263.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	8646.4	8620.4	6.0	20.0	0.0	
c10. Median (LF)	131.5	131.5	0.0	0.0	0.0	
c11.Railing (LF)	131.5	129.5	2.0	0.0	0.0	
c12. Drainage (EA)	1.0	0.0	1.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 7: Pier 6 to Pier 7	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8646.4	8614.4	32.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	263.0	263.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	8646.4	8646.4	0.0	0.0	0.0	
c10. Median (LF)	131.5	122.5	9.0	0.0	0.0	
c11.Railing (LF)	131.5	124.5	7.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 8: Pier 7 to Pier 8	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	11999.8	10506.8	984.0	509.0	0.0	
c7.2 Edge of Floor/Slab (LF)	365.0	365.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	11999.8	11992.8	7.0	0.0	0.0	
c10. Median (LF)	182.5	182.5	0.0	0.0	0.0	
c11.Railing (LF)	182.5	154.5	25.3	2.8	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 9: Pier 8 to Pier 9	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	10959.4	10955.4	4.0	0.0	1.0	
c7.2 Edge of Floor/Slab (LF)	334.0	334.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	10959.4	10950.4	9.0	0.0	0.0	
c10. Median (LF)	167.0	164.0	3.0	0.0	0.0	
c11.Railing (LF)	167.0	152.3	12.0	2.8	0.0	
c12. Drainage (EA)	2.0	1.0	1.0	0.0	0.0	
c13. Expansion Joint (LF)	66.0	63.0	2.0	1.0	0.0	

CS-4 is the deck core that was never filled. Hole is one bay west of sign support

Deck Span 10: Pier 9 to Pier 10	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	13003.1	11669.1	1334.0	0.0	1.0	
c7.2 Edge of Floor/Slab (LF)	402.0	387.0	15.0	0.0	0.0	
c8. Wearing Surface (SF)	13003.1	12920.2	14.8	68.0	0.0	
c10. Median (LF)	201.0	201.0	0.0	0.0	0.0	
c11.Railing (LF)	201.0	199.0	2.0	0.0	0.0	
c12. Drainage (EA)	1.0	0.0	1.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 11: Pier 10 to Pier 11	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	21995.2	21561.2	418.0	16.0	1.0	
c7.2 Edge of Floor/Slab (LF)	680.0	675.0	5.0	0.0	0.0	
c8. Wearing Surface (SF)	21995.2	21909.2	82.0	4.0	0.0	
c10. Median (LF)	340.0	340.0	0.0	0.0	0.0	
c11.Railing (LF)	340.0	318.0	16.0	6.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

CS-4 is the deck core that was never filled. Hole is one bay west of pier 10R

Deck Span 12: Pier 11 to Pier 12	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	11968.0	11720.0	248.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	370.0	370.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	11968.0	11963.0	5.0	0.0	0.0	
c10. Median (LF)	185.0	185.0	0.0	0.0	0.0	
c11.Railing (LF)	185.0	181.0	4.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 13: Pier 12 to Pier 13	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	11900.8	11748.8	152.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	368.0	368.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	11900.8	11893.8	7.0	0.0	0.0	
c10. Median (LF)	184.0	184.0	0.0	0.0	0.0	
c11.Railing (LF)	184.0	184.0	0.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	66.0	59.0	5.0	2.0	0.0	

Deck Span 14: Pier 13 to Pier 14	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	10799.7	10327.7	472.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	334.0	334.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	10799.7	10727.7	0.0	72.0	0.0	
c10. Median (LF)	167.0	167.0	0.0	0.0	0.0	
c11.Railing (LF)	167.0	150.0	5.0	12.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 15: Pier 14 to Pier 15	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9378.2	8895.2	483.0	0.0		
c7.2 Edge of Floor/Slab (LF)	290.0	290.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	9378.2	9378.2	0.0	0.0	0.0	
c10. Median (LF)	145.0	145.0	0.0	0.0	0.0	
c11.Railing (LF)	145.0	135.0	10.0	0.0	0.0	
c12. Drainage (EA)	1.0	0.0	1.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 16: Pier 15 to Pier 16	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9315.8	9051.8	264.0	0.0		
c7.2 Edge of Floor/Slab (LF)	268.0	228.0	40.0	0.0	0.0	
c8. Wearing Surface (SF)	9315.8	9313.8	2.0	0.0	0.0	
c10. Median (LF)	134.0	134.0	0.0	0.0	0.0	
c11.Railing (LF)	134.0	127.0	7.0	0.0	0.0	
c12. Drainage (EA)	2.0	1.0	1.0	0.0	0.0	
c13. Expansion Joint (LF)	66.0	61.0	5.0	0.0	0.0	

Deck Span 17: Pier 16 to Pier 17	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9467.8	8803.8	584.0	80.0	0.0	
c7.2 Edge of Floor/Slab (LF)	270.0	254.0	16.0	0.0	0.0	
c8. Wearing Surface (SF)	9467.8	9458.8	9.0	0.0	0.0	
c10. Median (LF)	135.0	134.0	1.0	0.0	0.0	
c11.Railing (LF)	135.0	125.0	10.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 18: Pier 17 to Pier 18	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9481.0	9357.0	124.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	270.4	258.4	12.0	0.0	0.0	
c8. Wearing Surface (SF)	9481.0	9481.0	0.0	0.0	0.0	
c10. Median (LF)	135.2	135.2	0.0	0.0	0.0	
c11.Railing (LF)	135.2	125.2	10.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 19: Pier 18 to Pier 19	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9455.0	9119.0	336.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	269.6	255.6	14.0	0.0	0.0	
c8. Wearing Surface (SF)	9455.0	9422.0	33.0	0.0	0.0	
c10. Median (LF)	134.8	134.8	0.0	0.0	0.0	
c11.Railing (LF)	134.8	124.8	10.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 20: Pier 19 to Pier 20	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	8766.1	8534.1	232.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	250.0	250.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	8766.1	8766.1	0.0	0.0	0.0	
c10. Median (LF)	125.0	125.0	0.0	0.0	0.0	
c11.Railing (LF)	125.0	113.0	12.0	0.0	0.0	
c12. Drainage (EA)	1.0	0.0	0.0	0.0	1.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 21: Pier 20 to Pier 21	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9336.8	9246.8	90.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	229.5	229.5	0.0	0.0	0.0	
c8. Wearing Surface (SF)	9336.8	9326.8	10.0	0.0	0.0	
c10. Median (LF)	114.8	114.8	0.0	0.0	0.0	
c11.Railing (LF)	114.8	114.8	0.0	0.0	0.0	
c12. Drainage (EA)	2.0	1.0	1.0	0.0	0.0	
c13. Expansion Joint (LF)	107.0	101.0	6.0	0.0	0.0	

Deck Span 22: Pier 21 to Pier 22	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9695.0	9542.0	153.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	235.3	235.3	0.0	0.0	0.0	
c8. Wearing Surface (SF)	9695.0	9658.0	37.0	0.0	0.0	
c10. Median (LF)	117.6	117.6	0.0	0.0	0.0	
c11.Railing (LF)	117.6	110.6	3.0	4.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 23: Pier 22 to Pier 23	condition state cr					
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	9865.4	9696.4	169.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	239.4	239.4	0.0	0.0	0.0	
c8. Wearing Surface (SF)	9865.4	9755.4	110.0	0.0	0.0	
c10. Median (LF)	119.7	113.7	6.0	0.0	0.0	
c11.Railing (LF)	119.7	114.7	5.0	0.0	0.0	
c12. Drainage (EA)	1.0	0.0	1.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 24: Pier 23 to Pier 24	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	10120.8	9098.9	552.0	469.9	0.0	
c7.2 Edge of Floor/Slab (LF)	390.6	390.6	0.0	0.0	0.0	
c8. Wearing Surface (SF)	10120.8	10085.8	35.0	0.0	0.0	
c10. Median (LF)	122.8	121.8	1.0	0.0	0.0	
c11.Railing (LF)	267.8	265.8	2.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Deck Span 25: Pier 24 to Forward Abutment	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	7987.3	7947.3	40.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	193.8	193.8	0.0	0.0	0.0	
c8. Wearing Surface (SF)	7987.3	7987.3	0.0	0.0	0.0	
c10. Median (LF)	96.9	96.9	0.0	0.0	0.0	
c11.Railing (LF)	96.9	86.9	10.0	0.0	0.0	
c12. Drainage (EA)	2.0	2.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	102.0	84.0	12.0	6.0	0.0	
Ramp C-B: Pier C-B 23 to Pier C-B 24	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	3191.7	3188.7	3.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	229.0	229.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	3191.7	3190.7	1.0	0.0	0.0	
c10. Median (LF)	0.0	0.0	0.0	0.0	0.0	
c11.Railing (LF)	229.0	215.0	14.0	0.0	0.0	
c12. Drainage (EA)	2.0	0.0	2.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Ramp C-B: Pier C-B 24 to Pier C-B 25	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	3427.4	3403.4	24.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	246.0	246.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	3427.4	3403.4	24.0	0.0	0.0	
c10. Median (LF)	0.0	0.0	0.0	0.0	0.0	
c11.Railing (LF)	246.0	246.0	0.0	0.0	0.0	
c12. Drainage (EA)	1.0	1.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Ramp C-B: Pier C-B 25 to Pier C-B 26	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	3476.7	3444.7	32.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	249.5	249.5	0.0	0.0	0.0	
c8. Wearing Surface (SF)	3476.7	3476.7	0.0	0.0	0.0	
c10. Median (LF)	0.0	0.0	0.0	0.0	0.0	
c11.Railing (LF)	249.5	249.5	0.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Ramp C-B: Pier C-B 26 to Pier C-B 27	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	3476.7	3452.7	24.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	249.5	249.5	0.0	0.0	0.0	
c8. Wearing Surface (SF)	3476.7	3476.7	0.0	0.0	0.0	
c10. Median (LF)	0.0	0.0	0.0	0.0	0.0	
c11.Railing (LF)	249.5	245.5	4.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	0.0	0.0	0.0	0.0	0.0	

Ramp C-B: Pier C-B 27 to Abutment C-B	condition state	cr				
	QTY.	1	2	3	4	TR
c7.1 Floor/Slab (SF)	2675.5	2638.5	37.0	0.0	0.0	
c7.2 Edge of Floor/Slab (LF)	192.0	192.0	0.0	0.0	0.0	
c8. Wearing Surface (SF)	2675.5	2675.5	0.0	0.0	0.0	
c10. Median (LF)	0.0	0.0	0.0	0.0	0.0	
c11.Railing (LF)	192.0	192.0	0.0	0.0	0.0	
c12. Drainage (EA)	0.0	0.0	0.0	0.0	0.0	
c13. Expansion Joint (LF)	49.0	40.0	0.0	9.0	0.0	

Westbound: Left Bridge Superstructure Items

Superstructure Items: Westbound Total	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	24	24	0	0	0	
c15.1 Beams/Girders (LF)	27881	18786	8595	500	0	
c16. Diaphragm/X-Frames (EA)	1165	0	1084	81	0	
c17 Stringers (LF)	8984	1508	7376	100	0	
c18 Floorbeams (LF)	9583	1032	8336	215	0	
c26 Bearing Devices (EA)	240	216	23	1	0	
c30 Protective Coating System (LF)	46448	17551	27443	997	376	
c31 Hinges (EA)	34	0	32	2	0	
c32 Fatigue (LF)	46448	46447	1	0	0	

Superstructure Items: Unit 1 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	959	862	90	7	0	
c16. Diaphragm/X-Frames (EA)	68	0	68	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	18	18	0	0	0	
c30 Protective Coating System (LF)	959	858	94	7	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	959	959	0	0	0	

Superstructure Items: Unit 1 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1148	1070	78	0	0	
c16. Diaphragm/X-Frames (EA)	78	0	78	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	16	0	16	0	0	
c26 Bearing Devices (EA)	18	18	0	0	0	
c30 Protective Coating System (LF)	1164	1084	80	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1164	1164	0	0	0	

Superstructure Items: Unit 1 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1064	904	160	0	0	
c16. Diaphragm/X-Frames (EA)	73	0	73	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	0	8	0	0	
c26 Bearing Devices (EA)	16	16	0	0	0	
c30 Protective Coating System (LF)	1072	941	131	0	0	
c31 Hinges (EA)	0	0	0	0		
c32 Fatigue (LF)	1072	1072	0	0	0	

Superstructure Items: Unit 1 Span 4	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	890	681	74	135	0	
c16. Diaphragm/X-Frames (EA)	54	0	54	0	0	
c17 Stringers (LF)	90	65	0	25	0	
c18 Floorbeams (LF)	202	96	101	5	0	
c26 Bearing Devices (EA)	15	15	0	0	0	
c30 Protective Coating System (LF)	1182	952	74	75	0	
c31 Hinges (EA)	7	0	5	2	0	
c32 Fatigue (LF)	1182	1182	0	0	0	

Superstructure Items: Unit 2 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	922	601	321	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	760	380	380	0	0	
c18 Floorbeams (LF)	711	0	711	0	0	
c26 Bearing Devices (EA)	7	7	0	0	0	
c30 Protective Coating System (LF)	2393	601	1792	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2393	2393	0	0	0	

Superstructure Items: Unit 2 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1068	775	293	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	903	0	903	0	0	
c18 Floorbeams (LF)	859	0	859	0	0	
c26 Bearing Devices (EA)	7	7	0	0	0	
c30 Protective Coating System (LF)	2830	775	2051	0	4	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2830	2830	0	0	0	

Superstructure Items: Unit 2 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	903	592	311	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	903	0	903	0	0	
c18 Floorbeams (LF)	842	0	842	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	2648	580	2053	0	15	
c31 Hinges (EA)	0	0	0	0		
c32 Fatigue (LF)	2648	2648	0	0	0	

Superstructure Items: Unit 2 Span 4	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1003	241	658	104	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	983	983	0	0	0	
c18 Floorbeams (LF)	935	842	92	1	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	2921	491	2022	408	0	
c31 Hinges (EA)	5	0	5	0	0	
c32 Fatigue (LF)	2921	2921	0	0	0	

Superstructure Items: Unit 3 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1189	272	915	2	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	951	0	951	0	0	
c18 Floorbeams (LF)	997	0	996	1	0	
c26 Bearing Devices (EA)	5	0	5	0	0	
c30 Protective Coating System (LF)	3137	-420	3554	3	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	3137	3137	0	0	0	

Superstructure Items: Unit 3 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1658	655	1003	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	1327	0	1327	0	0	
c18 Floorbeams (LF)	1434	0	1434	0	0	
c26 Bearing Devices (EA)	5	4	1	0	0	
c30 Protective Coating System (LF)	4419	718	3437	0	264	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	4419	4418	1	0	0	

Superstructure Items: Unit 3 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	874	93	777	4	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	700	0	700	0	0	
c18 Floorbeams (LF)	748	0	748	0	0	
c26 Bearing Devices (EA)	5	4	1	0	0	
c30 Protective Coating System (LF)	2322	79	2240	4	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2322	2322	0	0	0	

Superstructure Items: Unit 4 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	991	490	429	72	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	792	80	712	0	0	
c18 Floorbeams (LF)	935	94	841	0	0	
c26 Bearing Devices (EA)	5	1	4	0	0	
c30 Protective Coating System (LF)	2718	33	2443	242	0	
c31 Hinges (EA)	5	0	5	0	0	
c32 Fatigue (LF)	2718	2718	0	0	0	

Superstructure Items: Unit 4 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	959	527	425	7	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	775	0	775	0	0	
c18 Floorbeams (LF)	965	0	965	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	2699	471	2205	12	11	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2699	2699	0	0	0	

Superstructure Items: Unit 4 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	725	439	286	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	725	0	725	0	0	
c18 Floorbeams (LF)	683	0	683	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	2133	965	1136	0	32	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2133	2133	0	0	0	

Superstructure Items: Unit 5 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1384	1025	330	29	0	
c16. Diaphragm/X-Frames (EA)	80	0	0	80	0	
c17 Stringers (LF)	75	0	0	75	0	
c18 Floorbeams (LF)	208	0	0	208	0	
c26 Bearing Devices (EA)	5	4	1	0	0	
c30 Protective Coating System (LF)	1667	999	610	29	29	
c31 Hinges (EA)	5	0	5	0	0	
c32 Fatigue (LF)	1667	1667	0	0	0	

Superstructure Items: Unit 5 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1485	1283	202	0	0	
c16. Diaphragm/X-Frames (EA)	100	0	100	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	11	11	0	0	0	
c30 Protective Coating System (LF)	1485	1281	202	0	2	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1485	1485	0	0	0	

Superstructure Items: Unit 5 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1645	1282	363	0	0	
c16. Diaphragm/X-Frames (EA)	108	0	108	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	0	8	0	0	
c26 Bearing Devices (EA)	11	11	0	0	0	
c30 Protective Coating System (LF)	1653	158	1360	135	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1653	1653	0	0	0	

Superstructure Items: Unit 5 Span 4	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1618	1400	218	0	0	
c16. Diaphragm/X-Frames (EA)	110	0	110	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	12	12	0	0	0	
c30 Protective Coating System (LF)	1618	1399	218	0	1	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1618	1618	0	0	0	

Superstructure Items: Unit 5 Span 5	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1500	1347	153	0	0	
c16. Diaphragm/X-Frames (EA)	99	0	99	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	12	12	0	0	0	
c30 Protective Coating System (LF)	1500	1347	153	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1500	1500	0	0	0	

Superstructure Items: Unit 6 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1092	768	196	128	0	
c16. Diaphragm/X-Frames (EA)	77	0	77	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	0	8	0	0	
c26 Bearing Devices (EA)	12	12	0	0	0	
c30 Protective Coating System (LF)	1100	748	265	69	18	
c31 Hinges (EA)	12	0	12	0	0	
c32 Fatigue (LF)	1100	1100	0	0	0	

Superstructure Items: Unit 6 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1119	822	297	0	0	
c16. Diaphragm/X-Frames (EA)	74	0	74	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	10	10	0	0	0	
c30 Protective Coating System (LF)	1119	842	277	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1119	1119	0	0	0	

Superstructure Items: Unit 6 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1212	623	589	0	0	
c16. Diaphragm/X-Frames (EA)	73	0	73	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	0	8	0	0	
c26 Bearing Devices (EA)	10	10	0	0	0	
c30 Protective Coating System (LF)	1220	623	597	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1220	1220	0	0	0	

Superstructure Items: Unit 6 Span 4	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1335	1112	223	0	0	
c16. Diaphragm/X-Frames (EA)	86	0	86	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	0	8	0	0	
c26 Bearing Devices (EA)	11	11	0	0	0	
c30 Protective Coating System (LF)	1343	1112	231	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1343	1343	0	0	0	

Superstructure Items: Unit 6 Span 5	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1138	922	204	12	0	
c16. Diaphragm/X-Frames (EA)	85	0	84	1	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	0	8	0	0	
c26 Bearing Devices (EA)	25	13	11	1		
c30 Protective Coating System (LF)	1146	915	219	12	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1146	1146	0	0	0	

Eastbound: Right Bridge Superstructure Items

Superstructure Items: Eastbound Total	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	30	30	0	0	0	
c15.1 Beams/Girders (LF)	27713	16305	11010	398	0	
c16. Diaphragm/X-Frames (EA)	1186	167	983	36	0	
c17 Stringers (LF)	7959	1599	6305	56	0	
c18 Floorbeams (LF)	9041	280	8565	194	2	
c26 Bearing Devices (EA)	225	211	14	0	0	
c30 Protective Coating System (LF)	44713	23951	18997	1302	471	
c31 Hinges (EA)	30	9	21	0	0	
c32 Fatigue (LF)	44713	44696	17	0	0	

Superstructure Items: Unit 1 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	477	339	136	2	0	
c16. Diaphragm/X-Frames (EA)	32	0	32	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	9	9	0	0	0	
c30 Protective Coating System (LF)	477	339	136	2	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	477	477	0	0	0	

Superstructure Items: Unit 1 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	603	577	26	0	0	
c16. Diaphragm/X-Frames (EA)	40	37	3	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	9	9	0	0	0	
c30 Protective Coating System (LF)	603	577	23	3	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	603	603	0	0	0	

Superstructure Items: Unit 1 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	603	462	141	0	0	
c16. Diaphragm/X-Frames (EA)	40	30	10	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	9	9	0	0	0	
c30 Protective Coating System (LF)	603	428	163	12	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	603	603	0	0	0	

Superstructure Items: Unit 1 Span 4	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	552	410	142	0	0	
c16. Diaphragm/X-Frames (EA)	32	12	20	0	0	
c17 Stringers (LF)	60	60	0	0	0	
c18 Floorbeams (LF)	131	82	49	0	0	
c26 Bearing Devices (EA)	9	9	0	0	0	
c30 Protective Coating System (LF)	743	543	200	0	0	
c31 Hinges (EA)	5	0	5	0	0	
c32 Fatigue (LF)	743	743	0	0	0	

Superstructure Items: Unit 2 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	658	476	182	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	526	0	526	0	0	
c18 Floorbeams (LF)	572	0	570	0	2	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	1756	1288	468	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1756	1740	16	0	0	

Superstructure Items: Unit 2 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	658	352	306	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	526	0	526	0	0	
c18 Floorbeams (LF)	561	0	561	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	1745	1439	306	0	0	
c31 Hinges (EA)	0	0	0	0		
c32 Fatigue (LF)	1745	1745	0	0	0	

Superstructure Items: Unit 2 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	658	266	392	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	526	0	526	0	0	
c18 Floorbeams (LF)	561	0	561	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	1745	1419	326	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1745	1745	0	0	0	

Superstructure Items: Unit 2 Span 4	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	913	578	335	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	730	365	365	0	0	
c18 Floorbeams (LF)	810	0	810	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	2453	1308	1145	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2453	2452	1	0	0	

Superstructure Items: Unit 2 Span 5	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	835	304	404	128	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	668	453	167	48	0	
c18 Floorbeams (LF)	748	0	748	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	2251	510	1560	182	0	
c31 Hinges (EA)	5	0	5	0	0	
c32 Fatigue (LF)	2251	2251	0	0	0	

Superstructure Items: Unit 3 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1001	689	312	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	800	0	800	0	0	
c18 Floorbeams (LF)	873	0	863	10	0	
c26 Bearing Devices (EA)	5	3	2	0	0	
c30 Protective Coating System (LF)	2674	671	1975	0	28	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2674	2674	0	0	0	

Superstructure Items: Unit 3 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1691	331	1360	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	1353	0	1353	0	0	
c18 Floorbeams (LF)	1496	0	1484	12	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	4540	586	3932	0	22	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	4540	4540	0	0	0	

Superstructure Items: Unit 3 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	920	561	359	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	736	368	368	0	0	
c18 Floorbeams (LF)	810	0	786	24	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	2466	1352	1050	0	64	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2466	2466	0	0	0	

Superstructure Items: Unit 4 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	920	389	477	54	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	736	80	656	0	0	
c18 Floorbeams (LF)	873	55	738	80	0	
c26 Bearing Devices (EA)	5	4	1	0	0	
c30 Protective Coating System (LF)	2529	1346	1133	50	0	
c31 Hinges (EA)	5	0	5	0	0	
c32 Fatigue (LF)	2529	2529	0	0	0	

Superstructure Items: Unit 4 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	823	587	236	0	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	658	165	494	0	0	
c18 Floorbeams (LF)	748	0	748	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	2229	1983	236	10	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	2229	2229	0	0	0	

Superstructure Items: Unit 4 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	725	397	320	8	0	
c16. Diaphragm/X-Frames (EA)	0	0	0	0	0	
c17 Stringers (LF)	580	108	464	8	0	
c18 Floorbeams (LF)	623	0	623	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	1928	1026	580	314	8	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1928	1928	0	0	0	

Superstructure Items: Unit 5 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1146	607	501	38	0	
c16. Diaphragm/X-Frames (EA)	64	0	46	18	0	
c17 Stringers (LF)	60	0	60	0	0	
c18 Floorbeams (LF)	187	127	0	60	0	
c26 Bearing Devices (EA)	9	9	0	0	0	
c30 Protective Coating System (LF)	1393	562	791	12	28	
c31 Hinges (EA)	5	0	5	0	0	
c32 Fatigue (LF)	1393	1393	0	0	0	

Superstructure Items: Unit 5 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1215	1077	138	0	0	
c16. Diaphragm/X-Frames (EA)	80	0	80	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	9	9	0	0	0	
c30 Protective Coating System (LF)	1215	918	0	297	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1215	1215	0	0	0	

Superstructure Items: Unit 5 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1286	1171	115	0	0	
c16. Diaphragm/X-Frames (EA)	79	16	63	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	8	0	0	0	
c26 Bearing Devices (EA)	10	10	0	0	0	
c30 Protective Coating System (LF)	1294	946	137	0	211	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1294	1294	0	0	0	

Superstructure Items: Unit 5 Span 4	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1348	1243	105	0	0	
c16. Diaphragm/X-Frames (EA)	90	10	80	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	10	10	0	0	0	
c30 Protective Coating System (LF)	1348	1243	103	2	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1348	1348	0	0	0	

Superstructure Items: Unit 5 Span 5	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1250	1090	160	0	0	
c16. Diaphragm/X-Frames (EA)	90	18	72	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	10	10	0	0	0	
c30 Protective Coating System (LF)	1250	1027	223	0	0	
c31 Hinges (EA)	10	9	1	0	0	
c32 Fatigue (LF)	1250	1250	0	0	0	

Superstructure Items: Unit 6 Span 1	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1311	485	704	122	0	
c16. Diaphragm/X-Frames (EA)	96	12	72	12	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	0	0	8	0	
c26 Bearing Devices (EA)	10	10	0	0	0	
c30 Protective Coating System (LF)	1319	590	599	130	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1319	1319	0	0	0	

Superstructure Items: Unit 6 Span 2	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1466	1213	250	3	0	
c16. Diaphragm/X-Frames (EA)	92	0	92	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	0	8	0	0	
c26 Bearing Devices (EA)	10	10	0	0	0	
c30 Protective Coating System (LF)	1474	1203	258	3	10	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1474	1474	0	0	0	

Superstructure Items: Unit 6 Span 3	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1661	1185	477	0	0	
c16. Diaphragm/X-Frames (EA)	122	0	122	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	16	0	16	0	0	
c26 Bearing Devices (EA)	11	11	0	0	0	
c30 Protective Coating System (LF)	1677	1201	477	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1677	1677	0	0	0	

Superstructure Items: Unit 6 Span 4	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1312	903	409	0	0	
c16. Diaphragm/X-Frames (EA)	85	0	85	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	8	8	0	0	0	
c26 Bearing Devices (EA)	11	11	0	0	0	
c30 Protective Coating System (LF)	1320	911	409	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1320	1320	0	0	0	

Superstructure Items: Unit 6 Span 5	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	1122	488	634	0	0	
c16. Diaphragm/X-Frames (EA)	86	0	80	6	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	11	0	11	0	0	
c30 Protective Coating System (LF)	1122	507	373	242	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	1122	1122	0	0	0	

Superstructure Items: Span 24 Ramp C-B	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	499	30	426	43	0	
c16. Diaphragm/X-Frames (EA)	32	32	0	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	8	8	0	0	0	
c30 Protective Coating System (LF)	499	30	327	43	100	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	499	499	0	0	0	

Superstructure Items: Span 25 Ramp C-B	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	492	0	492	0	0	
c16. Diaphragm/X-Frames (EA)	35	0	35	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	492	0	492	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	492	492	0	0	0	

Superstructure Items: Span 26 Ramp C-B	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	499	0	499	0	0	
c16. Diaphragm/X-Frames (EA)	27	0	27	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	499	0	499	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	499	499	0	0	0	

Superstructure Items: Span 27 Ramp C-B	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	589	0	589	0	0	
c16. Diaphragm/X-Frames (EA)	34	0	34	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	5	5	0	0	0	
c30 Protective Coating System (LF)	589	0	597	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	589	589	0	0	0	

Superstructure Items: **Span 28 Ramp C-B**	condition state cr					
	QTY.	1	2	3	4	TR
c14 Alignment (EA)	1	1	0	0	0	
c15.1 Beams/Girders (LF)	480	96	384	0	0	
c16. Diaphragm/X-Frames (EA)	30	0	30	0	0	
c17 Stringers (LF)	0	0	0	0	0	
c18 Floorbeams (LF)	0	0	0	0	0	
c26 Bearing Devices (EA)	10	10	0	0	0	
c30 Protective Coating System (LF)	480	0	480	0	0	
c31 Hinges (EA)	0	0	0	0	0	
c32 Fatigue (LF)	480	480	0	0	0	

2018 Westbound Substructure Pier Items

Substructure Rear Abutment Items	condition state cr					
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	145.73	145.73	0.00	0.00	0.00	
c39. Backwalls (LF)	145.73	145.73	0.00	0.00	0.00	
c40. Wingwalls (EA)	1	1	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	
c43. Slope Protection (EA) d	1	1	0	0	0	

Pier 1L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	125.31	125.31	0.00	0.00	0.00	
c38. Pier Columns (LF)	8	8	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 2L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	117.83	117.83	0.00	0.00	0.00	
c38. Pier Columns (LF)	7	7	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 3L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	108.33	108.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	7	7	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 4L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	99.88	86.88	13.00	0.00	0.00	
c38. Pier Columns (LF)	3	3	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 5L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	82.85	71.85	11.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 6L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	75.13	75.13	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	0	2	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 7L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	75.13	75.13	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	0	2	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 9L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c36. Pier Walls (LF)	25.33	18.33	7.00	0.00	0.00	
c37. Pier Caps (LF)	67	58	9	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 10L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	53.33	14.00	0.00	0.00	
c38. Pier Columns (LF)	2	0	2	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 11L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	61.33	6.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 12L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	0	2	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 13L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 14L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	72.34	72.34	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	1	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 15L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	74.23	71.23	3.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 16L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	78.49	78.49	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 17L Condition State	condition state	cr				
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	82.17	82.17	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	1	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 18L Condition State	condition state	cr				
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	85.70	85.70	0.00	0.00	0.00	
c38. Pier Columns (LF)	3	3	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 19L Condition State	condition state	cr				
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	89.75	89.75	0.00	0.00	0.00	
c38. Pier Columns (LF)	3	2	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Substructure Ramp B-C Abutment Items	condition state	cr				
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	28.08	28.08	0.00	0.00	0.00	
c39. Backwalls (LF)	28.08	28.08	0.00	0.00	0.00	
c40. Wingwalls (EA)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	
c43. Slope Protection (EA) d	1	1	0	0	0	

Pier 20L Condition State	condition state	cr				
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 21L Condition State	condition state	cr				
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	69.58	69.58	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 22L Condition State	condition state	cr				
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	75.27	75.27	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 23L Condition State	condition state	cr				
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	85.71	85.71	0.00	0.00	0.00	
c38. Pier Columns (LF)	3	2	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 24L Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	98.96	98.96	0.00	0.00	0.00	
c38. Pier Columns (LF)	3	3	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Substructure Forward Abutment Items	condition state cr					
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	115.16	97.16	18.00	0.00	0.00	
c39. Backwalls (LF)	115.16	98.16	15.00	2.00	0.00	
c40. Wingwalls (EA)	1	1	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	
c43. Slope Protection (EA) d	1	1	0	0	0	

Substructure Summary	condition state cr					
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	289	271	18	0	0	
c36. Pier Walls (LF)	25.33	18.33	7.00	0.00	0.00	
c37. Pier Caps (LF)	1900.6	1844.6	56.0	0.0	0.0	
c38. Pier Columns/Bents(EA)	65	53	12	0	0	
c39. Backwalls (LF)	289	272	15	2	0	
c40. Wingwalls (EA)	4	4	0	0	0	
c42. Scour (EA) d	26	26	0	0	0	
c43. Slope Protection (EA) d	3	3	0	0	0	

Channel Items	condition state cr					
	QTY.	1	2	3	4	TR
c.51 Alignment	200	200	0	0	0	
c.52 Protection	400	400	0	0	0	
c.53 Hydraulic Opening	60	60	0	0	0	
c.54 Navigation Lights	60	60	0	0	0	

Sign/Utility Items	condition state cr					
	QTY.	1	2	3	4	TR
c.55 Signs	6	6	0	0	0	
c.56 Sign Supports	4	4	0	0	0	
c.57 Utilities	4600	4600	0	0	0	

2018 Eastbound Substructure Pier Items

Substructure Rear Abutment Items	condition state cr					
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	78.25	78.25	0.00	0.00	0.00	
c39. Backwalls (LF)	78.25	78.25	1.00	0.00	0.00	
c40. Wingwalls (EA)	1	1	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	
c43. Slope Protection (EA) d	1	1	0	0	0	

Pier 1R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	73.92	73.92	0.00	0.00	0.00	
c38. Pier Columns (LF)	4	4	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 2R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	72.25	72.25	0.00	0.00	0.00	
c38. Pier Columns (LF)	4	4	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 3R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	70.56	70.56	0.00	0.00	0.00	
c38. Pier Columns (LF)	4	4	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 4R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	69.88	69.88	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	0	2	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 5R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	1	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 6R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	1	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 7R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	60.33	5.00	2.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 8R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 9R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	0	1	1	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 10R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	0	2	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 11R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 12R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	1	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 13R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	1	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 14R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 15R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 16R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 17R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	67.33	67.33	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 18R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	73.30	73.30	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 19R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	75.13	75.13	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 20R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	75.13	75.13	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 21R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	81.56	81.56	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 22R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	96.88	96.88	0.00	0.00	0.00	
c38. Pier Columns (LF)	3	2	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 23R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	75.04	75.04	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 24R Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	88.10	87.10	0.00	1.00	0.00	
c38. Pier Columns (LF)	3	2	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Substructure Forward Abutment Items	condition state cr					
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	104.32	87.32	17.00	0.00	0.00	
c39. Backwalls (LF)	104.32	92.32	11.00	1.00	0.00	
c40. Wingwalls (EA)	1	1	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	
c43. Slope Protection (EA) d	1	1	0	0	0	

Pier 23 C-B Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	34	34	0	0	0	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 24 C-B Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	34	34	0	0	0	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 25 C-B Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	38.65	38.65	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 26 C-B Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	38.65	38.65	0.00	0.00	0.00	
c38. Pier Columns (LF)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Pier 27 C-B Condition State	condition state cr					
	QTY.	1	2	3	4	TR
c37. Pier Caps (LF)	48.22	48.22	0.00	0.00	0.00	
c38. Pier Columns (LF)	3	2	1	0	0	
c42. Scour (EA) d	1	1	0	0	0	

Substructure Ramp C-B Abutment Items	condition state cr					
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	53	46	7	0	0	
c39. Backwalls (LF)	53	27	15	11	0	
c40. Wingwalls (EA)	2	2	0	0	0	
c42. Scour (EA) d	1	1	0	0	0	
c43. Slope Protection (EA) d	1	1	0	0	0	

Substructure Summary	condition state cr					
	QTY.	1	2	3	4	TR
c33. Abutment Walls (LF)	235.6	211.6	23	0	0	
c37. Pier Caps (LF)	1920.58	1912.58	5.00	3.00	0.00	
c38. Pier Columns/Bents(EA)	67	54	12	1	0	
c39. Backwalls (LF)	235.6	197.6	27.0	12.0	0.0	
c40. Wingwalls (EA)	4	4	0	0	0	
c42. Scour (EA) d	32	32	0	0	0	
c43. Slope Protection (EA) d	3	3	0	0	0	

Sign/Utility Items	condition state cr					
	QTY.	1	2	3	4	TR
c.55 Signs	6	5	1	0	0	
c.56 Sign Supports	5	5	0	0	0	
c.57 Utilities	4600	4600	0	0	0	

Westbound Bottom of Deck Condition: 2018

Unit: 1 Span: 1 Bridge: Left Span Length: 52.0

Bridge Member /Bay	Beam 1-A to Beam 1-B		Beam 1-B to Beam 1-C		Beam 1-C to Beam 1-D		Beam 1-D to Beam 1-E		Beam 1-E to Beam 1-EA		Beam 1-EA to Beam 1-EB		Beam 1-EB to Beam 1-EC		Beam 1-EC to Beam 1-ED		Beam 1-ED to Beam 1-F		Beam 1-F to Beam 1-G		Beam 1-G to Beam 1-H		Beam 1-H to Beam 1-J		Beam 1-J to Beam 1-K		Beam 1-K to Beam 1-L		Beam 1-L to Beam 1-M		Beam 1-M to Beam 1-N		Beam 1-N to Beam 1-P	
R.A.	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1			2.5																															
2			2.5																														8	
3																																		
4																																		
Pier 1L																																		
				Total Deck Deterioration:				CS-2	CS-3																											
								13	0																										

Unit: 1 Span: 2 Bridge: Left Span Length: 55.0

Say: 2 % minor transverse cracks throughout = 55.0 x 155.0 x 0.02 = 171 CS2

Bridge Member /Bay	Beam 1-A to Beam 1-C		Beam 1-C to Beam 1-D		Beam 1-D to Beam 1-E		Beam 1-E to Beam 1-EA		Beam 1-EA to Beam 1-EC		Beam 1-EC to Beam 1-ED		Beam 1-ED to Beam 1-F		Beam 1-F to Beam 1-G		Beam 1-G to Beam 1-H		Beam 1-H to Beam 1-J		Beam 1-J to Beam 1-K		Beam 1-K to Beam 1-L		Beam 1-L to Beam 1-M		Beam 1-M to Beam 1-N		Beam 1-N to Beam 1-P	
Pier 1L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																																
2													16		16						8		8		12		8					
3																									8							
4					2																				8							
5					12																											
Pier 2L																																
				Total Deck Deterioration:				CS-2	CS-3																									
								269	0																								

Unit: 1 Span: 3 Bridge: Left Span Length: 60.0

Bridge Member /Bay	Beam 1-A to Beam 1-C		Beam 1-C to Beam 1-D		Beam 1-D to Beam 1-E		Beam 1-E to Beam 1-EA		Beam 1-EA to Beam 1-ED		Beam 1-ED to Beam 1-F		Beam 1-F to Beam 1-G		Beam 1-G to Beam 1-H		Beam 1-H to Beam 1-J		Beam 1-J to Beam 1-K		Beam 1-K to Beam 1-L		Beam 1-L to Beam 1-M		Beam 1-M to Beam 1-N		Beam 1-N to Beam 1-P	
Pier 2L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																														
2																					8		8							
3																			4											
4															8		8				4				4					
5															8															
Pier 3L																														
				Total Deck Deterioration:				CS-2	CS-3																							
								24	0																						

Unit: 1 Span: 4 Bridge: Left Span Length: 58.0

Bridge Member /Bay	Beam 2-A to Stringer 2-1		Stringer 2-1 to Stringer 2-3		Stringer 2-3 to Girder 2-B		Girder 2-B to Girder 2-C		Girder 2-C to Stringer 2-6		Stringer 2-6 to Girder 2-D		Girder 2-D to Stringer 2-7		Stringer 2-7 to Girder 2-E		Girder 2-E to Stringer 2-8		Stringer 2-8 to Girder 2-F		Girder 2-F to Stringer 2-9		Stringer 2-9 to Girder 2-G	
Pier 3L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																					8		8	
2																					8		24	
3																								
4					8																			
5																								
Pier 4L																								

Total Deck Deterioration:	CS-2	CS-3
	56	0

Unit: 2 Span: 1 Bridge: Left Span Length: 107.5

Bridge Member /Bay	Beam 2-A to Stringer 2-1		Stringer 2-1 to Stringer 2-3		Stringer 2-3 to Girder 2-B		Girder 2-B to Girder 2-C		Girder 2-C to Stringer 2-6		Stringer 2-6 to Girder 2-D		Girder 2-D to Stringer 2-7		Stringer 2-7 to Girder 2-E		Girder 2-E to Stringer 2-8		Stringer 2-8 to Girder 2-F		Girder 2-F to Stringer 2-9		Stringer 2-9 to Girder 2-G	
Pier 4L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1							8		8		8													
2	6		10				8		8		8													
3			6		6		8		8		8													
4	6						8		8		8													
5			6		6		8		8		8													
6	6										8													
7			6		6		8		8		8													
8											8													
9			6		6		8		8		8													
10											8													
Pier 5L																								

Total Deck Deterioration:	CS-2	CS-3
	268	0

Unit: 2 Span: 2 Bridge: Left Span Length: 153.5 Deck Width: 77.083

Bridge Member /Bay	Beam 2-A to Stringer 2-5		Stringer 2-5 to Stringer 2-6		Stringer 2-6 to Girder 2-D		Girder 2-D to Stringer 2-7		Stringer 2-7 to Girder 2-E		Girder 2-E to Stringer 2-8		Stringer 2-8 to Girder 2-F		Girder 2-F to Stringer 2-9		Stringer 2-9 to Girder 2-G	
Pier 5L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	12																	
2	12																	
3	12																	
4	20		8		8		8		8		8		8		8		8	
5	12		8															
6	12																	
7	12																	
8	12																	
9																		
10																		
11																		
Pier 6L																		

Total Deck Deterioration:	CS-2	CS-3
	176	0

Unit: 2 Span: 3 Bridge: Left Span Length: 157.5

Bridge Member /Bay	Beam 2-A to Stringer 2-5		Stringer 2-5 to Stringer 2-6		Stringer 2-6 to Girder 2-D		Girder 2-D to Stringer 2-7		Stringer 2-7 to Girder 2-E		Girder 2-E to Stringer 2-8		Stringer 2-8 to Girder 2-F		Girder 2-F to Stringer 2-9		Stringer 2-9 to Girder 2-G	
Pier 6L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	8			48		31.68		48	8		8			96			8	
2	8			48		31.68		48	8		8			96			8	
3	8			48		31.68		48	8		8			96			8	
4	8			48		31.68		48	8		8			96	8		8	
5	8			48		31.68	25	48	33		8		8		8		16	
6	8		8	48	8	31.68	33	48	33		8		8		8		8	
7	8			48		31.68		48	8		8		8		8		16	
8	8			48		31.68		48	8		8		8		8		8	
9	8			48		31.68		48	8		8		8		8		16	
10	8			48		31.68		48	8		8		8				8	
11	8			48		31.68		48	8								8	
12				48		31.68		48									8	
Pier 7L																		

Total Deck Deterioration:	CS-2	CS-3
	596	1916.2

Unit: 2 Span: 4 Bridge: Left Span Length: 180.5

Bridge Member /Bay	Beam 2-A to Stringer 2-5		Stringer 2-5 to Stringer 2-6		Stringer 2-6 to Girder 2-D		Girder 2-D to Stringer 2-7		Stringer 2-7 to Girder 2-E		Girder 2-E to Stringer 2-8		Stringer 2-8 to Girder 2-F		Girder 2-F to Stringer 2-9		Stringer 2-9 to Girder 2-G	
Pier 7L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	16									86.4					8		8	
2	16									86.4					16		8	
3	16									86.4					8		8	
4	16									86.4					8		8	
5	16									86.4					8		8	
6	16									86.4					8		8	
7	16									86.4	8				8		8	
8	16									86.4					8		8	
9	16									86.4					8		8	
10	16									86.4					8		8	
11	16									86.4					8		8	
12	16			96		96				86.4				96	8		8	
13	16			96		96				86.4				96	8		8	
14	16			96		96				86.4				96	8		8	
Pier 9L																		

Total Deck Deterioration:	CS-2	CS-3
	464	2073.6

Unit: 3 Span: 1 Bridge: Left Span Length: 222.0

Bridge Member /Bay	Girder 3-A to Stringer 3-1		Stinger 3-1 to Girder 3-B		Girder 3-B to Stringer 3-2		Stringer 3-2 to Girder 2-C		Girder 3-C to Stringer 3-3		Stinger 3-3 to Girder 3-D		Girder 3-D to Stringer 3-4		Stringer 3-4 to Girder 3-E	
Pier 9L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																
2																
3																
4	10		10		10		10		10		10		10		10	
5																
6							16								10	
7					8		8									
8					8		8									
9	10		10		10		10		10		10		10		10	
10																
11																
12																
13																
14																
15																
16																
Pier 10L																

Total Deck Deterioration:	CS-2	CS-3
	218	0

Unit: 3 Span: 2 Bridge: Left Span Length: 309.0

Bridge Member /Bay	Girder 3-A to Stringer 3-1		Stinger 3-1 to Girder 3-B		Girder 3-B to Stringer 3-2		Stringer 3-2 to Girder 2-C		Girder 3-C to Stringer 3-3		Stinger 3-3 to Girder 3-D		Girder 3-D to Stringer 3-4		Stringer 3-4 to Girder 3-E	
Pier 10L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1								96								
2																
3							8									
4							8									
5	8		8		8		8		8		8		8		8	
6	8						8		8				8		8	
7	8		8				8		8							
8	8						8		8				8			
9	8		8		8		8		8				8		8	
10	8						8		8		8					
11	8		8		8		8		8				8			
12	8						8		8				8		8	
13	8		8				8		8							
14	8						8		8				8			
15	8		8		8		8		8		8		8		8	
16	8						8									
17	8		8				8									
18	8						8									
19	8															
20	8															
21																
22																
Pier 11L																

Total Deck Deterioration:	CS-2	CS-3
	560	96

Unit: 3 Span: 3 Bridge: Left Span Length: 159.0

Bridge Member /Bay	Girder 3-A to Stringer 3-1		Stinger 3-1 to Girder 3-B		Girder 3-B to Stringer 3-2		Stringer 3-2 to Girder 2-C		Girder 3-C to Stringer 3-3		Stinger 3-3 to Girder 3-D		Girder 3-D to Stringer 3-4		Stringer 3-4 to Girder 3-E	
Pier 11L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	16		8		8		8		8		8		8		16	
2	8		8		8		8								8	
3	8												8		8	
4	8														8	
5	8		8										8		8	
6	8														8	
7	8												8		8	
8	8														8	
9	8												8		8	
10	8														8	
11	8		8		8		8						8		8	
12	16		8		8		8						8		16	
Pier 12L																

Total Deck Deterioration:	CS-2	CS-3
	400	0

Unit: 4 Span: 1 Bridge: Left Span Length: 130.0

Bridge Member /Bay	Girder 4-A to Stringer 4-1		Stinger 4-1 to Girder4-B		Girder 4-B to Stringer 4-2		Stringer 4-2 to Girder 4-C		Girder 4-C to Stringer 4-3		Stinger 4-3 to Girder 4-D		Girder 4-D to Stringer 4-4		Stringer 4-4 to Girder 4-E	
Pier 12L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1			2													
2	6															
3	10		15		8				6						8	
4	6		12		8				6		8				8	
5					5		8		3		8					
6	14		5		16				5		8				16	
7	10		10		10		14		7		8		3		16	
8	5				8		24		4		8		6		16	
9	10		10		8		16				8		6		16	
10	5				10		8				10		10		16	
11	2															
12	5		5													
13																
Pier 13L																

Total Deck Deterioration:	CS-2	CS-3
	485	0

Unit: 4 Span: 2 Bridge: Left Span Length: 158.0

Bridge Member /Bay	Girder 4-A to Stringer 4-1		Stringer 4-1 to Stringer 4-3		Stinger 4-3 to Girder4-B		Girder 4-B to Stringer 4-4		Stringer 4-4 to Girder 4-C		Girder 4-C to Stringer 4-5		Stinger 4-5 to Girder 4-D		Girder 4-D to Stringer 4-6		Stringer 4-6 to Girder 4-E	
Pier 13L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	8		8							96	8		8		8		8	
2	8									96	6							
3	8		8														8	
4	8		8		8												8	
5	8		8		8													
6	8		8		8		8		8		8		8		8		8	
7	8				8													
8	8		8				8											
9	8		8		8		8										8	
10	8		8		8													
11	8				8				14									
12								96		96			8		8		8	
Pier 14L																		

Total Deck Deterioration:	CS-2	CS-3
	372	384

Unit: 4 Span: 3 Bridge: Left Span Length: 117.0

Bridge Member /Bay	Girder 4-A to Stringer 4-1		Stringer 4-1 to Stringer 4-3		Stinger 4-3 to Girder4-B		Girder 4-B to Stringer 4-4		Stringer 4-4 to Girder 4-C		Girder 4-C to Stringer 4-5		Stinger 4-5 to Girder 4-D		Girder 4-D to Stringer 4-6		Stringer 4-6 to Girder 4-E	
Pier 14L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	16		8		8		8		8	96	8		8		8		8	
2	16						8			96	8				8		8	
3	16						8				8				8		8	
4	16						8				8							
5	16		8				8				8				8		8	
6	16						8				8						8	
7	16						8		8		8				8		8	
8	16		8								8		8					
9	16														8		8	
10	16																	
11	16		8		8				8						8		8	
12	16																	
Pier 15L																		

Total Deck Deterioration:	CS-2	CS-3
	520	192

Unit: 5 Span: 1 Bridge: Left Span Length: 113.0

Bridge Member /Bay	Girder 5-A to Girder 5-C		Girder 5-C to Girder 5-D		Girder 5-D to Girder 5-E		Girder 5-E to Girder 5-F		Girder 5-F to Girder 5-G		Girder 5-G to Girder 5-H		Girder 5-H to Girder 5-J		Girder 5-J to Girder 5-K		Girder 5-K to Girder 5-L		Girder 5-L to Girder 5-M	
Pier 15L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																				
2																				
3																				
4					24															
5																				
6																				
7							10													
8																				
Pier 16L																				

Total Deck Deterioration:	CS-2	CS-3
	34	0

Unit: 5 Span: 2 Bridge: Left Span Length: 114.0

Bridge Member /Bay	Girder 5-A to Girder 5-C		Girder 5-C to Girder 5-D		Girder 5-D to Girder 5-E		Girder 5-E to Girder 5-F		Girder 5-F to Girder 5-G		Girder 5-G to Girder 5-H		Girder 5-H to Girder 5-J		Girder 5-J to Girder 5-K		Girder 5-K to Girder 5-L		Girder 5-L to Girder 5-M	
Pier 16L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	16		16			84		84		84		84	16		16					
2	16		16		16					84			16		16					
3	16		16		16								16		16					
4	16		16		16		8		8		8		16		16		8		8	
5	16		16			84		84		84		84	16		16					
6	16		16		16								16		16					
7	16		16		16								16		16					
8	16		16			84		84		84		84	16		16					
Pier 17L																				

Total Deck Deterioration:	CS-2	CS-3
	632	1092

Unit: 5 Span: 3 Bridge: Left Span Length: 111.2

Bridge Member /Bay	Girder 5-A to Girder 5-C		Girder 5-C to Girder 5-D		Girder 5-D to Girder 5-E		Girder 5-E to Girder 5-F		Girder 5-F to Girder 5-G		Girder 5-G to Girder 5-H		Girder 5-H to Girder 5-J		Girder 5-J to Girder 5-K		Girder 5-K to Girder 5-L		Girder 5-L to Girder 5-M	
Pier 17L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	8		8		8		8		8		8		8		8		8		8	
2	8		8		8		8		8		8			72	8		8		8	
3			8		8		8		8				8		8		8			
4	8		8		8		16	16			8		8		8		8		8	
5	8		8				24	24	8		8		8		8				8	
6	8				8		16	16	8				8		8		8		8	
7	8		8		8		8		8		8				8				8	
8	8		8		8				8		8		8				8		8	
9	8		8		8		8		8		8		8		8		8		8	
10	8		8		8		8		8		8		8		8		8		8	
Pier 18L																				

Total Deck Deterioration:	CS-2	CS-3
	728	128

Unit: 5 Span: 4 Bridge: Left Span Length: 115.8

Bridge Member /Bay	Girder 5-A to Girder 5-B		Girder 5-B to Girder 5-C		Girder 5-C to Girder 5-D		Girder 5-D to Girder 5-E		Girder 5-E to Girder 5-F		Girder 5-F to Girder 5-G		Girder 5-G to Girder 5-H		Girder 5-H to Girder 5-J		Girder 5-J to Girder 5-K		Girder 5-K to Girder 5-L		Girder 5-L to Girder 5-M	
Pier 18L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	4		8		6													8		8		
2																						
3											8											
4																		4				
5	16		16		16		16		16		16		16		16		16		16			
6													6		8		8					
7																						
8																						
9																						
10																						
Pier 19L																						

Total Deck Deterioration:	CS-2	CS-3
	228	0

Unit: 5 Span: 5 Bridge: Left Span Length: 115.0

Bridge Member /Bay	Girder 5-A to Girder 5-B		Girder 5-B to Girder 5-C		Girder 5-C to Girder 5-D		Girder 5-D to Girder 5-E		Girder 5-E to Girder 5-F		Girder 5-F to Girder 5-G		Girder 5-G to Girder 5-H		Girder 5-H to Girder 5-J		Girder 5-J to Girder 5-K		Girder 5-K to Girder 5-L		Girder 5-L to Girder 5-M	
Pier 19L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1						2			8													
2								4	3		3				8		16		16			
3									8		4				8						8	
4																						
5																						
6									4		4				8							
7			8																			
8																			4			
9																						
Pier 20L																						

Total Deck Deterioration:	CS-2	CS-3
	110	6

Unit: 6 Span: 1 Bridge: Left Span Length: 106.8

Bridge Member /Bay	Girder 6-A to Girder 6-B		Girder 6-B to Girder 6-C		Girder 6-C to Girder 6-D		Girder 6-D to Girder 6-E		Girder 6-E to Girder 6-F		Girder 6-F to Girder 6-G		Girder 6-G to Girder 6-H		Girder 6-H to Girder 6-J		Girder 6-J to Girder 6-N	
Pier 20L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																		
2																		
3	6																	
4																		
5													6					
6																		
7	6										6							
8																		
9																		
Pier 21L																		

Total Deck Deterioration:	CS-2	CS-3
	24	0

Unit: 6 Span: 2 Bridge: Left Span Length: 95.6

Bridge Member /Bay	Girder 6-A to Girder 6-B		Girder 6-B to Girder 6-C		Girder 6-C to Girder 6-D		Girder 6-D to Girder 6-E		Girder 6-E to Girder 6-F		Girder 6-F to Girder 6-G		Girder 6-G to Girder 6-H		Girder 6-H to Girder 6-J		Girder 6-J to Girder 6-N	
Pier 21L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	7																	
2	5												5					
3																		
4																		
5	7		7		7		7		7		7		7		5		5	
6															5			
7			7										10		15			
8	7																	
Pier 22L																		

Total Deck Deterioration:	CS-2	CS-3
	120	0

Unit: 6 Span: 3 Bridge: Left Span Length: 102.7

Bridge Member /Bay	Girder 6-A to Girder 6-B		Girder 6-B to Girder 6-C		Girder 6-C to Girder 6-D		Girder 6-D to Girder 6-E		Girder 6-E to Girder 6-F		Girder 6-F to Girder 6-G		Girder 6-G to Girder 6-H		Girder 6-H to Girder 6-J		Girder 6-J to Girder 6-N	
Pier 22L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																		
2													7		7			
3	14	14									7							
4	7	7	14										14		8		8	
5																		
6		12																
7		12																
8		15	4				4											
Pier 23L																		

Total Deck Deterioration:	CS-2	CS-3
	94	60

Unit: 6 Span: 4 Bridge: Left Span Length: 102.8

Bridge Member /Bay	Girder 6-A to Girder 6-B		Girder 6-B to Girder 6-C		Girder 6-C to Girder 6-D		Girder 6-D to Girder 6-E		Girder 6-E to Girder 6-F		Girder 6-F to Girder 6-G		Girder 6-G to Girder 6-H		Girder 6-H to Girder 6-J		Girder 6-J to Girder 6-K		Girder 6-K to Girder 6-N	
Pier 23L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																				
2	16		16																	
3	16		16		16		16		16		16		16		16		16		16	
4							6													
5							16													
6			8				16													
7							16													
8							16													
Pier 24L																				

Total Deck Deterioration:	CS-2	CS-3
	270	0

Unit: 6 Span: 5 Bridge: Left Span Length: 84.9

Bridge Member /Bay	Girder 6-A to Girder 6-B		Girder 6-B to Girder 6-C		Girder 6-C to Girder 6-D		Girder 6-D to Girder 6-E		Girder 6-E to Girder 6-F		Girder 6-F to Girder 6-G		Girder 6-G to Girder 6-H		Girder 6-H to Girder 6-J		Girder 6-J to Girder 6-K		Girder 6-K to Girder 6-L		Girder 6-L to Girder 6-N	
Pier 24L	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1							16															
2							16															
3	8		8		8		16															
4							16															
5					8		16															
6	8						16															
Pier F.A.																						

Total Deck Deterioration:	CS-2	CS-3
	136	0

Eastbound Bottom of Deck Condition: 2018

Unit: 1 Span: 1 Bridge: Right Span Length: 50.0

Bridge Member/ Bay	Beam 1-Q to Beam 1-R		Beam 1-R to Beam 1-S		Beam 1-S to Beam 1-T		Beam 1-T to Beam 1-U		Beam 1-U to Beam 1-V		Beam 1-V to Beam 1-W		Beam 1-W to Beam 1-X		Beam 1-X to Beam 1-Y	
R.A.	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	6						8		2							
2																
3	7		6								6				8	
4	8		6													
Pier 1R																

Total Deck Deterioration:	CS-2	CS-3
	57	0

Unit: 1 Span: 2 Bridge: Right Span Length: 67.0

Bridge Member/ Bay	Beam 1-Q to Beam 1-R		Beam 1-R to Beam 1-S		Beam 1-S to Beam 1-T		Beam 1-T to Beam 1-U		Beam 1-U to Beam 1-V		Beam 1-V to Beam 1-W		Beam 1-W to Beam 1-X		Beam 1-X to Beam 1-Y	
Pier 1R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																
2													12		16	
3																
4	8															
5																
Pier 2R																

Total Deck Deterioration:	CS-2	CS-3
	36	0

Unit: 1 Span: 3 Bridge: Right Span Length: 67.0

Bridge Member/ Bay	Beam 1-Q to Beam 1-R		Beam 1-R to Beam 1-S		Beam 1-S to Beam 1-T		Beam 1-T to Beam 1-U		Beam 1-U to Beam 1-V		Beam 1-V to Beam 1-W		Beam 1-W to Beam 1-X		Beam 1-X to Beam 1-Y	
Pier 2R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1															12	
2													8		8	
3															8	
4															8	
5																
Pier 3R																

Total Deck Deterioration:	CS-2	CS-3
	44	0

Unit: 1 Span: 4 Bridge: Right Span Length: 68.0

Bridge Member/ Bay	Beam 1-Q to Beam 1-R		Beam 1-R to Beam 1-S		Beam 1-S to Beam 1-T		Beam 1-T to Beam 1-U		Beam 1-U to Beam 1-V		Beam 1-V to Beam 1-W		Beam 1-W to Beam 1-X		Beam 1-X to Beam 1-Y	
Pier 3R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																
2											3					
3																
4																
5																
Pier 4R																

Total Deck Deterioration:	CS-2	CS-3
	3	0

Unit: 2 Span: 1 Bridge: Right Span Length: 131.5

Bridge Member/ Bay	Girder 2-H to Stringer 2-10		Stringer 2-10 to Girder 2-J		Girder 2-J to Stringer 2-11		Stringer 2-11 to Girder 2-K		Girder 2-K to Stringer 2-12		Stringer 2-12 to Girder 2-L		Girder 2-L to Stringer 2-13		Stringer 2-13 to Girder 2-M	
Pier 4R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1						39									2	
2						39									1	
3						39					8				1	
4			16			39	5		5		8				2	
5						39					8				1	
6						39					8				2	
7						39									1	
8						39									1	
9						39									2	
Pier 5R																

Total Deck Deterioration:	CS-2	CS-3
	71	350.67

Unit: 2 Span: 2 Bridge: Right Span Length: 112.5

Bridge Member/ Bay	Girder 2-H to Stringer 2-10		Stringer 2-10 to Girder 2-J		Girder 2-J to Stringer 2-11		Stringer 2-11 to Girder 2-K		Girder 2-K to Stringer 2-12		Stringer 2-12 to Girder 2-L		Girder 2-L to Stringer 2-13		Stringer 2-13 to Girder 2-M	
Pier 5R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1					8		2				2					
2					8				8		3		8		16	
3									8		5					
4									8							
5							8		8							
6																
7																
8	16		16		16		16		16		16		16		16	
9																
10																
11																
Pier 6R																

Total Deck Deterioration:	CS-2	CS-3
	220	0

Unit: 2 Span: 3 Bridge: Right Span Length: 111.5

Bridge Member/ Bay	Girder 2-H to Stringer 2-10		Stringer 2-10 to Girder 2-J		Girder 2-J to Stringer 2-11		Stringer 2-11 to Girder 2-K		Girder 2-K to Stringer 2-12		Stringer 2-12 to Girder 2-L		Girder 2-L to Stringer 2-13		Stringer 2-13 to Girder 2-M	
Pier 6R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																
2																
3																
4																
5																
6																
7																
8																
9																
10	16		8				8									
11																
Pier 7R																

Total Deck Deterioration:	CS-2	CS-3
	32	0

Unit: 2 Span: 4 Bridge: Right Span Length: 150.5

Bridge Member/ Bay	Girder 2-H to Stringer 2-10		Stringer 2-10 to Girder 2-J		Girder 2-J to Stringer 2-11		Stringer 2-11 to Girder 2-K		Girder 2-K to Stringer 2-12		Stringer 2-12 to Girder 2-L		Girder 2-L to Stringer 2-13		Stringer 2-13 to Girder 2-M	
Pier 7R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	8		8						2	25.9	51.9					10.4
2			8						2	25.9	51.9					10.4
3	8		8						2	25.9	51.9					10.4
4									2	25.9	51.9					10.4
5	8		8						2	25.9	51.9					10.4
6									2	25.9	51.9					10.4
7			8						2	25.9	51.9					10.4
8	16		16		16		16		18	25.9	51.9		16		16	10.4
9			8						2	25.9	51.9					10.4
10	8								2	25.9	51.9					10.4
11			8		6				2	25.9	51.9					10.4
12	8								2	25.9	51.9					10.4
13			8						2	25.9	51.9					10.4
14			8						2	25.9	51.9					10.4
Pier 8R																

Total Deck Deterioration:	CS-2	CS-3
	984	509

Unit: 2 Span: 5 Bridge: Right Span Length: 167.0

Bridge Member/ Bay	Girder 2-H to Stringer 2-10		Stringer 2-10 to Girder 2-J		Girder 2-J to Stringer 2-11		Stringer 2-11 to Girder 2-K		Girder 2-K to Stringer 2-12		Stringer 2-12 to Girder 2-L		Girder 2-L to Stringer 2-13		Stringer 2-13 to Girder 2-M	
Pier 8R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																
2																
3																
4																
5	4															
6																
7																
8																
9																
10																
11																
12																
Pier 9R																

Total Deck Deterioration:	CS-2	CS-3	CS-4
	4	0	1

Unit: 3 Span: 1 Bridge: Right Span Length: 142.0

Bridge Member/ Bay	Girder 3-F to Stringer 3-5		Stinger 3-5 to Girder 3-G		Girder 3-G to Stringer 3-6		Stringer 3-6 to Girder 3-H		Girder 3-H to Stringer 3-7		Stinger 3-7 to Girder 3-J		Girder 3-J to Stringer 3-8		Stringer 3-8 to Girder 3-K	
Pier 9R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	96		96													
2	8														7	
3	24															
4	16		8										12			
5	16		1				16				5				15	
6	8		8		8		16				8				15	
7	16		16		16		16				10		12		15	
8	16				24		16		10		12		20		14	
9	16				16		8		10		10		15		10	
10	16		16						10		10		10		15	
11	12		12		12		12		12		12		12		12	
12	12		12		12		12		12		12		12		12	
13	12		12		12		12		12		12		12		12	
14	12		12		12		12		12		12		12		12	
15	12		12		12		12		12		12		12		12	
16	12		12		12		12		12		12		12		12	
Pier 10R																

Total Deck Deterioration:	CS-2	CS-3	CS-4
	1334	0	1

Unit: 3 Span: 2 Bridge: Right Span Length: 282.0

Bridge Member/ Bay	Girder 3-F to Stringer 3-5		Stinger 3-5 to Girder 3-G		Girder 3-G to Stringer 3-6		Stringer 3-6 to Girder 3-H		Girder 3-H to Stringer 3-7		Stinger 3-7 to Girder 3-J		Girder 3-J to Stringer 3-8		Stringer 3-8 to Girder 3-K	
Pier 10R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1															16	
2	8				8										24	
3															24	
4															24	
5															24	
6	8	8			8										24	
7															24	
8							8		8		16		8		24	
9											2				24	
10	8	8			8										24	
11															24	
12									8				8		16	
13																
14	8				8											
15																
16									8				8			
17																
18																
19									8							
20																
21																
22																
23																
24																
25																
Pier 11R																

Total Deck Deterioration:	CS-2	CS-3	CS-4
	418	16	1

Unit: 3 Span: 3 Bridge: Right Span Length: 143.0

Bridge Member/ Bay	Girder 3-F to Stringer 3-5		Stinger 3-5 to Girder 3-G		Girder 3-G to Stringer 3-6		Stringer 3-6 to Girder 3-H		Girder 3-H to Stringer 3-7		Stinger 3-7 to Girder 3-J		Girder 3-J to Stringer 3-8		Stringer 3-8 to Girder 3-K	
Pier 11R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																
2					8		8		8		8		8		8	
3																
4					8		8		8		8		8		8	
5													8			
6					8				8				8		8	
7													8			
8					8		8		8				8			
9													8			
10					8		8		8				8			
11																
12					8		8		8				8			
13																
Pier 12R																

Total Deck Deterioration:	CS-2	CS-3
	248	0

Unit: 4 Span: 1 Bridge: Right Span Length: 155

Bridge Member/ Bay	Girder 4-F to Stringer 4-7		Stinger 4-7 to Girder 4-G		Girder 4-G to Stringer 4-8		Stringer 4-8 to Girder 4-H		Girder 4-H to Stringer 4-9		Stinger 4-9 to Girder 4-J		Girder 4-J to Stringer 4-10		Stringer 4-10 to Girder 4-K	
Pier 12R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																
2																
3															8	
4																
5															16	
6															24	
7															8	
8															8	
9															8	
10																
11	10		10		10		10		10		10		10		10	
12																
13																
14																
Pier 13R																

Total Deck Deterioration:	CS-2	CS-3
	152	0

Unit: 4 Span: 2 Bridge: Right Span Length: 167.0

Bridge Member/ Bay	Girder 4-F to Stringer 4-7		Stinger 4-7 to Girder 4-G		Girder 4-G to Stringer 4-8		Stringer 4-8 to Girder 4-H		Girder 4-H to Stringer 4-9		Stinger 4-9 to Girder 4-J		Girder 4-J to Stringer 4-10		Stringer 4-10 to Girder 4-K	
Pier 13R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	8														16	
2	8														16	
3	8														16	
4	8														16	
5	8														16	
6	8														16	
7	16		8		8		8		8		16		8		16	
8	16										8				16	
9	16		8		8		8		8		8		8		16	
10	16														16	
11	16		8		8		8		8		16		8		16	
Pier 14R																

Total Deck Deterioration:	CS-2	CS-3
	472	0

Unit: 4 Span: 3 Bridge: Right Span Length: 112.0

Bridge Member/ Bay	Girder 4-F to Stringer 4-7		Stinger 4-7 to Girder 4-G		Girder 4-G to Stringer 4-8		Stringer 4-8 to Girder 4-H		Girder 4-H to Stringer 4-9		Stinger 4-9 to Girder 4-J		Girder 4-J to Stringer 4-10		Stringer 4-10 to Girder 4-K	
Pier 14R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1															16	
2															16	
3															16	
4	8		8		8		8		8		8		8		16	
5															16	
6	8						8				8		8		16	
7															16	
8	8		8		8		8		8		8		8		16	
9															16	
10							8				8		8		16	
11															16	
12							8				8		8		16	
13															19	
14															16	
15															16	
16															16	
17															16	
18															16	
Pier 15R																

Total Deck Deterioration:	CS-2	CS-3
	483	0

Unit: 5 Span: 1 Bridge: Right Span Length: 90.0

Bridge Member/ Bay	Girder 5-N to Girder 5-P		Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-X	
Pier 15R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	8		8		8										8		24	
2																	24	
3			8		8										8		24	
4																	24	
5			8		8										8		24	
6																	24	
7			8		8												24	
Pier 16R																		

Total Deck Deterioration:	CS-2	CS-3
	264	0

Unit: 5 Span: 2 Bridge: Right Span Length: 84.0

Bridge Member/ Bay	Girder 5-N to Girder 5-P		Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-X	
Pier 16R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																	96	
2									8								96	
3																		
4									8				8					
5	8		8		8		8		8		8		8		8		8	
6																	96	
7									8								96	
8										80							96	
Pier 17R																		

Total Deck Deterioration:	CS-2	CS-3
	584	80

Unit: 5 Span: 3 Bridge: Right Span Length: 135.2

Bridge Member/ Bay	Girder 5-N to Girder 5-P		Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-X	
Pier 17R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1													8		8			
2											8							
3															8			
4	8				8		8		8		8							
5													8		8			
6	8		8		8						8							
7																		
8	4																	
9																		
10																		
Pier 18R																		

Total Deck Deterioration:	CS-2	CS-3
	124	0

Unit: 5 Span: 4 Bridge: Right Span Length: 134.8

Bridge Member/ Bay	Girder 5-N to Girder 5-P		Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-X	
Pier 18R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1			8						8				8				8	
2			8										8					
3			8						8				8				8	
4			8										8				8	
5			8										8					
6	8		8		8		8		8		8		8		8		8	
7			8										8				8	
8			8		8								8		8			
9			8														8	
10	8		8		8		8		8		8		8		8		8	
11																		
Pier 19R																		

Total Deck Deterioration:	CS-2	CS-3
	336	0

Unit: 5 Span: 5 Bridge: Right Span Length: 125.0

Bridge Member/ Bay	Girder 5-N to Girder 5-P		Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-X	
Pier 19R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																	16	
2																	16	
3			8		8				8						8		24	
4																	16	
5			8						8						8		24	
6																	16	
7																	24	
8																	16	
9																	24	
Pier 20R																		

Total Deck Deterioration:	CS-2	CS-3
	232	0

Unit: 6 Span: 1 Bridge: Right Span Length: 92.8

Bridge Member/ Bay	Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-ZB		Girder 6-ZB to Girder 6-ZC		Girder 6-ZC to Girder 6-ZD	
Pier 20R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1	1		1		1		1		1		1		1		1		1		1	
2	1		1		1		1		1		1		1		1		1		1	
3	1		1		1		1		1		1		1		1		1		1	
4	1		1		1		1		1		1		1		1		1		1	
5	1		1		1		1		1		1		1		1		1		1	
6	1		1		1		1		1		1		1		1		1		1	
7	1		1		1		1		1		1		1		1		1		1	
8	1		1		1		1		1		1		1		1		1		1	
9	1		1		1		1		1		1		1		1		1		1	
Pier 21R																				

Total Deck Deterioration:	CS-2	CS-3
	90	0

Unit: 6 Span: 2 Bridge: Right Span Length: 117.6

Bridge Member/ Bay	Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-ZB		Girder 6-ZB to Girder 6-ZC		Girder 6-ZC to Girder 6-ZD	
Pier 21R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																			8	
2																			8	
3																			8	
4																			8	
5	9		9		9		9		9		9		9		9		9		8	
6																			8	
7																			8	
8																			8	
9																			8	
Pier 22R																				

Total Deck Deterioration:	CS-2	CS-3
	153	0

Unit: 6 Span: 3 Bridge: Right Span Length: 84.7

Bridge Member/ Bay	Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-ZA		Girder 6-ZA to Girder 6-ZB		Girder 6-ZB to Girder 6-ZC		Girder 6-ZC to Girder 6-ZD	
Pier 22R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1									3													
2																						
3	3																					
4	9		9		9		9		48		9		9		4		9		9		9	
5																						
6															3						24	
7			3																			
8																						
Pier 23R																						

Total Deck Deterioration:	CS-2	CS-3
	169	0

Unit: 6 Span: 4 Bridge: Right Span Length: 94.8

Bridge Member/ Bay	Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-X		Girder 6-X to Girder 6-Y	
Pier 23R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1											8		16				16	
2											8		16				16	
3	16		16		16		16		8		8		16		16		24	
4									8		8		16		48		16	
5			8						8		8			90	96		16	
6						38.64			8		8			90			24	
7			8			35.64					8			90			16	
8						35.64					8			90			24	
Pier 24R																		

Total Deck Deterioration:	CS-2	CS-3
	552	469.92

Unit: 6 Span: 5 Bridge: Right Span Length: 84.9

Bridge Member/ Bay	Girder 5-P to Girder 5-Q		Girder 5-Q to Girder 5-R		Girder 5-R to Girder 5-S		Girder 5-S to Girder 5-T		Girder 5-T to Girder 5-U		Girder 5-U to Girder 5-V		Girder 5-V to Girder 5-W		Girder 5-W to Girder 5-X		Girder 6-X to Girder 6-Y		Girder 6-Y to Girder 6-Z	
Pier 24R	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1																				
2																				
3																				
4																			8	
5																			8	
6																			24	
Pier F.A.																				

Total Deck Deterioration:	CS-2	CS-3
	40	0

Unit: Ramp C-B Span: 1 Bridge: Right Span Length: 99.5

Bridge Member/ Bay	Girder 6-ZA to Girder 6-ZB		Girder 6-ZB to Girder 6-ZC		Girder 6-ZC to Girder 6-ZD	
Pier 23C-B	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1						
2						
3						
4					3	
5						
Pier 24C-B						
	Total Deck Deterioration:				CS-2	CS-3
					3	0

Unit: Ramp C-B Span: 2 Bridge: Right Span Length: 105

Bridge Member/ Bay	Girder 6-ZA to Girder 6-ZB		Girder 6-ZB to Girder 6-ZC		Girder 6-ZC to Girder 6-ZD	
Pier 24C-B	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1					8	
2						
3					16	
4						
5						
Pier 25C-B						
	Total Deck Deterioration:				CS-2	CS-3
					24	0

Unit: Ramp C-B Span: 3 Bridge: Right Span Length: 112

Bridge Member/ Bay	Girder 6-ZA to Girder 6-ZB		Girder 6-ZB to Girder 6-ZC		Girder 6-ZC to Girder 6-ZD	
Pier 25C-B	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1					8	
2						
3			8			
4	8					
5	8					
Pier 26C-B						
	Total Deck Deterioration:				CS-2	CS-3
					32	0

Unit: Ramp C-B Span: 4 Bridge: Right Span Length: 110

Bridge Member/ Bay	Girder 6-ZA to Girder 6-ZB		Girder 6-ZB to Girder 6-ZC		Girder 6-ZC to Girder 6-ZD	
Pier 26C-B	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1			8		6	
2			6			
3						
4						
5			4			
Pier 27C-B						
	Total Deck Deterioration:				CS-2	CS-3
					24	0

Unit: Ramp C-B Span: 5 Bridge: Right Span Length: 88.5

Bridge Member/ Bay	Girder 6-ZA to Girder 6-ZB		Girder 6-ZB to Girder 6-ZC		Girder 6-ZC to Girder 6-ZD	
Pier 27C-B	CS-2	CS-3	CS-2	CS-3	CS-2	CS-3
1			4		8	
2						
3					8	
4					9	
5					8	
F.A. C-B						
	Total Deck Deterioration:				CS-2	CS-3
					37	0

Steel Deficiencies : Steel assumed CS-1 unless noted otherwise

Unit: 1 Span 1 Bridge: Left Span Length: 53 ft.

Bridge Member/Bay	Beam 1-A (Linear Foot)			Beam 1-B (Linear Foot)			Beam 1-C (Linear Foot)			Beam 1-D (Linear Foot)			Beam 1-E (Linear Foot)			Beam 1-EA (Linear Foot)			Beam 1-EB (Linear Foot)			Beam 1-EC (Linear Foot)			Beam 1-ED (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
R.A.																											
1	2			1			3	1		1			10						1			1					
2	2			1			2	1		1			10			1						1			1		
3	2			1			2	1		1			1	1		1						1					
4	1			1			2			1						1						1			1		
Pier 1L																											
Total	7	0	0	4	0	0	9	3	0	4	0	0	21	1	0	3	0	0	1	0	0	4	0	0	2	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	862	90	7	0
X-Frames Totals:	0	68	0	0

Span Quantity

Beam/ Girder (LF): 959 ft.

X-Frames (Ea.): 68 Each

Unit: 1 Span 2 Bridge: Left Span Length: 67 ft.

Bridge Member/Bay	Beam 1-A (Linear Foot)			Beam 1-C (Linear Foot)			Beam 1-D (Linear Foot)			Beam 1-E (Linear Foot)			Beam 1-EA (Linear Foot)			Beam 1-EC (Linear Foot)			Beam 1-ED (Linear Foot)			Beam 1-F (Linear Foot)			Beam 1-G (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 1L																											
1	5						4			4			5			2											
2																											
3																											
4																											
5																											
Pier 2L																											
Total	5	0	0	0	0	0	4	0	0	4	0	0	5	0	0	2	0	0	0	0	0	0	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1070	78	0	0
Floorbeam Total:	0	16	0	0
X-Frames Totals:	0	78	0	0

Span Quantity

Beam/ Girder (LF): 1148 ft.

Floorbeam (LF): 16 ft.

X-Frames (Ea.): 78 Each

Unit: 1 Span 3 Bridge: Left Span Length: 67 ft.

Bridge Member/Bay	Beam 1-A (Linear Foot)			Beam 1-C (Linear Foot)			Beam 1-D (Linear Foot)			Beam 1-E (Linear Foot)			Beam 1-EA (Linear Foot)			Beam 1-ED (Linear Foot)			Beam 1-F (Linear Foot)			Beam 1-G (Linear Foot)			Beam 1-H (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 2L																											
1				5			3			13.4			5			5			5			4			9		
2										13.4																	
3										13.4																	
4										13.4																	
5				5						13.4			5			6			4						9		
Pier 3L																											
Total	0	0	0	10	0	0	3	0	0	67	0	0	10	0	0	11	0	0	9	0	0	4	0	0	18	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	904	160	0	0
Floorbeam Total:	0	8	0	0
X-Frames Totals:	0	73	0	0

Span Quantity

Beam/ Girder (LF): 1064 ft.
Floorbeam (LF): 8 ft.
X-Frames (Ea.): 73 Each

Unit: 1 Span 4 Bridge: Left Span Length: 53 ft.

Bridge Member/Bay	Beam 1-A (Linear Foot)			Beam 1-C (Linear Foot)			Beam 1-D (Linear Foot)			Beam 1-E (Linear Foot)			Beam 1-EA (Linear Foot)			Beam 1-ED (Linear Foot)			Beam 1-F (Linear Foot)			Beam 1-G (Linear Foot)			Beam 1-H (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 3L																											
1	5			18									11			16			3			17			4		
2																											
3																											
4																											
5		5			5			5			5			5			5			5			5			5	
Expansion 1																											
Total	5	5	0	18	5	0	0	5	0	0	5	0	11	5	0	16	5	0	3	5	0	17	5	0	4	5	0

	CS-1	CS-2	CS-2	CS-2
Beam/Girder Total:	545	74	75	0
Floorbeam Total:	0	101	0	0
X-Frames Totals:	0	54	0	0

Span Quantity

Beam/ Girder (LF): 694 ft.
Floorbeam (LF): 101 ft.
X-Frames (Ea.): 54 Each

Unit: 1 Span 1 Bridge: Left Span Length: 53 ft.

Beam 1-F (Linear Foot)			Beam 1-G (Linear Foot)			Beam 1-H (Linear Foot)			Beam 1-J (Linear Foot)			Beam 1-K (Linear Foot)			Beam 1-L (Linear Foot)			Beam 1-M (Linear Foot)			Beam 1-N (Linear Foot)			Beam 1-P (Linear Foot)			Diaphragms/ X-Frames (Each)		
Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
1															4			4									17		
1	1		3						6						4									2			17		
1	1					2						4															17		
1	1														2												17		
4	3	0	3	0	0	2	0	0	6	0	0	4	0	0	10	0	0	4	0	0	0	0	0	2	0	0	68	0	0

Unit: 1 Span 2 Bridge: Left Span Length: 67 ft.

Beam 1-H (Linear Foot)			Beam 1-J (Linear Foot)			Beam 1-K (Linear Foot)			Beam 1-L (Linear Foot)			Beam 1-M (Linear Foot)			Beam 1-N (Linear Foot)			Beam 1-P (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
			5			8			6			5			5			6			3			15		
																					3			15		
																					3			15		
																					3			15		
						8						5			4			6			4			18		
0	0	0	5	0	0	16	0	0	6	0	0	10	0	0	9	0	0	12	0	0	16	0	0	78	0	0

Unit: 1 Span 3 Bridge: Left Span Length: 67 ft.

Beam 1-J (Linear Foot)			Beam 1-K (Linear Foot)			Beam 1-L (Linear Foot)			Beam 1-M (Linear Foot)			Beam 1-N (Linear Foot)			Beam 1-P (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
4			6			2						4						2			15		
																		2			14		
																		1			14		
																		1			15		
												5			7			2			15		
4	0	0	6	0	0	2	0	0	0	0	0	9	0	0	7	0	0	8	0	0	73	0	0

Unit: 1 Span 4 Bridge: Left Span Length: 53 ft.

Beam 1-J (Linear Foot)			Beam 1-K (Linear Foot)			Beam 1-L (Linear Foot)			Beam 1-M (Linear Foot)			Beam 1-N (Linear Foot)			Beam 1-P (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
																		20			11		
																		20			11		
																		20			11		
																		20			11		
	5			5			5			5			5			5		21			10		
0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	101	0	0	54	0	0

Unit: 1 Span 4 Bridge: Left Span Length: 15 ft.

Bridge Member/Bay	Girder 2-A (Linear Foot)			Stringer 2-1 (Linear Foot)			Stringer 2-3 (Linear Foot)			Girder 2-B (Linear Foot)			Girder 2-C (Linear Foot)			Stringer 2-6 (Linear Foot)			Girder 2-D (Linear Foot)			Stringer 2-7 (Linear Foot)			Girder 2-E (Linear Foot)			Stringer 2-8 (Linear Foot)			Girder 2-F (Linear Foot)			Stringer 2-9 (Linear Foot)			Girder 2-G (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 1																																									
1		5						5			5			5			5			5			5			5			5			5			5			5		
2																																									
Pier 4L																																									
Total	0	5	0	0	0	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	136	0	60	0
Stringer Total:	65	0	25	0
Floorbeam Total:	96	0	5	0

Span Quantity

Beam/ Girder (LF): 196 ft.
Stringer (LF): 90 ft.
Floorbeam (LF): 101 ft.

Unit: 2 Span 1 Bridge: Left Span Length: 131.5 ft.

Bridge Member/Bay	Girder 2-A (Linear Foot)			Stringer 2-1 (Linear Foot)			Stringer 2-3 (Linear Foot)			Girder 2-B (Linear Foot)			Girder 2-C (Linear Foot)			Stringer 2-6 (Linear Foot)			Girder 2-D (Linear Foot)			Stringer 2-7 (Linear Foot)			Girder 2-E (Linear Foot)			Stringer 2-8 (Linear Foot)			Girder 2-F (Linear Foot)			Stringer 2-9 (Linear Foot)			Girder 2-G (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 4L																																									
1	4									5			6.2						3.5						4.3						4.9						4.1					
2	4									5			6.2						3.5						4.3						4.9						4.1					
3	4									5			6.2						3.5						4.3						4.9						4.1					
4	4									5			6.2						3.5						4.3						4.9						4.1					
5	4									5			6.2						3.5						4.3						4.9						4.1					
6	4									5			6.2						3.5						4.3						4.9						4.1					
7	4									5			6.2						3.5						4.3						4.9						4.1					
8	4									5			6.2						3.5						4.3						4.9						4.1					
9	4									5			6.2						3.5						4.3						4.9						4.1					
10	5									5			6.2						3.5						4.3						4.9						4.1					
Pier 5L																																									
Total	41	0	0	0	0	0	0	0	0	50	0	0	62	0	0	0	0	0	35	0	0	0	0	0	43	0	0	0	0	0	49	0	0	0	0	0	41	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	601	321	0	0
Stringer Total:	380	380	0	0
Floorbeam Total:	0	711	0	0

Span Quantity

Beam/ Girder (LF): 922 ft.
Stringer (LF): 760 ft.
Floorbeam (LF): 711 ft.

Unit: 2 Span 2 Bridge: Left Span Length: 180.5 ft.

Bridge Member/Bay	Girder 2-A (Linear Foot)			Stringer 2-5 (Linear Foot)			Stringer 2-6 (Linear Foot)			Girder 2-D (Linear Foot)			Stringer 2-7 (Linear Foot)			Girder 2-E (Linear Foot)			Stringer 2-8 (Linear Foot)			Girder 2-F (Linear Foot)			Stringer 2-9 (Linear Foot)			Girder 2-G (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 5L																																				
1	4.9									1.5455						6.6364						7.3636						5.8182					
2	4.9									1.5455						6.6364						7.3636						5.8182					
3	4.9									1.5455						6.6364						7.3636						5.8182					
4	4.9									1.5455						6.6364						7.3636						5.8182					
5	4.9									1.5455						6.6364						7.3636						5.8182					
6	4.9									1.5455						6.6364						7.3636						5.8182					
7	4.9									1.5455						6.6364						7.3636						5.8182					
8	4.9									1.5455						6.6364						7.3636						5.8182					
9	4.9									1.5455						6.6364						7.3636						5.8182					
10	4.9									1.5455						6.6364						7.3636						5.8182					
11	4.9									1.5455						6.6364						11.364						5.8182					
Pier 6L																																				
Total	54	0	0	0	0	0	0	0	0	17	0	0	0	0	0	73	0	0	0	0	0	85	0	0	0	0	0	64	0	0	0	0	0			

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	775	293	0	0
Stringer Total:	0	903	0	0
Floorbeam Total:	0	859	0	0

Span Quantity

Beam/ Girder (LF): 1068 ft.
Stringer (LF): 903 ft.
Floorbeam (LF): 859 ft.

Unit: 2 Span 3 Bridge: Left Span Length: 180.5 ft.

Bridge Member/Bay	Girder 2-A (Linear Foot)			Stringer 2-5 (Linear Foot)			Stringer 2-6 (Linear Foot)			Girder 2-D (Linear Foot)			Stringer 2-7 (Linear Foot)			Girder 2-E (Linear Foot)			Stringer 2-8 (Linear Foot)			Girder 2-F (Linear Foot)			Stringer 2-9 (Linear Foot)			Girder 2-G (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 6L																																	
1	4.6667									6						5						4.75						5.25					
2	4.6667									6						5						4.75						5.25					
3	4.6667									6						5						4.75						5.25					
4	4.6667									6						5						4.75						5.25					
5	4.6667									6						5						4.75						5.25					
6	4.6667									6						5						4.75						5.25					
7	4.6667									7.5						5						4.75						5.25					
8	4.6667									7.5						5						4.75						5.25					
9	4.6667									6						5						4.75						5.25					
10	4.6667									6						5						4.75						5.25					
11	4.6667									6						5						4.75						5.25					
12	4.6667									6						5						4.75						5.25					
Pier 7L																																	
Total	56	0	0	0	0	0	0	0	0	75	0	0	0	0	0	60	0	0	0	0	0	57	0	0	0	0	0	63	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	592	311	0	0
Stringer Total:	0	903	0	0
Floorbeam Total:	0	842	0	0

Span Quantity

Beam/ Girder (LF): 903 ft.
Stringer (LF): 903 ft.
Floorbeam (LF): 842 ft.

Unit: 2 Span 4 Bridge: Left Span Length: 180.5 ft.

Bridge Member/Bay	Girder 2-A (Linear Foot)			Stringer 2-5 (Linear Foot)			Stringer 2-6 (Linear Foot)			Girder 2-D (Linear Foot)			Stringer 2-7 (Linear Foot)			Girder 2-E (Linear Foot)			Stringer 2-8 (Linear Foot)			Girder 2-F (Linear Foot)			Stringer 2-9 (Linear Foot)			Girder 2-G (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 7L																																	
1	7.6667									5.4167						8.6667						8.5						2.8333					
2	7.6667									5.4167						8.6667						8.5						2.8333					
3	7.6667									5.4167						8.6667						8.5						2.8333					
4	7.6667									5.4167						8.6667						8.5						2.8333					
5	7.6667									5.4167						8.6667						8.5						2.8333					
6	7.6667									5.4167						8.6667						8.5						2.8333					
7	15.042									15.042						15.042						15.042						15.042					
8	15.042	1								15.042						15.042						15.042						15.042					
9	15.042									15.042						15.042						15.042						15.042					
10	15.042									15.042						15.042						15.042						15.042					
11	15.042									15.042						15.042						15.042						15.042					
12	6.0417	9									20						18						18						15					
Expansion 2																																	
Total	127.25	10	0	0	0	0	0	0	0	107.71	20	0	0	0	0	127.21	18	0	0	0	0	126.21	18	0	0	0	0	92.208	15	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	241.42	580.58	81	0
Stringer Total:	885	0	0	0
Floorbeam Total:	842	0	0	0

Beam/ Girder (LF): 903 ft.
Stringer (LF): 885 ft.
Floorbeam (LF): 842 ft.

Unit: 2 Span 4 Bridge: Left Span Length: 20 ft.

Bridge Member/Bay	Girder 2-A (Linear Foot)			Stringer 2-5 (Linear Foot)			Stringer 2-6 (Linear Foot)			Girder 2-D (Linear Foot)			Stringer 2-7 (Linear Foot)			Girder 2-E (Linear Foot)			Stringer 2-8 (Linear Foot)			Girder 2-F (Linear Foot)			Stringer 2-9 (Linear Foot)			Girder 2-G (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 2																																	
1	10									10						10						10						10					
2	10									5	5					4	6					2	8					6	4			1	
Pier 9L																																	
Total	20	0	0	0	0	0	0	0	0	15	5	0	0	0	0	14	6	0	0	0	0	12	8	0	0	0	0	16	4	0	0	1	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	0	77	23	0
Stringer Total:	98	0	0	0
Floorbeam Total:	0	92	1	0

Span Quantity

Beam/ Girder (LF): 100 ft.

Stringer (LF): 98 ft.

Floorbeam (LF): 93 ft.

Unit: 3 Span 1 Bridge: Left Span Length: 237 ft.

Bridge Member/Bay	Girder 3-A (Linear Foot)			Stringer 3-1 (Linear Foot)			Girder 3-B (Linear Foot)			Stringer 3-2 (Linear Foot)			Girder 2-C (Linear Foot)			Stringer 3-3 (Linear Foot)			Girder 3-D (Linear Foot)			Stringer 3-4 (Linear Foot)			Girder 2-E (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 9L																														
1	9.7763						9.7763						11.85						14.688	2					11.109			58	1	
2	9.7763						9.7763						11.85						14.688						11.109			59		
3	9.7763						9.7763						11.85						14.688						11.109			59		
4	9.7763						9.7763						11.85						14.688						11.109			59		
5	9.7763						9.7763						11.85						14.688						11.109			59		
6	9.7763						9.7763						11.85						14.688						11.109			59		
7	9.7763						9.7763						11.85						14.688						11.109			59		
8	9.7763						9.7763						11.85						14.688						11.109			59		
9	9.7763						9.7763						11.85						14.688						11.109			59		
10	9.7763						9.7763						11.85						14.688						11.109			59		
11	9.7763						9.7763						11.85						14.688						11.109			59		
12	9.7763						9.7763						11.85						14.688						11.109			59		
13	9.7763						9.7763						11.85						14.688						11.109			59		
14	9.7763						9.7763						11.85						14.688						11.109			59		
15	9.7763						9.7763						11.85						14.688						11.109			59		
16	9.7763						9.7763						11.85						14.688						11.109			59		
Pier 10L																														
Total	156.42	0	0	0	0	0	156.42	0	0	0	0	0	189.6	0	0	0	0	0	235	2	0	0	0	0	177.75	0	0	943	1	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	271.81	915.19	2	0
Stringer Total:	0	951	0	0
Floorbeam Total:	0	996	1	0

Span Quantity

Beam/ Girder (LF): 1189 ft.

Stringer (LF): 951 ft.

Floorbeam (LF): 997 ft.

^

|

warped longitutinal stiffener

Unit: 3 Span 2 Bridge: Left Span Length: 330 ft.

Bridge Member/Bay	Girder 3-A (Linear Foot)			Stringer 3-1 (Linear Foot)			Girder 3-B (Linear Foot)			Stringer 3-2 (Linear Foot)			Girder 2-C (Linear Foot)			Stringer 3-3 (Linear Foot)			Girder 3-D (Linear Foot)			Stringer 3-4 (Linear Foot)			Girder 2-E (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 10L																														
1	4.3182						7						7.2727						12						15					
2	4.3182						7						7.2727						12						15					
3	4.3182						7						7.2727						12						15					
4	4.3182						7						7.2727						12						15					
5	4.3182						7						7.2727						12						15					
6	4.3182						7						7.2727						12						15					
7	4.3182						7						7.2727						12						15					
8	4.3182						7						7.2727						12						15					
9	4.3182						7						7.2727						12						15					
10	4.3182						7						7.2727						12						15					
11	4.3182						7						7.2727						12						15					
12	4.3182						7						7.2727						12						15					
13	4.3182						7						7.2727						12						15					
14	4.3182						7						7.2727						12						15					
15	4.3182						7						7.2727						12						15					
16	4.3182						7						7.2727						12						15					
17	4.3182						7						7.2727						12						15					
18	4.3182						7						7.2727						12						15					
19	4.3182						7						7.2727						12						15					
20	4.3182						7						7.2727						12						15					
21	4.3182						7						7.2727						12						15					
22	4.3182						7						7.2727						12						15					
Pier 11L																														
Total	95	0	0	0	0	0	154	0	0	0	0	0	160	0	0	0	0	0	264	0	0	0	0	0	330	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	655	1003	0	0
Stringer Total:	0	1327	0	0
Floorbeam Total:	0	1434	0	0

Span Quantity

Beam/ Girder (LF): 1658 ft.

Stringer (LF): 1327 ft.

Floorbeam (LF): 1434 ft.

Unit: 3 Span 3 Bridge: Left Span Length: 174 ft.

Bridge Member/Bay	Girder 3-A (Linear Foot)			Stringer 3-1 (Linear Foot)			Girder 3-B (Linear Foot)			Stringer 3-2 (Linear Foot)			Girder 2-C (Linear Foot)			Stringer 3-3 (Linear Foot)			Girder 3-D (Linear Foot)			Stringer 3-4 (Linear Foot)			Girder 2-E (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 11L																														
1	7.0833						14.5						14.5						14.5						14.5					
2	7.0833						14.5						14.5						14.5						14.5					
3	7.0833						14.5						14.5						14.5						14.5					
4	7.0833						14.5						14.5						14.5						14.5					
5	7.0833						14.5						14.5						14.5						14.5					
6	7.0833						14.5						14.5						14.5						14.5					
7	7.0833						14.5						14.5						14.5						14.5					
8	7.0833						14.5						14.5						14.5						14.5					
9	7.0833						14.5						14.5						14.5						14.5					
10	7.0833						14.5						14.5						14.5						14.5					
11	7.0833						14.5						14.5						14.5						14.5					
12	7.0833						14.5						10.5	4					14.5						14.5					
Pier 12L																														
Total	85	0	0	0	0	0	174	0	0	0	0	0	170	4	0	0	0	0	174	0	0	0	0	0	174	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	93	777	4	0
Stringer Total:	0	700	0	0
Floorbeam Total:	0	748	0	0

Span Quantity

Beam/ Girder (LF): 874 ft.
Stringer (LF): 700 ft.
Floorbeam (LF): 748 ft.

Unit: 4 Span 1 Bridge: Left Span Length: 20 ft.

Bridge Member/Bay	Girder 4-A (Linear Foot)			Stringer 4-1 (Linear Foot)			Girder 4-B (Linear Foot)			Stringer 4-2 (Linear Foot)			Girder 4-C (Linear Foot)			Stringer 4-3 (Linear Foot)			Girder 4-D (Linear Foot)			Stringer 4-4 (Linear Foot)			Girder 4-E (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 12L																														
1	10						10						10						10						10					
2	2	8					2	8					2	8					10						1	9				
Expansion 3																														
Total	12	8	0	0	0	0	12	8	0	0	0	0	12	8	0	0	0	0	20	0	0	0	0	0	11	9	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	0	67	33	0
Stringer Total:	80	0	0	0
Floorbeam Total:	94	0	0	0

Span Quantity

Beam/ Girder (LF): 100 ft.
Stringer (LF): 80 ft.
Floorbeam (LF): 94 ft.

Unit: 4 Span 1 Bridge: Left Span Length: 178 ft.

Bridge Member/Bay	Girder 4-A (Linear Foot)			Stringer 4-1 (Linear Foot)			Girder 4-B (Linear Foot)			Stringer 4-2 (Linear Foot)			Girder 4-C (Linear Foot)			Stringer 4-3 (Linear Foot)			Girder 4-D (Linear Foot)			Stringer 4-4 (Linear Foot)			Girder 4-E (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 3																														
1	5.2727	8					5.3636	8					8	8					6.7273	6					7.5455	9				
2	5.2727						5.3636						8						6.7273						7.5455					
3	5.2727						5.3636						8						6.7273						7.5455					
4	5.2727						5.3636						8						6.7273						7.5455					
5	5.2727						5.3636						8						6.7273						7.5455					
6	5.2727						5.3636						8						6.7273						7.5455					
7	5.2727						5.3636						8						6.7273						7.5455					
8	5.2727						5.3636						8						6.7273						7.5455					
9	5.2727						5.3636						8						6.7273						7.5455					
10	5.2727						5.3636						8						6.7273						7.5455					
11	5.2727						5.3636						8						6.7273						7.5455					
Pier 13L																														
Total	58	8	0	0	0	0	59	8	0	0	0	0	88	8	0	0	0	0	74	6	0	0	0	0	83	9	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	490	362	39	0
Stringer Total:	0	712	0	0
Floorbeam Total:	0	841	0	0

Span Quantity

Beam/ Girder (LF): 891 ft.

Stringer (LF): 712 ft.

Floorbeam (LF): 841 ft.

Unit: 4 Span 2 Bridge: Left Span Length: 189 ft.

Bridge Member/Bay	Girder 4-A (Linear Foot)			Stringer 4-1 (Linear Foot)			Girder 4-B (Linear Foot)			Stringer 4-4 (Linear Foot)			Girder 4-C (Linear Foot)			Stringer 4-5 (Linear Foot)			Girder 4-D (Linear Foot)			Stringer 4-6 (Linear Foot)			Girder 4-E (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 13L																														
1	6.5	6					5.75						5.25						7.4167	1					10.5					
2	6.5						5.75						5.25						7.4167						10.5					
3	6.5						5.75						5.25						7.4167						10.5					
4	6.5						5.75						5.25						7.4167						10.5					
5	6.5						5.75						5.25						7.4167						10.5					
6	6.5						5.75						5.25						7.4167						10.5					
7	6.5						5.75						5.25						7.4167						10.5					
8	6.5						5.75						5.25						7.4167						10.5					
9	6.5						5.75						5.25						7.4167						10.5					
10	6.5						5.75						5.25						7.4167						10.5					
11	6.5						5.75						5.25						7.4167						10.5					
12	6.5						5.75						5.25						7.4167						10.5					
Pier 14L																														
Total	78	6	0	0	0	0	69	0	0	0	0	0	63	0	0	0	0	0	89	1	0	0	0	0	126	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	527	425	7	0
Stringer Total:	0	775	0	0
Floorbeam Total:	0	965	0	0

Span Quantity

Beam/ Girder (LF): 959 ft.
Stringer (LF): 775 ft.
Floorbeam (LF): 965 ft.

Unit: 4 Span 3 Bridge: Left Span Length: 145 ft.

Bridge Member/Bay	Girder 4-A (Linear Foot)			Stringer 4-1 (Linear Foot)			Stringer 4-3 (Linear Foot)			Girder 4-B (Linear Foot)			Stringer 4-4 (Linear Foot)			Girder 4-C (Linear Foot)			Stringer 4-5 (Linear Foot)			Girder 4-D (Linear Foot)			Stringer 4-6 (Linear Foot)			Girder 4-E (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 14L																														
1	4.0833									3.25						6						5.3333						5.1667					
2	4.0833									3.25						6						5.3333						5.1667					
3	4.0833									3.25						6						5.3333						5.1667					
4	4.0833									3.25						6						5.3333						5.1667					
5	4.0833									3.25						6						5.3333						5.1667					
6	4.0833									3.25						6						5.3333						5.1667					
7	4.0833									3.25						6						5.3333						5.1667					
8	4.0833									3.25						6						5.3333						5.1667					
9	4.0833									3.25						6						5.3333						5.1667					
10	4.0833									3.25						6						5.3333						5.1667					
11	4.0833									3.25						6						5.3333						5.1667					
12	4.0833									3.25						6						5.3333						5.1667					
Pier 15L																														
Total	49	0	0	0	0	0	0	0	0	39	0	0	0	0	0	72	0	0	0	0	0	64	0	0	0	0	0	62	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	439	286	0	0
Stringer Total:	0	725	0	0
Floorbeam Total:	0	683	0	0

Span Quantity

Beam/ Girder (LF): 725 ft.
Stringer (LF): 725 ft.
Floorbeam (LF): 683 ft.

Unit: 5 Span 1 Bridge: Left Span Length: 15 ft.

Bridge Member/Bay	Girder 4-A (Linear Foot)			Stringer 4-1 (Linear Foot)			Stringer 4-3 (Linear Foot)			Girder 4-B (Linear Foot)			Stringer 4-4 (Linear Foot)			Girder 4-C (Linear Foot)			Stringer 4-5 (Linear Foot)			Girder 4-D (Linear Foot)			Stringer 4-6 (Linear Foot)			Girder 4-E (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 15L																																	
1																																	
2	8									6						8						3						3					
Expansion 4																																	
Total	8	0	0	0	0	0	0	0	0	6	0	0	0	0	0	8	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4	**Span Quantity**		
Beam/Girder Total:	127	28	0	0	Beam/ Girder (LF):	155	ft.
Stringer Total:	0	0	75	0	Stringer (LF):	75	ft.
Floorbeam Total:	0	0	208	0	Floorbeam (LF):	208	ft.

Unit: 5 Span 1 Bridge: Left Span Length: 119 ft.

Bridge Member/Bay	Girder 5-A (Linear Foot)			Girder 5-C (Linear Foot)			Girder 5-D (Linear Foot)			Girder 5-E (Linear Foot)			Girder 5-F (Linear Foot)			Girder 5-G (Linear Foot)			Girder 5-H (Linear Foot)			Girder 5-J (Linear Foot)			Girder 5-K (Linear Foot)			Girder 5-L (Linear Foot)			Girder 5-M (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 4																																				
1		6		4.9583			4.9583			4.9583				5			6			6			6		4.9583			4.9583			4.9583					
2	4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583					
3	4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583					
4	4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583					
5	4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583					
6	4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583			4.9583					
Pier 16L																																				
Total	24.792	6	0	29.75	0	0	29.75	0	0	29.75	0	0	24.792	5	0	24.792	6	0	24.792	6	0	24.792	6	0	29.75	0	0	29.75	0	0	29.75	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4	**Span Quantity**		
Beam/Girder Total:	897.54	302.46	29	0	Beam/ Girder (LF):	1229	ft.
X-Frames Totals:	0	0	80	0	X-Frames (Ea.):	80	Each

Unit: 5 Span 2 Bridge: Left Span Length: 135 ft.

Bridge Member/Bay	Girder 5-A (Linear Foot)			Girder 5-C (Linear Foot)			Girder 5-D (Linear Foot)			Girder 5-E (Linear Foot)			Girder 5-F (Linear Foot)			Girder 5-G (Linear Foot)			Girder 5-H (Linear Foot)			Girder 5-J (Linear Foot)			Girder 5-K (Linear Foot)			Girder 5-L (Linear Foot)			Girder 5-M (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 16L																																				
1	1.5			2.25			3.25			2.5			1.375			3.125			2.875			2.125			1.5			2.75			2					
2	1.5			2.25			3.25			2.5			1.375			3.125			2.875			2.125			1.5			2.75			2					
3	1.5			2.25			3.25			2.5			1.375			3.125			2.875			2.125			1.5			2.75			2					
4	1.5			2.25			3.25			2.5			1.375			3.125			2.875			2.125			1.5			2.75			2					
5	1.5			2.25			3.25			2.5			1.375			3.125			2.875			2.125			1.5			2.75			2					
6	1.5			2.25			3.25			2.5			1.375			3.125			2.875			2.125			1.5			2.75			2					
7	1.5			2.25			3.25			2.5			1.375			3.125			2.875			2.125			1.5			2.75			2					
8	1.5			2.25			3.25			2.5			1.375			3.125			2.875			2.125			1.5			2.75			2					
Pier 17L																																				
Total	12	0	0	18	0	0	26	0	0	20	0	0	11	0	0	25	0	0	23	0	0	17	0	0	12	0	0	22	0	0	16	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4	**Span Quantity**		
Beam/Girder Total:	1283	202	0	0	Beam/ Girder (LF):	1485	ft.
X-Frames Totals:	0	100	0	0	X-Frames (Ea.):	100	Each

Unit: 5 Span 3 Bridge: Left Span Length: 135.2 ft.

Bridge Member/Bay	Girder 5-A (Linear Foot)			Girder 5-C (Linear Foot)			Girder 5-D (Linear Foot)			Girder 5-E (Linear Foot)			Girder 5-F (Linear Foot)			Girder 5-G (Linear Foot)			Girder 5-H (Linear Foot)			Girder 5-J (Linear Foot)			Girder 5-K (Linear Foot)			Girder 5-L (Linear Foot)			Girder 5-M (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 17L																																							
1	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
2	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
3	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
4	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
5	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
6	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
7	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
8	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
9	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
10	13.52			4.5			2.7			1.9			2.6			3.1			1.8			0.8			1.8			1.4			2.2								
Pier 18L																																							
Total	135.2	0	0	45	0	0	27	0	0	19	0	0	26	0	0	31	0	0	18	0	0	8	0	0	18	0	0	14	0	0	22	0	0	0	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1281.8	363.2	0	0
Floorbeam Total:	0	8	0	0
X-Frames Totals:	0	108	0	0

Span Quantity

Beam/ Girder (LF): 1645 ft.

Floorbeam (LF): 8 ft.

X-Frames (Ea.): 108 Each

Unit: 5 Span 4 Bridge: Left Span Length: 134.8 ft.

Bridge Member/Bay	Girder 5-A (Linear Foot)			Girder 5-B (Linear Foot)			Girder 5-C (Linear Foot)			Girder 5-D (Linear Foot)			Girder 5-E (Linear Foot)			Girder 5-F (Linear Foot)			Girder 5-G (Linear Foot)			Girder 5-H (Linear Foot)			Girder 5-J (Linear Foot)			Girder 5-K (Linear Foot)			Girder 5-L (Linear Foot)			Girder 5-M (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 18L																																							
1	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
2	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
3	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
4	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
5	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
6	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
7	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
8	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
9	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
10	2.2			2.5			2.1			1.4			1.6			1.5			1.1			1.4			1.2			1.5			1.9			3.4					
Pier 19L																																							
Total	22	0	0	25	0	0	21	0	0	14	0	0	16	0	0	15	0	0	11	0	0	14	0	0	12	0	0	15	0	0	19	0	0	34	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1400	218	0	0
X-Frames Totals:	0	110	0	0

Span Quantity

Beam/ Girder (LF): 1618 ft.

X-Frames (Ea.): 110 Each

Unit: 5 Span 5 Bridge: Left Span Length: 125 ft.

Bridge Member/Bay	Girder 5-A (Linear Foot)			Girder 5-B (Linear Foot)			Girder 5-C (Linear Foot)			Girder 5-D (Linear Foot)			Girder 5-E (Linear Foot)			Girder 5-F (Linear Foot)			Girder 5-G (Linear Foot)			Girder 5-H (Linear Foot)			Girder 5-J (Linear Foot)			Girder 5-K (Linear Foot)			Girder 5-L (Linear Foot)			Girder 5-M (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 19L																																							
1	3			1.1111			1.3333			0.5556			1			6			1.2222			7			8			2.3333			2.1111			2					
2	3			1.1111			1.3333			0.5556			1						1.2222									2.3333			2.1111			2					
3	3			1.1111			1.3333			0.5556			1						1.2222									2.3333			2.1111			2					
4	3			1.1111			1.3333			0.5556			1						1.2222									2.3333			2.1111			2					
5	3			1.1111			1.3333			0.5556			1						1.2222									2.3333			2.1111			2					
6	3			1.1111			1.3333			0.5556			1						1.2222									2.3333			2.1111			2					
7	3			1.1111			1.3333			0.5556			1						1.2222									2.3333			2.1111			2					
8	3			1.1111			1.3333			0.5556			1						1.2222									2.3333			2.1111			2					
9	3			1.1111			1.3333			0.5556			1						1.2222									2.3333			2.1111			2					
Pier 20L																																							
Total	27	0	0	10	0	0	12	0	0	5	0	0	9	0	0	6	0	0	11	0	0	7	0	0	8	0	0	21	0	0	19	0	0	18	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1347	153	0	0
X-Frames Totals:	0	99	0	0

Span Quantity

Beam/ Girder (LF): 1500 ft.

X-Frames (Ea.): 99 Each

Unit: 6 Span 1 Bridge: Left Span Length: 10 ft.

Bridge Member/Bay	Girder 5-A (Linear Foot)			Girder 5-B (Linear Foot)			Girder 5-C (Linear Foot)			Girder 5-D (Linear Foot)			Girder 5-E (Linear Foot)			Girder 5-F (Linear Foot)			Girder 5-G (Linear Foot)			Girder 5-H (Linear Foot)			Girder 5-J (Linear Foot)			Girder 5-K (Linear Foot)			Girder 5-L (Linear Foot)			Girder 5-M (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 20L																																				
1		5		5				5			5			5			5			5			5			5			5			5		
2		5			5			5			5			5			5			5			5			5			5			5		
Expansion 5																																				
Total	0	10	0	5	5	0	0	10	0	0	10	0	0	10	0	0	10	0	0	10	0	0	10	0	0	10	0	0	10	0	0	10	0	0	10	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	-25	5	115	0

Span Quantity

Beam/ Girder (LF): 95 ft.

Unit: 6 Span 1 Bridge: Left Span Length: 104.8 ft.

Bridge Member/Bay	Girder 6-A (Linear Foot)			Girder 6-B (Linear Foot)			Girder 6-C (Linear Foot)			Girder 6-D (Linear Foot)			Girder 6-E (Linear Foot)			Girder 6-F (Linear Foot)			Girder 6-G (Linear Foot)			Girder 6-H (Linear Foot)			Girder 6-J (Linear Foot)			Girder 6-N (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 5																																				
1	2.4286			4			2.2857			3.2857			1.8571	6		5			1.4286			2.8571	7		1.1429			3								
2	2.4286			4			2.2857			3.2857			1.8571			5			1.4286			2.8571			1.1429			3								
3	2.4286			4			2.2857			3.2857			1.8571			5			1.4286			2.8571			1.1429			3								
4	2.4286			4			2.2857			3.2857			1.8571			5			1.4286			2.8571			1.1429			3								
5	2.4286			4			2.2857			3.2857			1.8571			5			1.4286			2.8571			1.1429			3								
6	2.4286			4			2.2857			3.2857			1.8571			5			1.4286			2.8571			1.1429			3								
7	2.4286			4			2.2857			3.2857			1.8571			5			1.4286			2.8571			1.1429			3								
Pier 21L																																				
Total	17	0	0	28	0	0	16	0	0	23	0	0	13	6	0	35	0	0	10	0	0	20	7	0	8	0	0	21	0	0	0	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	793	191	13	0
Floorbeam Total:	0	8	0	0
X-Frames Totals:	0	77	0	0

Span Quantity

Beam/ Girder (LF): 997 ft.

Floorbeam (LF): 8 ft.

X-Frames (Ea.): 77 Each

Unit: 6 Span 2 Bridge: Left Span Length: 117.6 ft.

Bridge Member/Bay	Girder 6-A (Linear Foot)			Girder 6-B (Linear Foot)			Girder 6-C (Linear Foot)			Girder 6-D (Linear Foot)			Girder 6-E (Linear Foot)			Girder 6-F (Linear Foot)			Girder 6-G (Linear Foot)			Girder 6-H (Linear Foot)			Girder 6-J (Linear Foot)			Girder 6-N (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 21L																																	
1	5			7.3516			2.625			3.625			3			4.625			2.625			2.9406			2.375			2.9406					
2	5			7.3516			2.625			3.625			3			4.625			2.625			2.9406			2.375			2.9406					
3	5			7.3516			2.625			3.625			3			4.625			2.625			2.9406			2.375			2.9406					
4	5			7.3516			2.625			3.625			3			4.625			2.625			2.9406			2.375			2.9406					
5	5			7.3516			2.625			3.625			3			4.625			2.625			2.9406			2.375			2.9406					
6	5			7.3516			2.625			3.625			3			4.625			2.625			2.9406			2.375			2.9406					
7	5			7.3516			2.625			3.625			3			4.625			2.625			2.9406			2.375			2.9406					
8	5			7.3516			2.625			3.625			3			4.625			2.625			2.9406			2.375			2.9406					
Pier 22L																																	
Total	40	0	0	58.813	0	0	21	0	0	29	0	0	24	0	0	37	0	0	21	0	0	23.525	0	0	19	0	0	23.525	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	822.14	296.86	0	0
X-Frames Totals:	0	74	0	0

Span Quantity

Beam/ Girder (LF): 1119 ft.

X-Frames (Ea.): 74 Each

Unit: 6 Span 3 Bridge: Left Span Length: 119.7 ft.

Bridge Member/Bay	Girder 6-A (Linear Foot)			Girder 6-B (Linear Foot)			Girder 6-C (Linear Foot)			Girder 6-D (Linear Foot)			Girder 6-E (Linear Foot)			Girder 6-F (Linear Foot)			Girder 6-G (Linear Foot)			Girder 6-H (Linear Foot)			Girder 6-J (Linear Foot)			Girder 6-N (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 22L																																				
1	3.25			11.969			14.962			11.969			5.875			5.5			4.375			7.5			2.875			5.375								
2	3.25			11.969			14.962			11.969			5.875			5.5			4.375			7.5			2.875			5.375								
3	3.25			11.969			14.962			11.969			5.875			5.5			4.375			7.5			2.875			5.375								
4	3.25			11.969			14.962			11.969			5.875			5.5			4.375			7.5			2.875			5.375								
5	3.25			11.969			14.962			11.969			5.875			5.5			4.375			7.5			2.875			5.375								
6	3.25			11.969			14.962			11.969			5.875			5.5			4.375			7.5			2.875			5.375								
7	3.25			11.969			14.962			11.969			5.875			5.5			4.375			7.5			2.875			5.375								
8	3.25			11.969			14.962			11.969			5.875			5.5			4.375			7.5			2.875			5.375								
Pier 23L																																				
Total	26	0	0	95.754	0	0	119.69	0	0	95.754	0	0	47	0	0	44	0	0	35	0	0	60	0	0	23	0	0	43	0	0	0	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	622.8	589.2	0	0
Floorbeam Total:	0	8	0	0
X-Frames Totals:	0	73	0	0

Span Quantity

Beam/ Girder (LF): 1212 ft.

Floorbeam (LF): 8 ft.

X-Frames (Ea.): 73 Each

Unit: 6 Span 4 Bridge: Left Span Length: 122.8 ft.

Bridge Member/Bay	Girder 6-A (Linear Foot)			Girder 6-B (Linear Foot)			Girder 6-C (Linear Foot)			Girder 6-D (Linear Foot)			Girder 6-E (Linear Foot)			Girder 6-F (Linear Foot)			Girder 6-G (Linear Foot)			Girder 6-H (Linear Foot)			Girder 6-J (Linear Foot)			Girder 6-N (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 23L																																				
1	2.5			4			4.875			4.125			2.375			2.75			1			2.125			2.625			1.5								
2	2.5			4			4.875			4.125			2.375			2.75			1			2.125			2.625			1.5								
3	2.5			4			4.875			4.125			2.375			2.75			1			2.125			2.625			1.5								
4	2.5			4			4.875			4.125			2.375			2.75			1			2.125			2.625			1.5								
5	2.5			4			4.875			4.125			2.375			2.75			1			2.125			2.625			1.5								
6	2.5			4			4.875			4.125			2.375			2.75			1			2.125			2.625			1.5								
7	2.5			4			4.875			4.125			2.375			2.75			1			2.125			2.625			1.5								
8	2.5			4			4.875			4.125			2.375			2.75			1			2.125			2.625			1.5								
Pier 24L																																				
Total	20	0	0	32	0	0	39	0	0	33	0	0	19	0	0	22	0	0	8	0	0	17	0	0	21	0	0	12	0	0	0	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1112	223	0	0
Floorbeam Total:	0	8	0	0
X-Frames Totals:	0	86	0	0

Span Quantity

Beam/ Girder (LF): 1335 ft.
Floorbeam (LF): 8 ft.
X-Frames (Ea.): 86 Each

Unit: 6 Span 5 Bridge: Left Span Length: 96.9 ft.

Bridge Member/Bay	Girder 6-A (Linear Foot)			Girder 6-B (Linear Foot)			Girder 6-C (Linear Foot)			Girder 6-D (Linear Foot)			Girder 6-E (Linear Foot)			Girder 6-F (Linear Foot)			Girder 6-G (Linear Foot)			Girder 6-H (Linear Foot)			Girder 6-J (Linear Foot)			Girder 6-N (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 24L																																				
1	12.113			6			2.3333			1.5			8			2.5			7			1.8333			1.6667			2	12								
2	12.113						2.3333			1.5						2.5						1.8333			1.6667			2								
3	12.113						2.3333			1.5						2.5						1.8333			1.6667			2								
4	12.113						2.3333			1.5						2.5						1.8333			1.6667			2								
5	12.113						2.3333			1.5			14			2.5						1.8333			1.6667			2								
6	12.113						2.3333			1.5			10			2.5			15			1.8333			1.6667			2							1	
F.A.																																				
Total	72.68	0	0	6	0	0	14	0	0	9	0	0	32	0	0	15	0	0	22	0	0	11	0	0	10	0	0	12	12	0	0	0	0	0	1	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	922.32	203.68	12	0
Floorbeam Total:	0	8	0	0
X-Frames Totals:	0	84	1	0

Span Quantity

Beam/ Girder (LF): 1138 ft.
Floorbeam (LF): 8 ft.
X-Frames (Ea.): 85 Each

Steel Deficiencies : Steel assumed CS-1 unless noted otherwise

Unit: 1 Span 1 Bridge: Right Span Length: 53 ft.

Bridge Member/Bay	Beam 1-Q (Linear Foot)			Beam 1-R (Linear Foot)			Beam 1-S (Linear Foot)			Beam 1-T (Linear Foot)			Beam 1-U (Linear Foot)			Beam 1-V (Linear Foot)			Beam 1-W (Linear Foot)			Beam 1-X (Linear Foot)			Beam 1-Y (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
R.A.																														
1	3			5.5			1.25			1.5			3			5.75			3.75	2		4			6.25					
2	3			5.5			1.25			1.5			3			5.75			3.75			4			6.25					
3	3			5.5			1.25			1.5			3			5.75			3.75			4			6.25					
4	3			5.5			1.25			1.5			3			5.75			3.75			4			6.25					
Pier 1R																														
Total	12	0	0	22	0	0	5	0	0	6	0	0	12	0	0	23	0	0	15	2	0	16	0	0	25	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	339	136	2	0
X-Frames Totals:	0	32	0	0

Span Quantity

Beam/ Girder (LF): 477 ft.

X-Frames (Ea.): 32 Each

Unit: 1 Span 2 Bridge: Right Span Length: 67 ft.

Bridge Member/Bay	Beam 1-Q (Linear Foot)			Beam 1-R (Linear Foot)			Beam 1-S (Linear Foot)			Beam 1-T (Linear Foot)			Beam 1-U (Linear Foot)			Beam 1-V (Linear Foot)			Beam 1-W (Linear Foot)			Beam 1-X (Linear Foot)			Beam 1-Y (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 1L																														
1																									3.6					
2																									3.6					
3	1			1			1			1			1			3									3.6					
4																									3.6					
5																									3.6			3		
Pier 2R																														
Total	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	3	0	0	0	0	0	0	0	0	18	0	0	3	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	577	26	0	0
X-Frames Totals:	37	3	0	0

Span Quantity

Beam/ Girder (LF): 603 ft.

X-Frames (Ea.): 40 Each

Unit: 1 Span 3 Bridge: Right Span Length: 67 ft.

Bridge Member/Bay	Beam 1-Q (Linear Foot)			Beam 1-R (Linear Foot)			Beam 1-S (Linear Foot)			Beam 1-T (Linear Foot)			Beam 1-U (Linear Foot)			Beam 1-V (Linear Foot)			Beam 1-W (Linear Foot)			Beam 1-X (Linear Foot)			Beam 1-Y (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 2R																														
1										13.4			4						2.8			2.8			5.2			5		
2										13.4			4						2.8			2.8			5.2					
3										13.4			4						2.8			2.8			5.2					
4										13.4			4						2.8			2.8			5.2					
5										13.4			4						2.8			2.8			5.2			5		
Pier 3R																														
Total	0	0	0	0	0	0	0	0	0	67	0	0	20	0	0	0	0	0	14	0	0	14	0	0	26	0	0	10	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	462	141	0	0
X-Frames Totals:	30	10	0	0

Span Quantity

Beam/ Girder (LF): 603 ft.

X-Frames (Ea.): 40 Each

Unit: 1 Span 4 Bridge: Right Span Length: 53 ft.

Bridge Member/Bay	Beam 1-Q (Linear Foot)			Beam 1-R (Linear Foot)			Beam 1-S (Linear Foot)			Beam 1-T (Linear Foot)			Beam 1-U (Linear Foot)			Beam 1-V (Linear Foot)			Beam 1-W (Linear Foot)			Beam 1-X (Linear Foot)			Beam 1-Y (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 3R																																	
1				2.4			3			1.2						5.2			6			10.6									4		
2				2.4			3			1.2						5.2			6			10.6									4		
3				2.4			3			1.2						5.2			6			10.6									4		
4				2.4			3			1.2						5.2			6			10.6									4		
5				2.4			3			1.2						5.2			6			10.6									4		
Expansion 1																																	
Total	0	0	0	12	0	0	15	0	0	6	0	0	0	0	0	26	0	0	30	0	0	53	0	0	0	0	0	0	0	0	20	0	0

	CS-1	CS-2	CS-2	CS-2
Beam/Girder Total:	288	142	0	0
Floorbeam Total:	65.5	0	0	0
X-Frames Totals:	12	20	0	0

Span Quantity

Beam/ Girder (LF): 430 ft.
Floorbeam (LF): 65.5 ft.
X-Frames (Ea.): 32 Each

Unit: 1 Span 4 Bridge: Right Span Length: 15 ft.

Bridge Member/Bay	Girder 2-H (Linear Foot)			Stringer 2-10 (Linear Foot)			Girder 2-J (Linear Foot)			Stringer 2-11 (Linear Foot)			Girder 2-K (Linear Foot)			Stringer 2-12 (Linear Foot)			Girder 2-L (Linear Foot)			Stringer 2-13 (Linear Foot)			Girder 2-M (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 1																														
1																												32.75		
2																												16.375		
Pier 4R																														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49.125	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	122	0	0	0
Stringer Total:	60	0	0	0
Floorbeam Total:	16.375	49.125	0	0

Span Quantity

Beam/ Girder (LF): 122 ft.
Stringer (LF): 60 ft.
Floorbeam (LF): 65.5 ft.

Unit: 2 Span 1 Bridge: Right Span Length: 131.5 ft.

Bridge Member/Bay	Girder 2-H (Linear Foot)			Stringer 2-10 (Linear Foot)			Girder 2-J (Linear Foot)			Stringer 2-11 (Linear Foot)			Girder 2-K (Linear Foot)			Stringer 2-12 (Linear Foot)			Girder 2-L (Linear Foot)			Stringer 2-13 (Linear Foot)			Girder 2-M (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 4R																														
1							7.5						5						3.2						2.5					
2							7.5						5						3.2						2.5					
3							7.5						5						3.2						2.5					2
4							7.5						5						3.2						2.5					
5							7.5						5						3.2						2.5					
6							7.5						5						3.2						2.5					
7							7.5						5						3.2						2.5					
8							7.5						5						3.2						2.5					
9							7.5						5						3.2						2.5					
10							7.5						5						3.2						2.5					
Pier 5R																														
Total	0	0	0	0	0	0	75	0	0	0	0	0	50	0	0	0	0	0	32	0	0	0	0	0	25	0	0	0	0	2

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	476	182	0	0
Stringer Total:	0	526	0	0
Floorbeam Total:	0	570	0	2

Span Quantity

Beam/ Girder (LF): 658 ft.
Stringer (LF): 526 ft.
Floorbeam (LF): 572 ft.

Unit: 2 Span 2 Bridge: Right Span Length: 131.5 ft.

Bridge Member/Bay	Girder 2-H (Linear Foot)			Stringer 2-10 (Linear Foot)			Girder 2-J (Linear Foot)			Stringer 2-11 (Linear Foot)			Girder 2-K (Linear Foot)			Stringer 2-12 (Linear Foot)			Girder 2-L (Linear Foot)			Stringer 2-13 (Linear Foot)			Girder 2-M (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 5R																														
1	2.5455						8.3636						7.8182						6						3.0909					
2	2.5455						8.3636						7.8182						6						3.0909					
3	2.5455						8.3636						7.8182						6						3.0909					
4	2.5455						8.3636						7.8182						6						3.0909					
5	2.5455						8.3636						7.8182						6						3.0909					
6	2.5455						8.3636						7.8182						6						3.0909					
7	2.5455						8.3636						7.8182						6						3.0909					
8	2.5455						8.3636						7.8182						6						3.0909					
9	2.5455						8.3636						7.8182						6						3.0909					
10	2.5455						8.3636						7.8182						6						3.0909					
11	2.5455						8.3636						7.8182						6						3.0909					
Pier 6R																														
Total	28	0	0	0	0	0	92	0	0	0	0	0	86	0	0	0	0	0	66	0	0	0	0	0	34	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	352	306	0	0
Stringer Total:	0	526	0	0
Floorbeam Total:	0	561	0	0

Span Quantity

Beam/ Girder (LF): 658 ft.
Stringer (LF): 526 ft.
Floorbeam (LF): 561 ft.

Unit: 2 Span 3 Bridge: Right Span Length: 131.5 ft.

Bridge Member/Bay	Girder 2-H (Linear Foot)			Stringer 2-10 (Linear Foot)			Girder 2-J (Linear Foot)			Stringer 2-11 (Linear Foot)			Girder 2-K (Linear Foot)			Stringer 2-12 (Linear Foot)			Girder 2-L (Linear Foot)			Stringer 2-13 (Linear Foot)			Girder 2-M (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 6R																														
1	9.0833						5.6667						6.0833						6.3333						5.5					
2	9.0833						5.6667						6.0833						6.3333						5.5					
3	9.0833						5.6667						6.0833						6.3333						5.5					
4	9.0833						5.6667						6.0833						6.3333						5.5					
5	9.0833						5.6667						6.0833						6.3333						5.5					
6	9.0833						5.6667						6.0833						6.3333						5.5					
7	9.0833						5.6667						6.0833						6.3333						5.5					
8	9.0833						5.6667						6.0833						6.3333						5.5					
9	9.0833						5.6667						6.0833						6.3333						5.5					
10	9.0833						5.6667						6.0833						6.3333						5.5					
11	9.0833						5.6667						6.0833						6.3333						5.5					
12	9.0833						5.6667						6.0833						6.3333						5.5					
Pier 7R																														
Total	109	0	0	0	0	0	68	0	0	0	0	0	73	0	0	0	0	0	76	0	0	0	0	0	66	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	266	392	0	0
Stringer Total:	0	526	0	0
Floorbeam Total:	0	561	0	0

Span Quantity

Beam/ Girder (LF): 658 ft.
Stringer (LF): 526 ft.
Floorbeam (LF): 561 ft.

Unit: 2 Span 4 Bridge: Right Span Length: 182.5 ft.

Bridge Member/Bay	Girder 2-H (Linear Foot)			Stringer 2-10 (Linear Foot)			Girder 2-J (Linear Foot)			Stringer 2-11 (Linear Foot)			Girder 2-K (Linear Foot)			Stringer 2-12 (Linear Foot)			Girder 2-L (Linear Foot)			Stringer 2-13 (Linear Foot)			Girder 2-M (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 7R																														
1	5.3846						3.8462						4.2308						4						8.3077					
2	5.3846						3.8462						4.2308						4						8.3077					
3	5.3846						3.8462						4.2308						4						8.3077					
4	5.3846						3.8462						4.2308						4						8.3077					
5	5.3846						3.8462						4.2308						4						8.3077					
6	5.3846						3.8462						4.2308						4						8.3077					
7	5.3846						3.8462						4.2308						4						8.3077					
8	5.3846						3.8462						4.2308						4						8.3077					
9	5.3846						3.8462						4.2308						4						8.3077					
10	5.3846						3.8462						4.2308						4						8.3077					
11	5.3846						3.8462						4.2308						4						8.3077					
12	5.3846						3.8462						4.2308						4						8.3077					
13	5.3846						3.8462						4.2308						4						8.3077					
Pier 8R																														
Total	70	0	0	0	0	0	50	0	0	0	0	0	55	0	0	0	0	0	52	0	0	0	0	0	108	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	578	335	0	0
Stringer Total:	365	365	0	0
Floorbeam Total:	0	810	0	0

Beam/ Girder (LF): 913 ft.
Stringer (LF): 730 ft.
Floorbeam (LF): 810 ft.

Unit: 2 Span 5 Bridge: Right Span Length: 147 ft.

Bridge Member/Bay	Girder 2-H (Linear Foot)			Stringer 2-10 (Linear Foot)			Girder 2-J (Linear Foot)			Stringer 2-11 (Linear Foot)			Girder 2-K (Linear Foot)			Stringer 2-12 (Linear Foot)			Girder 2-L (Linear Foot)			Stringer 2-13 (Linear Foot)			Girder 2-M (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 8R																														
1	14.7						7.5						7						5.5						6					
2	14.7						7.5						7						5.5						6					
3	14.7						7.5						7						5.5						6					
4	14.7						7.5						7						5.5						6					
5	14.7						7.5						7						5.5						6					
6		14.7					7.5						7						5.5						6					
7		14.7					7.5						7						5.5						6					
8		14.7					7.5						7						5.5						6					
9		14.7					7.5						7						5.5						6					
10		14.7			6		7.5	6			6		7	6			6		5.5	6			6		6	6				
Expansion 2																														
Total	73.5	73.5	0	0	6	0	75	6	0	0	6	0	70	6	0	0	6	0	55	6	0	0	6	0	60	6	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	304	333.5	97.5	0
Stringer Total:	417	147	24	0
Floorbeam Total:	0	658	0	0

Beam/ Girder (LF): 735 ft.
Stringer (LF): 588 ft.
Floorbeam (LF): 658 ft.

Unit: 2 Span 5 Bridge: Right Span Length: 20 ft.

Bridge Member/Bay	Girder 3-F (Linear Foot)			Stringer 3-5 (Linear Foot)			Girder 3-G (Linear Foot)			Stringer 3-6 (Linear Foot)			Girder 2-H (Linear Foot)			Stringer 3-7 (Linear Foot)			Girder 3-J (Linear Foot)			Stringer 3-8 (Linear Foot)			Girder 2-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 2																														
1	7	6			6		7	6			6		7	6			6		7	6			6		7	6				
2	7						7						7						7						7					
Pier 9R																														
Total	14	6	0	0	6	0	14	6	0	0	6	0	14	6	0	0	6	0	14	6	0	0	6	0	14	6	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	0	70	30	0
Stringer Total:	36	20	24	0
Floorbeam Total:	0	90	0	0

Span Quantity

Beam/ Girder (LF): 100 ft.
Stringer (LF): 80 ft.
Floorbeam (LF): 90 ft.

Unit: 3 Span 1 Bridge: Right Span Length: 201 ft.

Bridge Member/Bay	Girder 3-F (Linear Foot)			Stringer 3-5 (Linear Foot)			Girder 3-G (Linear Foot)			Stringer 3-6 (Linear Foot)			Girder 2-H (Linear Foot)			Stringer 3-7 (Linear Foot)			Girder 3-J (Linear Foot)			Stringer 3-8 (Linear Foot)			Girder 2-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 9R																														
1	1.75						2						5.3125						6.5625						3.875					
2	1.75						2						5.3125						6.5625						3.875					
3	1.75						2						5.3125						6.5625						3.875					
4	1.75						2						5.3125						6.5625						3.875					
5	1.75						2						5.3125						6.5625						3.875					
6	1.75						2						5.3125						6.5625						3.875					
7	1.75						2						5.3125						6.5625						3.875					
8	1.75						2						5.3125						6.5625						3.875					
9	1.75						2						5.3125						6.5625						3.875					
10	1.75						2						5.3125						6.5625						3.875					
11	1.75						2						5.3125						6.5625						3.875					
12	1.75						2						5.3125						6.5625						3.875					
13	1.75						2						5.3125						6.5625						3.875					
14	1.75						2						5.3125						6.5625						3.875					
15	1.75						2						5.3125						6.5625						3.875					
16	1.75						2						5.3125						6.5625						3.875				10	
Pier 10R																														
Total	28	0	0	0	0	0	32	0	0	0	0	0	85	0	0	0	0	0	105	0	0	0	0	0	62	0	0	0	10	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	689	312	0	0
Stringer Total:	0	800	0	0
Floorbeam Total:	0	863	10	0

Span Quantity

Beam/ Girder (LF): 1001 ft.
Stringer (LF): 800 ft.
Floorbeam (LF): 873 ft.

Unit: 3 Span 2 Bridge: Right Span Length: 340 ft.

Bridge Member/Bay	Girder 3-F (Linear Foot)			Stringer 3-5 (Linear Foot)			Girder 3-G (Linear Foot)			Stringer 3-6 (Linear Foot)			Girder 2-H (Linear Foot)			Stringer 3-7 (Linear Foot)			Girder 3-J (Linear Foot)			Stringer 3-8 (Linear Foot)			Girder 3-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 10R																														
1	12.364						12.364						12.364						12.364						12.364				12	
2	12.364						12.364						12.364						12.364						12.364					
3	12.364						12.364						12.364						12.364						12.364					
4	12.364						12.364						12.364						12.364						12.364					
5	12.364						12.364						12.364						12.364						12.364					
6	12.364						12.364						12.364						12.364						12.364					
7	12.364						12.364						12.364						12.364						12.364					
8	12.364						12.364						12.364						12.364						12.364					
9	12.364						12.364						12.364						12.364						12.364					
10	12.364						12.364						12.364						12.364						12.364					
11	12.364						12.364						12.364						12.364						12.364					
12	12.364						12.364						12.364						12.364						12.364					
13	12.364						12.364						12.364						12.364						12.364					
14	12.364						12.364						12.364						12.364						12.364					
15	12.364						12.364						12.364						12.364						12.364					
16	12.364						12.364						12.364						12.364						12.364					
17	12.364						12.364						12.364						12.364						12.364					
18	12.364						12.364						12.364						12.364						12.364					
19	12.364						12.364						12.364						12.364						12.364					
20	12.364						12.364						12.364						12.364						12.364					
21	12.364						12.364						12.364						12.364						12.364					
22	12.364						12.364						12.364						12.364						12.364					
Pier 11R																														
Total	272	0	0	0	0	0	272	0	0	0	0	0	272	0	0	0	0	0	272	0	0	0	0	0	272	0	0	0	12	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	331	1360	0	0
Stringer Total:	0	1353	0	0
Floorbeam Total:	0	1484	12	0

Span Quantity

Beam/ Girder (LF): 1691 ft.
Stringer (LF): 1353 ft.
Floorbeam (LF): 1496 ft.

Unit: 3 Span 3 Bridge: Right Span Length: 185 ft.

Bridge Member/Bay	Girder 3-F (Linear Foot)			Stringer 3-5 (Linear Foot)			Girder 3-G (Linear Foot)			Stringer 3-6 (Linear Foot)			Girder 2-H (Linear Foot)			Stringer 3-7 (Linear Foot)			Girder 3-J (Linear Foot)			Stringer 3-8 (Linear Foot)			Girder 2-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 11R																														
1	2.3333						2.8333						3.75						4.8333						7.5				12	
2	2.3333						2.8333						3.75						4.8333						7.5				12	
3	2.3333						2.8333						3.75						4.8333						7.5					
4	2.3333						2.8333						3.75						4.8333						7.5					
5	2.3333						2.8333						3.75						4.8333						7.5					
6	7.3333						2.8333						3.75						4.8333						7.5					
7	12.333						2.8333						3.75						4.8333						7.5					
8	12.333						2.8333						3.75						4.8333						7.5					
9	12.333						2.8333						3.75						4.8333						7.5					
10	12.333						2.8333						3.75						4.8333						17.5					
11	12.333						2.8333						3.75						4.8333						17.5					
12	12.333						8						8						4.8333						17.5					
Pier 12R																														
Total	93	0	0	0	0	0	39.167	0	0	0	0	0	49.25	0	0	0	0	0	58	0	0	0	0	0	120	0	0	0	24	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	560.58	359.42	0	0
Stringer Total:	368	368	0	0
Floorbeam Total:	0	786	24	0

Span Quantity

Beam/ Girder (LF): 920 ft.
Stringer (LF): 736 ft.
Floorbeam (LF): 810 ft.

Unit: 4 Span 1 Bridge: Right Span Length: 20 ft.

Bridge Member/Bay	Girder 3-F (Linear Foot)			Stringer 3-5 (Linear Foot)			Girder 3-G (Linear Foot)			Stringer 3-6 (Linear Foot)			Girder 2-H (Linear Foot)			Stringer 3-7 (Linear Foot)			Girder 3-J (Linear Foot)			Stringer 3-8 (Linear Foot)			Girder 2-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 12R																														
1	4						4						5.5						5						10					
2	4	5					4	5					5.5	5					5	5					5	5			40	
Expansion 3																														
Total	8	5	0	0	0	0	8	5	0	0	0	0	11	5	0	0	0	0	10	5	0	0	0	0	15	5	0	0	40	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	23	52	25	0
Stringer Total:	80	0	0	0
Floorbeam Total:	55	0	40	0

Span Quantity

Beam/ Girder (LF): 100 ft.
Stringer (LF): 80 ft.
Floorbeam (LF): 95 ft.

Unit: 4 Span 1 Bridge: Right Span Length: 164 ft.

Bridge Member/Bay	Girder 4-F (Linear Foot)			Stringer 4-7 (Linear Foot)			Girder 4-G (Linear Foot)			Stringer 4-8 (Linear Foot)			Girder 4-H (Linear Foot)			Stringer 4-9 (Linear Foot)			Girder 4-J (Linear Foot)			Stringer 4-10 (Linear Foot)			Girder 4-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 3																														
1	4.1818	5					3.1818	5					2.7273	5					9.9091	5					9.9091	5			40	
2	4.1818						3.1818						2.7273						14.909						14.909					
3	4.1818						3.1818						2.7273						14.909						14.909					
4	4.1818						3.1818						2.7273						14.909						14.909					
5	4.1818						3.1818						2.7273						14.909						14.909					
6	4.1818						3.1818						2.7273						14.909						14.909					
7	4.1818						3.1818						2.7273						10.909	4					14.909					
8	4.1818						3.1818						2.7273						14.909						14.909					
9	4.1818						3.1818						2.7273						14.909						14.909					
10	4.1818						3.1818						2.7273						14.909						14.909					
11	4.1818						3.1818						2.7273						14.909						14.909					
Pier 13R																														
Total	46	5	0	0	0	0	35	5	0	0	0	0	30	5	0	0	0	0	155	9	0	0	0	0	159	5	0	0	40	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	366	425	29	0
Stringer Total:	0	656	0	0
Floorbeam Total:	0	738	40	0

Span Quantity

Beam/ Girder (LF): 820 ft.
Stringer (LF): 656 ft.
Floorbeam (LF): 778 ft.

Unit: 4 Span 2 Bridge: Right Span Length: 167 ft.

Bridge Member/Bay	Girder 4-F (Linear Foot)			Stringer 4-7 (Linear Foot)			Girder 4-G (Linear Foot)			Stringer 4-8 (Linear Foot)			Girder 4-H (Linear Foot)			Stringer 4-9 (Linear Foot)			Girder 4-J (Linear Foot)			Stringer 4-10 (Linear Foot)			Girder 4-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 13R																														
1	2						2.1667						3.9167						7						4					
2	2						2.1667						3.9167						7						4					
3	2						2.1667						3.9167						7						4					
4	2						2.1667						3.9167						7						4					
5	2						2.1667						3.9167						7						4					
6	2						2.1667						3.9167						7						4					
7	2						2.1667						3.9167						7						4					
8	2						2.1667						3.9167						7						4					
9	2						2.1667						3.9167						7						4					
10	2						2.1667						3.9167						7						4					
11	2						2.1667						3.9167						7						4					
12	2						2.1667						3.9167						8						10					
Pier 14R																														
Total	24	0	0	0	0	0	26	0	0	0	0	0	47	0	0	0	0	0	85	0	0	0	0	0	54	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	587	236	0	0
Stringer Total:	164.5	493.5	0	0
Floorbeam Total:	0	748	0	0

Span Quantity

Beam/ Girder (LF): 823 ft.
Stringer (LF): 658 ft.
Floorbeam (LF): 748 ft.

Unit: 4 Span 3 Bridge: Right Span Length: 145 ft.

Bridge Member/Bay	Girder 4-F (Linear Foot)			Stringer 4-7 (Linear Foot)			Girder 4-G (Linear Foot)			Stringer 4-8 (Linear Foot)			Girder 4-H (Linear Foot)			Stringer 4-9 (Linear Foot)			Girder 4-J (Linear Foot)			Stringer 4-10 (Linear Foot)			Girder 4-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 14R																														
1	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
2	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
3	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
4	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
5	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
6	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
7	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
8	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
9	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
10	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
11	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667			9.6667			12.083					
12	2.75			9.6667			3.1667			9.6667			3			9.6667			5.6667	8		9.6667			12.083					
Pier 15R																														
Total	33	0	0	116	0	0	38	0	0	116	0	0	36	0	0	116	0	0	68	8	0	116	0	0	145	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	397	320	8	0
Stringer Total:	108	464	8	0
Floorbeam Total:	0	623	0	0

Span Quantity

Beam/ Girder (LF): 725 ft.
Stringer (LF): 580 ft.
Floorbeam (LF): 623 ft.

Unit: 5 Span 1 Bridge: Right Span Length: 15 ft.

Bridge Member/Bay	Girder 4-F (Linear Foot)			Stringer 4-7 (Linear Foot)			Girder 4-G (Linear Foot)			Stringer 4-8 (Linear Foot)			Girder 4-H (Linear Foot)			Stringer 4-9 (Linear Foot)			Girder 4-J (Linear Foot)			Stringer 4-10 (Linear Foot)			Girder 4-K (Linear Foot)			Floorbeams (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 15R																														
1																														
2		4					2	8					2	8					2	8					10				60	
Expansion 4																														
Total	0	4	0	0	0	0	2	8	0	0	0	0	2	8	0	0	0	0	2	8	0	0	0	0	10	0	0	0	60	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	84	16	28	0
Stringer Total:	0	60	0	0
Floorbeam Total:	127	0	60	0

Span Quantity

Beam/ Girder (LF): 128 ft.
Stringer (LF): 60 ft.
Floorbeam (LF): 187 ft.

Unit: 5 Span 1 Bridge: Right Span Length: 119 ft.

Bridge Member/Bay	Girder 5-N (Linear Foot)			Girder 5-P (Linear Foot)			Girder 5-Q (Linear Foot)			Girder 5-R (Linear Foot)			Girder 5-S (Linear Foot)			Girder 5-T (Linear Foot)			Girder 5-U (Linear Foot)			Girder 5-V (Linear Foot)			Girder 5-W (Linear Foot)			Girder 5-X (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 4																																
1	31	3		6			9			5			8			7.3333			2	3		17.333			19.833			19.833	4		1	9	
2				6			9			5			8			7.3333						17.333			19.833			19.833			1	9	
3										5						7.3333						17.333			19.833			19.833			11		
4										5						7.3333						17.333			19.833			19.833			11		
5																7.3333						17.333			19.833			19.833			11		
6																7.3333						17.333			19.833			19.833			11		
Pier 16R																																
Total	31	3	0	12	0	0	18	0	0	20	0	0	16	0	0	44	0	0	2	3	0	104	0	0	119	0	0	119	4	0	46	18	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	523	485	10	0
X-Frames Totals:	0	46	18	0

Span Quantity

Beam/ Girder (LF): 1018 ft.

X-Frames (Ea.): 64 Each

Unit: 5 Span 2 Bridge: Right Span Length: 135 ft.

Bridge Member/Bay	Girder 5-N (Linear Foot)			Girder 5-P (Linear Foot)			Girder 5-Q (Linear Foot)			Girder 5-R (Linear Foot)			Girder 5-S (Linear Foot)			Girder 5-T (Linear Foot)			Girder 5-U (Linear Foot)			Girder 5-V (Linear Foot)			Girder 5-W (Linear Foot)			Girder 5-X (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 16R																																
1	3.125			2.25			2			1.625			1.5						2.75			1			2			1					
2	3.125			2.25			2			1.625			1.5						2.75			1			2			1					
3	3.125			2.25			2			1.625			1.5						2.75			1			2			1					
4	3.125			2.25			2			1.625			1.5						2.75			1			2			1					
5	3.125			2.25			2			1.625			1.5						2.75			1			2			1					
6	3.125			2.25			2			1.625			1.5						2.75			1			2			1					
7	3.125			2.25			2			1.625			1.5						2.75			1			2			1					
8	3.125			2.25			2			1.625			1.5						2.75			1			2			1					
Pier 17R																																
Total	25	0	0	18	0	0	16	0	0	13	0	0	12	0	0	0	0	0	22	0	0	8	0	0	16	0	0	8	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1077	138	0	0
X-Frames Totals:	0	80	0	0

Span Quantity

Beam/ Girder (LF): 1215 ft.

X-Frames (Ea.): 80 Each

Unit: 5 Span 3 Bridge: Right Span Length: 135.2 ft.

Bridge Member/Bay	Girder 5-N (Linear Foot)			Girder 5-P (Linear Foot)			Girder 5-Q (Linear Foot)			Girder 5-R (Linear Foot)			Girder 5-S (Linear Foot)			Girder 5-T (Linear Foot)			Girder 5-U (Linear Foot)			Girder 5-V (Linear Foot)			Girder 5-W (Linear Foot)			Girder 5-X (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 17R																																				
1	6			3									7			5									7			5								
2				3									7			5									7			5								
3	6			3																					7			5								
4				3																					7			5								
5				3																					7			6								
6				3																																
7																																				
8																																				
9																																				
10																																				
Pier 18R																																				
Total	12	0	0	18	0	0	0	0	0	0	0	0	14	0	0	10	0	0	0	0	0	0	0	0	35	0	0	26	0	0	0	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1171	115	0	0
Floorbeam Total:	8	0	0	0
X-Frames Totals:	16	63	0	0

Span Quantity

Beam/ Girder (LF): 1286 ft.
Floorbeam (LF): 8 ft.
X-Frames (Ea.): 79 Each

Unit: 5 Span 4 Bridge: Right Span Length: 134.8 ft.

Bridge Member/Bay	Girder 5-N (Linear Foot)			Girder 5-P (Linear Foot)			Girder 5-Q (Linear Foot)			Girder 5-R (Linear Foot)			Girder 5-S (Linear Foot)			Girder 5-T (Linear Foot)			Girder 5-U (Linear Foot)			Girder 5-V (Linear Foot)			Girder 5-W (Linear Foot)			Girder 5-X (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 18R																																	
1	5			4			6			7			3			5			4			7			5			5					
2	4			4			6						3			5			4			7			5								
3							6						3			5																	
4	2																														2		
5																																	
6																																	
7																																	
8																															3		
9																															3		
10																																	
Pier 19R																																	
Total	11	0	0	8	0	0	18	0	0	7	0	0	9	0	0	15	0	0	8	0	0	14	0	0	10	0	0	5	0	0	8	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1243	105	0	0
X-Frames Totals:	10	80	0	0

Span Quantity

Beam/ Girder (LF): 1348 ft.
X-Frames (Ea.): 90 Each

Unit: 5 Span 5 Bridge: Right Span Length: 125 ft.

Bridge Member/Bay	Girder 5-N (Linear Foot)			Girder 5-P (Linear Foot)			Girder 5-Q (Linear Foot)			Girder 5-R (Linear Foot)			Girder 5-S (Linear Foot)			Girder 5-T (Linear Foot)			Girder 5-U (Linear Foot)			Girder 5-V (Linear Foot)			Girder 5-W (Linear Foot)			Girder 5-X (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 19R																																	
1	5			5			3.1111			2.2222			3.3333			2.2222			2.2222			4			3			7					
2				5			3.1111			2.2222			3.3333			2.2222			2.2222			4			3			6					
3							3.1111			2.2222			3.3333			2.2222			2.2222														
4							3.1111			2.2222			3.3333			2.2222			2.2222														
5							3.1111			2.2222			3.3333			2.2222			2.2222														
6							3.1111			2.2222			3.3333			2.2222			2.2222														
7							3.1111			2.2222			3.3333			2.2222			2.2222														
8							3.1111			2.2222			3.3333			2.2222			2.2222														
9							3.1111			2.2222			3.3333			2.2222			2.2222														
Pier 20R																																	
Total	5	0	0	10	0	0	28	0	0	20	0	0	30	0	0	20	0	0	20	0	0	8	0	0	6	0	0	13	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1090	160	0	0
X-Frames Totals:	18	72	0	0

Span Quantity

Beam/ Girder (LF): 1250 ft.

X-Frames (Ea.): 90 Each

Unit: 6 Span 1 Bridge: Right Span Length: 10 ft.

Bridge Member/Bay	Girder 5-N (Linear Foot)			Girder 5-P (Linear Foot)			Girder 5-Q (Linear Foot)			Girder 5-R (Linear Foot)			Girder 5-S (Linear Foot)			Girder 5-T (Linear Foot)			Girder 5-U (Linear Foot)			Girder 5-V (Linear Foot)			Girder 5-W (Linear Foot)			Girder 5-X (Linear Foot)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 20R																														
1																														
2	6	12			6			10			6			6			6			6			6			6				
Expansion 5																														
Total	6	12	0	0	6	0	0	10	0	0	6	0	0	6	0	0	6	0	0	6	0	0	6	0	0	6	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	44	6	64	0

Span Quantity

Beam/ Girder (LF): 114 ft.

Unit: 6 Span 1 Bridge: Right Span Length: 104.8 ft.

Bridge Member/Bay	Girder 6-P (Linear Foot)			Girder 6-Q (Linear Foot)			Girder 6-R (Linear Foot)			Girder 6-S (Linear Foot)			Girder 6-T (Linear Foot)			Girder 6-U (Linear Foot)			Girder 6-V (Linear Foot)			Girder 6-W (Linear Foot)			Girder 6-ZB (Linear Foot)			Girder 6-ZC (Linear Foot)			Girder 6-ZD (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Expansion 5																																						
1	6	6		5	10		14.967	6		5	6		6	6		14.967	6		14.967	6		14.967	6		14.967	6		7.4836			7.4836				8			12	
2				5			14.967			5			6			14.967			14.967			14.967			14.967			7.4836			7.4836						12		
3				5			14.967			5			6			14.967			14.967			14.967			14.967			7.4836			7.4836						12		
4				5			14.967			5						14.967			14.967			14.967			14.967			7.4836			7.4836						12		
5							14.967			5						14.967			14.967			14.967			14.967			7.4836			7.4836						12		
6							14.967									14.967			14.967			14.967			14.967			7.4836			7.4836						12		
7							14.967									14.967			14.967			14.967			14.967			7.4836			7.4836						12		
Pier 21R																																						
Total	6	6	0	20	10	0	104.77	6	0	25	6	0	18	6	0	104.77	6	0	104.77	6	0	104.77	6	0	104.77	6	0	52.385	0	0	52.385	0	0	0	8	0	72	12	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	441.38	697.62	58	0
Floorbeam Total:	0	0	8	0
X-Frames Totals:	12	72	12	0

Span Quantity

Beam/ Girder (LF): 1197 ft.

Floorbeam (LF): 8 ft.

X-Frames (Ea.): 96 Each

Unit: 6 Span 2 Bridge: Right Span Length: 117.6 ft.

Bridge Member/Bay	Girder 6-P (Linear Foot)			Girder 6-Q (Linear Foot)			Girder 6-R (Linear Foot)			Girder 6-S (Linear Foot)			Girder 6-T (Linear Foot)			Girder 6-U (Linear Foot)			Girder 6-V (Linear Foot)			Girder 6-W (Linear Foot)			Girder 6-ZB (Linear Foot)			Girder 6-ZC (Linear Foot)			Girder 6-ZD (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 21R																																							
1	10			4			10			5	1		4			8			5.875			3	1		4.25	1		4.5			6			8					
2	7			4						5			4			8			5.875			3			4.25			4.5			6								
3																8			5.875			3			4.25			4.5			6								
4																8			5.875			3			4.25			4.5											
5																6			5.875			3			4.25			4.5											
6																			5.875			3			4.25			4.5											
7																			5.875			3			4.25			4.5											
8																			5.875			3			4.25			4.5											
Pier 22R																																							
Total	17	0	0	8	0	0	10	0	0	10	1	0	8	0	0	38	0	0	47	0	0	24	1	0	34	1	0	36	0	0	18	0	0	8	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1213	250	3	0
Floorbeam Total:	0	8	0	0
X-Frames Totals:	0	92	0	0

Span Quantity

Beam/ Girder (LF): 1466 ft.
Floorbeam (LF): 8 ft.
X-Frames (Ea.): 92 Each

Unit: 6 Span 3 Bridge: Right Span Length: 119.7 ft.

Bridge Member/Bay	Girder 6-P (Linear Foot)			Girder 6-Q (Linear Foot)			Girder 6-R (Linear Foot)			Girder 6-S (Linear Foot)			Girder 6-T (Linear Foot)			Girder 6-U (Linear Foot)			Girder 6-V (Linear Foot)			Girder 6-W (Linear Foot)			Girder 6-ZA (Linear Foot)			Girder 6-ZB (Linear Foot)			Girder 6-ZC (Linear Foot)			Girder 6-ZD (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 22R																																							
1	2.875			4.25			4.5			3.5			2.75			5			4.875			11.063			5.625			6.25			4.875			4			8					
2	2.875			4.25			4.5			3.5			2.75			5			4.875			11.063			5.625			6.25			4.875			4								
3	2.875			4.25			4.5			3.5			2.75			5			4.875			11.063			5.625			6.25			4.875			4								
4	2.875			4.25			4.5			3.5			2.75			5			4.875			11.063			5.625			6.25			4.875			4								
5	2.875			4.25			4.5			3.5			2.75			5			4.875			11.063			5.625			6.25			4.875			4								
6	2.875			4.25			4.5			3.5			2.75			5			4.875			11.063			5.625			6.25			4.875			4								
7	2.875			4.25			4.5			3.5			2.75			5			4.875			11.063			5.625			6.25			4.875			4								
8	2.875			4.25			4.5			3.5			2.75			5			4.875			11.063			5.625			6.25			4.875			4			8					
Pier 23R																																								
Total	23	0	0	34	0	0	36	0	0	28	0	0	22	0	0	40	0	0	39	0	0	88.5	0	0	45	0	0	50	0	0	39	0	0	32	0	0	16	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	1184.5	476.5	0	0
Floorbeam Total:	0	16	0	0
X-Frames Totals:	0	122	0	0

Span Quantity

Beam/ Girder (LF): 1661 ft.
Floorbeam (LF): 16 ft.
X-Frames (Ea.): 122 Each

Unit: 6 Span 4 Bridge: Right Span Length: 122.8 ft.

Bridge Member/Bay	Girder 6-P (Linear Foot)			Girder 6-Q (Linear Foot)			Girder 6-R (Linear Foot)			Girder 6-S (Linear Foot)			Girder 6-T (Linear Foot)			Girder 6-U (Linear Foot)			Girder 6-V (Linear Foot)			Girder 6-W (Linear Foot)			Girder 6-Y (Linear Foot)			Girder 6-Z (Linear Foot)			Floorbeams (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 23R																																				
1	4.75			4.5			3.5			5.5			4.25			4.75			3.5			6			7.5			6.875								
2	4.75			4.5			3.5			5.5			4.25			4.75			3.5			6			7.5			6.875								
3	4.75			4.5			3.5			5.5			4.25			4.75			3.5			6			7.5			6.875								
4	4.75			4.5			3.5			5.5			4.25			4.75			3.5			6			7.5			6.875								
5	4.75			4.5			3.5			5.5			4.25			4.75			3.5			6			7.5			6.875								
6	4.75			4.5			3.5			5.5			4.25			4.75			3.5			6			7.5			6.875								
7	4.75			4.5			3.5			5.5			4.25			4.75			3.5			6			7.5			6.875								
8	4.75			4.5			3.5			5.5			4.25			4.75			3.5			6			7.5			6.875								
Pier 24R																																				
Total	38	0	0	36	0	0	28	0	0	44	0	0	34	0	0	38	0	0	28	0	0	48	0	0	60	0	0	55	0	0	0	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	903	409	0	0
Floorbeam Total:	8	0	0	0
X-Frames Totals:	0	85	0	0

Span Quantity

Beam/ Girder (LF): 1312 ft.
Floorbeam (LF): 8 ft.
X-Frames (Ea.): 85 Each

Unit: 6 Span 5 Bridge: Right Span Length: 96.9 ft.

Bridge Member/Bay	Girder 6-P (Linear Foot)			Girder 6-Q (Linear Foot)			Girder 6-R (Linear Foot)			Girder 6-S (Linear Foot)			Girder 6-T (Linear Foot)			Girder 6-U (Linear Foot)			Girder 6-V (Linear Foot)			Girder 6-W (Linear Foot)			Girder 6-X (Linear Foot)			Girder 6-Y (Linear Foot)			Girder 6-Z (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 24R																																				
1	4.6667			5			8.0755			12.113			16.151			12.113			4.5			12.113			6.6667			16.151			8.0755					
2	4.6667			5			8.0755			12.113			16.151			12.113			4.5			12.113			6.6667			16.151			8.0755					
3	4.6667			5			8.0755			12.113			16.151			12.113			4.5			12.113			6.6667			16.151			8.0755					
4	4.6667			5			8.0755			12.113			16.151			12.113			4.5			12.113			6.6667			16.151			8.0755					
5	4.6667			5			8.0755			12.113			16.151			12.113			4.5			12.113			6.6667			16.151			8.0755					
6	4.6667			5			8.0755			12.113			16.151			12.113			4.5			12.113			6.6667			16.151			8.0755					
F.A.																																				
Total	28	0	0	30	0	0	48.453	0	0	72.68	0	0	96.906	0	0	72.68	0	0	27	0	0	72.68	0	0	40	0	0	96.906	0	0	48.453	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	488.24	633.76	0	0
X-Frames Totals:	0	80	6	0

Span Quantity

Beam/ Girder (LF): 1122 ft.

X-Frames (Ea.): 86 Each

Unit: Ramp C-B Span 24 Bridge: Right Span Length: 124.6 ft.

Bridge Member/Bay	Girder 6-ZA (Linear Foot)			Girder 6-ZB (Linear Foot)			Girder 6-ZC (Linear Foot)			Girder 6-ZD (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 23 C-B															
1	19.94	8		23.325	8		23.325	8		18.694	8				
2	19.94			23.325			23.325			18.694					
3	19.94			23.325			23.325			18.694					
4	19.94			23.325			23.325			18.694					
5	19.94	3		23.325			23.325			18.694	8				
Pier 24 C-B															
Total	99.7	11	0	116.63	8	0	116.63	8	0	93.469	16	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	29.581	426.42	43	0
X-Frames Totals:	32	0	0	0

Beam/ Girder (LF): 499 ft.

X-Frames (Ea.): 32 Each

Unit: Ramp C-B Span 25 Bridge: Right Span Length: 123.0 ft.

Bridge Member/Bay	Girder 6-ZA (Linear Foot)			Girder 6-ZB (Linear Foot)			Girder 6-ZC (Linear Foot)			Girder 6-ZD (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 24 C-B															
1	24.6			24.6			24.6			24.6					
2	24.6			24.6			24.6			24.6					
3	24.6			24.6			24.6			24.6					
4	24.6			24.6			24.6			24.6					
5	24.6			24.6			24.6			24.6					
Pier 25 C-B															
Total	123	0	0	123	0	0	123	0	0	123	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	0	492	0	0
X-Frames Totals:	0	35	0	0

Beam/ Girder (LF): 492 ft.

X-Frames (Ea.): 35 Each

Unit: Ramp C-B Span 26 Bridge: Right Span Length: 124.8 ft.

Bridge Member/Bay	Girder 6-ZA (Linear Foot)			Girder 6-ZB (Linear Foot)			Girder 6-ZC (Linear Foot)			Girder 6-ZD (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 25 C-B															
1	24.95			24.95			24.95			24.95					
2	24.95			24.95			24.95			24.95					
3	24.95			24.95			24.95			24.95					
4	24.95			24.95			24.95			24.95					
5	24.95			24.95			24.95			24.95					
Pier 26 C-B															
Total	124.75	0	0	124.75	0	0	124.75	0	0	124.75	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	0	499	0	0
X-Frames Totals:	0	27	0	0

Beam/ Girder (LF): 499 ft.
X-Frames (Ea.): 27 Each

Unit: Ramp C-B Span 27 Bridge: Right Span Length: 124.8 ft.

Bridge Member/Bay	Girder 6-ZA (Linear Foot)			Girder 6-ZB (Linear Foot)			Girder 6-ZC (Linear Foot)			Girder 6-ZD (Linear Foot)			Girder 6-ZE (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 26 C-B																		
1	24.95			24.95			24.95						24.95					
2	24.95			24.95			24.95			22.5			24.95					
3	24.95			24.95			24.95			22.5			24.95					
4	24.95			24.95			24.95			22.5			24.95					
5	24.95			24.95			24.95			22.5			24.95					
Pier 27 C-B																		
Total	124.75	0	0	124.75	0	0	124.75	0	0	90	0	0	124.75	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	0	589	0	0
X-Frames Totals:	0	34	0	0

Beam/ Girder (LF): 589 ft.
X-Frames (Ea.): 34 Each

Unit: Ramp C-B Span 28 Bridge: Right Span Length: 96.0 ft.

Bridge Member/ Bay	Girder 6-ZA (Linear Foot)			Girder 6-ZB (Linear Foot)			Girder 6-ZC (Linear Foot)			Girder 6-ZD (Linear Foot)			Girder 6-ZE (Linear Foot)			Diaphragms/ X-Frames (Each)		
	Condition State			Condition State			Condition State			Condition State			Condition State			Condition State		
	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4	CS-2	CS-3	CS-4
Pier 27 C-B																		
1	19.2			19.2			19.2			19.2			19.2					
2	19.2			19.2			19.2			19.2			19.2					
3	19.2			19.2			19.2			19.2			19.2					
4	19.2			19.2			19.2			19.2			19.2					
5	19.2			19.2			19.2			19.2			19.2					
Abut. C-B																		
Total	96	0	0	96	0	0	96	0	0	96	0	0	96	0	0	0	0	0

	CS-1	CS-2	CS-3	CS-4
Beam/Girder Total:	96	384	0	0
X-Frames Totals:	0	30	0	0

Beam/ Girder (LF): 480 ft.

X-Frames (Ea.): 30 Each