NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: prompt action request, sketches revised, clearances revised, resurfaced with no change in asphalt wearing surface thickness

Structure Safety Report

Routine Element Inspection - Contract

STRUCTURE NUMBER: 110171 **SAP STRUCTURE NO:** 0120171 **FHWA STRUCTURE NO:** 000000000230171

DIVISION: 13 **COUNTY:** BURKE **INSPECTION DATE:** 10/04/2023 **FREQUENCY:** 24 MONTHS

FACILITY CARRIED: SR1761 **MILE POST:**

LOCATION: .1 MI.N.JCT.SR1770

FEATURE INTERSECTED: I40

LATITUDE: 35° 42' 35.22" **LONGITUDE:** 81° 26' 22.9"

SUPERSTRUCTURE: REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE: E.BTS:RC.CAPS/TIM.PILES;INT.BTS:RC POST&BEAM

SPANS: 4 SPANS. SEE SPAN PROFILE SHEET FOR SPAN DETAILS

☐ FRACTURE CRITICAL ☐ TEMPORARY SHORING ☐ SCOUR CRITICAL ☐ SCOUR PLAN OF ACTION

GRADES: (Inspector/NBI Coding) **DECK** 5 / 5 **SUPERSTRUCTURE** 6 / 6 **SUBSTRUCTURE** 6 / 6 **CULVERT** N / N

POSTED SV: Not Posted **POSTED TTST:** Not Posted

OTHER SIGNS PRESENT: none

south approach looking north

Sign noticed issued for		Number Required
NO	**WEIGHT LIMIT**	0
NO	**DELINEATORS**	0
NO	**NARROW BRIDGE**	0
NO	**ONE LANE BRIDGE**	0
NO	**LOW CLEARANCE**	0

DIRECTION OF INSPECTION S-N

DIRECTION MATCHES PLANS

INSPECTED BY	SIGNATURE	ASSISTED BY
Chris Perry		Isaiah Chapman

NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

12/21/2023

IDENTIFICATION

(1) STATE NAME	NORTH CAROLINA	BRIDGE	**110171**
(8) STRUCTURE NUMBER (FEDERAL)			**0230171**
(5) INVENTORY ROUTE (ON/UNDER)	ON		**31017610**
(2) STATE HIGHWAY DEPARTMENT DISTRICT			**13**
(3) COUNTY CODE (FEDERAL)	**23**	(4) PLACE CODE	**31500**
(6) FEATURE INTERSECTED	**I40**		
(7) FACILITY CARRIED	**SR1761**		
(9) LOCATION	**.1 MI.N.JCT.SR1770**		
(11) MILEPOINT			**0.0**
(12) BASE HIGHWAY NETWORK			**0**
(13) LRS INVENTORY ROUTE & SUBROUTE			**0**
(16) LATITUDE	**35° 42' 35.22"**	(17) LONGITUDE	**81° 26' 22.9"**
(98) BORDER BRIDGE STATE CODE		PERCENT SHARED	
(99) BORDER BRIDGE STRUCTURE NUMBER			

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN			**Steel**
TYPE	**Stringer/Multi-beam or girder**	CODE	**302**
(44) STRUCTURE TYPE APPROACH			
TYPE		CODE	
(45) NUMBER OF SPANS IN MAIN UNIT			**4**
(46) NUMBER OF SPANS IN APPROACH			**0**
(107) DECK STRUCTURE TYPE		CODE	**1**
(108)WEARING SURFACE/PROTECTIVE SYSTEM			
(A) TYPE OF WEARING SURFACE		CODE	**6**
(B) TYPE OF MEMBRANE		CODE	**0**
(C) TYPE OF DECK PROTECTION		CODE	**0**

AGE AND SERVICE

(27) YEAR BUILT			**1956**
(106) YEAR RECONSTRUCTED			**0**
(42) TYPE OF SERVICE ON -			**Overpass Structure**
OFF -		**Highway** CODE	**61**
(28) LANES ON STRUCTURE	**2**	LANES UNDER STRUCTURE	**4**
(29) AVERAGE DAILY TRAFFIC			**4200**
(30) YEAR OF ADT	**2021**	(109) TRUCK ADT PCT	**7**
(19) BYPASS OR DETOUR LENGTH			**2.0**

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN			**65.0**
(49) STRUCTURE LENGTH			**237.0**
(50) CURB OR SIDEWALK: LEFT	**3.1**	RIGHT	**3.1**
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB			**26.0**
(52) DECK WIDTH OUT TO OUT			**34.4**
(32) APPROACH ROADWAY WITH (W/ SHOULDERS)			**28.0**
(33) BRIDGE MEDIAN		CODE	**5**
(34) SKEW	**40**	(35) STRUCTURE FLARED	**0111**
(10) INVENTORY ROUTE MIN VERT CLEAR			**999.9**
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			**0.0**
(53) MIN VERT CLEAR OVER BRIDGE RDWY			**999.9**
(54) MIN VERT UNDERCLEAR: REFERENCE	**H**		**14.7**
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE	**H**		**9.2**
(56) MIN LAT UNDERCLEARANCE LT:			**13.7**

NAVIGATION DATA

(38) NAVIGATION CONTROL -	CODE	**6**
(111) PIER PROTECTION	CODE	
(39) NAVIGATION VERTICAL CLEARANCE		**0.0**
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR		**0.0**
(40) NAVIGATION HORIZONTAL CLEARANCE		**0.0**

SUFFICIENCY RATING **78.89**

STATUS =

CLASSIFICATION — CODE

(112) NBIS BRIDGE SYSTEM		**Y**
(104) HIGHWAY SYSTEM	**Inventory Route not on NHS**	**0**
(26) FUNCTIONAL CLASS	**Urban Collector**	**17**
(100) STRAHNET HIGHWAY	**Not a STRAHNET Route**	**0**
(101) PARALLEL STRUCTURE		**0**
(102) DIRECTION OF TRAFFIC	**2-way traffic**	**2**
(103) TEMPORARY STRUCTURE		
(110) DESIGNATED NATIONAL NETWORK -	**on national network for trucks**	**0**
(20) TOLL	**On Free Road**	**3**
(21) MAINT -		**01**
(22) OWNER -		**01**
(37) HISTORICAL SIGNIFICANCE -		**5**

CONDITION — CODE

(58) DECK	**5**
(59) SUPERSTRUCTURE	**6**
(60) SUBSTRUCTURE	**6**
(61) CHANNEL & CHANNEL PROTECTION	**N**
(62) CULVERTS	**N**

LOAD RATING AND POSTING — CODE

(31) DESIGN LOAD	**HS 15**	**3**
(63) OPERATING RATING METHOD -	**Load Factor**	**1**
(64) OPERATING RATING -	**HS-32**	**58**
(65) INVENTORY RATING METHOD -		**1**
(66) INVENTORY RATING	**HS-19**	**35**
(70) BRIDGE POSTING	**No Posting Required**	**5**
(41) STRUCTURE OPEN, POSTED, OR CLOSED		**A**
DESCRIPTION	**Open, no restriction**	

APPRAISAL — CODE

(67) STRUCTURAL EVALUATION	**6**
(68) DECK GEOMETRY	**N**
(69) UNDERCLEARANCES, VERT & HORIZ	**3**
(71) WATERWAY ADEQUACY	**N**
(72) APPROACH ROADWAY ALIGNMENT	**8**
(36) TRAFFIC SAFETY FEATURES	**N**
(113) SCOUR CRITICAL BRIDGES	**N**

PROPOSED IMPROVEMENTS

(75) TYPE OF WORK	CODE
(76) LENGTH OF STRUCTURE IMPROVEMENT	
(94) BRIDGE IMPROVEMENT COST	
(95) ROADWAY IMPROVEMENT COST	
(96) TOTAL PROJECT COST	
(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(114) FUTURE ADT **8,400**	YEAR OF FUTURE ADT **2040**

INSPECTION

(90) INSPECTION DATE	**10/23**	(91) FREQUENCY	**24**
(92) CRITICAL FEATURE INSPECTION		(93) CFI DATE	
A) FRACTURE CRIT DETAIL		A)	
B) UNDERWATER INSP		B)	
C) OTHER SPECIAL INSP		C)	
SCOUR			

Structure Number **110171** County **BURKE** Run Date **12/21/2023**

Span Number	Facility Carried	Inventory Route	Maximum Minimum Vertical Clearance	Milepoint	Base Highway	LRS Inventory Route	Functional Classification	Number of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	*See Note Below*					STRAHNET Highway	Direction of Traffic	National Highway System	National Truck Network
												Reference Feature	Minimum Vertical Underclearance	Rigth Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade				
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100	102	104	110
2	I 40 E	11000400	14.9	118.1	1	10040	11	2	22500	2015	40.8	H	14.7	8.6	14.5	3		1	☐	☐
3	I 40 W	11000400	15.3	118.1	1	10040	11	2	22500	2015	42.2	H	15.2	9.1	13.8	3		1	☐	☐

Note: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69.

Superstructure Build Details

Span Number 1 **Span Length** 52.420 **Skew** 50.000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
5	Fixed Bearing	Fixed Bearing	5 Each	Inorganic Zinc Pimer with Acrylic Top Coat	5
5	Movable Bearing	Movable Bearing	5 Each	Inorganic Zinc Pimer with Acrylic Top Coat	5
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1805 Square Feet		
5	Plate Girder	Steel Open Girder/Beam	260 Feet	Inorganic Zinc Pimer with Acrylic Top Coat	2535
1	Asphalt Wearing Surface	Wearing Surface	1363 Square Feet		
2	Concrete Railing	Reinforced Concrete Bridge Railing	106 Feet		

Span Number 2 **Span Length** 65.830 **Skew** 50.000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
5	Fixed Bearing	Fixed Bearing	5 Each	Inorganic Zinc Pimer with Acrylic Top Coat	5
5	Movable Bearing	Movable Bearing	5 Each	Inorganic Zinc Pimer with Acrylic Top Coat	5
1	Asphalt Wearing Surface	Wearing Surface	1712 Square Feet		
2	Concrete Railing	Reinforced Concrete Bridge Railing	132 Feet		
5	Plate Girder	Steel Open Girder/Beam	330 Feet	Inorganic Zinc Pimer with Acrylic Top Coat	3230
1	Standard Joint	Pourable Joint Seal	34 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	2269 Square Feet		

Span Number 3 **Span Length** 65.830 **Skew** 50.000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
5	Plate Girder	Steel Open Girder/Beam	330 Feet	Inorganic Zinc Pimer with Acrylic Top Coat	3230
1	Reinforced Concrete Deck	Reinforced Concrete Deck	2266 Square Feet		
5	Fixed Bearing	Fixed Bearing	5 Each	Inorganic Zinc Pimer with Acrylic Top Coat	5
1	Standard Joint	Pourable Joint Seal	34 Feet		

Superstructure Build Details

1	Asphalt Wearing Surface	Wearing Surface	1712	Square Feet		
2	Concrete Railing	Reinforced Concrete Bridge Railing	132	Feet		
5	Movable Bearing	Movable Bearing	5	Each	Inorganic Zinc Pimer with Acrylic Top Coat	5

Span Number 4 **Span Length** 52.420 **Skew** 50.000

Number of Items	Type of Component	Element Name	Quantity		Protective System Applied	Quantity (Sq Ft)
2	Concrete Railing	Reinforced Concrete Bridge Railing	106	Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1805	Square Feet		
5	Movable Bearing	Movable Bearing	5	Each	Inorganic Zinc Pimer with Acrylic Top Coat	5
5	Fixed Bearing	Fixed Bearing	5	Each	Inorganic Zinc Pimer with Acrylic Top Coat	5
5	Plate Girder	Steel Open Girder/Beam	260	Feet	Inorganic Zinc Pimer with Acrylic Top Coat	2535
1	Asphalt Wearing Surface	Wearing Surface	1363	Square Feet		
1	Standard Joint	Pourable Joint Seal	34	Feet		

Structure Element Scoring

Structure Number: **110171**

Inspection Date **10/4/2023**

Element Number	Parent Number	Element Name	Location	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity
12		Reinforced Concrete Deck	Deck	8,145	6,535	407	1,203	0
107		Steel Open Girder/Beam	Beam	1,180	849	278	25	28
515	107	Steel Protective Coating	Beam	11,530	11,277	0	249	4
205		Reinforced Concrete Column	Piles and Columns	9	6	2	1	0
215		Reinforced Concrete Abutment	Abutments	98	74	22	2	0
228		Timber Pile	Piles and Columns	21	21	0	0	0
234		Reinforced Concrete Pier Cap	Caps	202	127	19	56	0
301		Pourable Joint Seal	Expansion Joints	102	81	0	0	21
311		Movable Bearing	Bearing Device	20	0	2	18	0
515	311	Steel Protective Coating	Bearing Device	20	0	3	1	16
313		Fixed Bearing	Bearing Device	20	0	15	5	0
515	313	Steel Protective Coating	Bearing Device	20	1	11	4	4
331		Reinforced Concrete Bridge Railing	Bridge Rail	476	409	19	48	0
510		Wearing Surface	Wearing Surfaces	6,150	6,150	0	0	0

Summary of Maintenance Needs

Maintenance By Defect

Structure Number: **110171** Inspection Date: **10/04/2023**

MMS Code	Element Name	Defect Name	Recommended Quantity
3326	Reinforced Concrete Deck	Delamination/Spall	5 Square Feet
3326	Reinforced Concrete Deck	Cracking (RC and Other)	386 Square Feet
3326	Reinforced Concrete Deck	Exposed Rebar	19 Square Feet
3326	Reinforced Concrete Deck	Efflorescence/Rust Staining	1200 Square Feet
3314	Steel Open Girder/Beam	Damage	4 Feet
3314	Steel Open Girder/Beam	Corrosion	33 Feet
3314	Steel Open Girder/Beam	Distortion	20 Feet
3348	Reinforced Concrete Column	Delamination/Spall	6 Each
3350	Reinforced Concrete Abutment	Delamination/Spall	10 Feet
3350	Reinforced Concrete Abutment	Efflorescence/Rust Staining	2 Feet
3348	Reinforced Concrete Pier Cap	Patched Area	4 Feet
3348	Reinforced Concrete Pier Cap	Cracking (RC and Other)	32 Feet
3348	Reinforced Concrete Pier Cap	Delamination/Spall	39 Feet
3310	Pourable Joint Seal	Seal Damage	21 Feet
3334	Movable Bearing	Connection	2 Each
3334	Movable Bearing	Corrosion	16 Each
3334	Fixed Bearing	Corrosion	3 Each
3334	Fixed Bearing	Connection	2 Each
3318	Reinforced Concrete Bridge Railing	Delamination/Spall	58 Feet
3318	Reinforced Concrete Bridge Railing	Exposed Rebar	5 Feet
3318	Reinforced Concrete Bridge Railing	Cracking (RC and Other)	1 Feet
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	289 Square Feet

Element Structure Maintenance Quantities

Structure Number: **110171** Inspection Date **10/04/2023**

Location	MMS Code	Description	Maint Quantity	Total Quantity	Severe Quantity	Poor Quantity	Fair Quantity	Good Quantity
Beam	3314	Maintenance Steel Superstructure Components	57	1180	28.000	25.000	278.000	849.000
Beam	3342	Clean and Paint Steel	250	11530	4.000	249.000	0.000	11277.000
Bearing Device	3334	Bridge Bearing	18	20	0.000	18.000	2.000	0.000
Bearing Device	3334	Bridge Bearing	5	20	0.000	5.000	15.000	0.000
Bearing Device	3342	Clean and Paint Steel	20	20	16.000	1.000	3.000	0.000
Bearing Device	3342	Clean and Paint Steel	19	20	4.000	4.000	11.000	1.000
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	64	476	0.000	48.000	19.000	409.000
Deck	3326	Maintenance of Concrete Deck	1610	8145	0.000	1203.000	407.000	6535.000
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	21	102	21.000	0.000	0.000	81.000
Wearing Surfaces	2816	Asphalt Surface Repair	0	6150	0.000	0.000	0.000	6150.000
Abutments	3350	Maintenance of Concrete Wings and Wall	12	98	0.000	2.000	22.000	74.000
Caps	3348	Maintenance of Concrete Substructure	75	202	0.000	56.000	19.000	127.000
Piles and Columns	3344	Maintenance To Timber Substructure	0	21	0.000	0.000	0.000	21.000
Piles and Columns	3348	Maintenance of Concrete Substructure	6	9	0.000	1.000	2.000	6.000

Priority Actions Request

Structure Number 110171

Span1

3326 **Deck** Reinforced Concrete Deck

Priority Level	Defect Type	Quantity	Defect Description
1	Efflorescence/Rust	300	Span 1 Deck: (PAR) underside of all bays, transverse and map cracks (up to 1/32 inch) with efflorescence buildup and some rust stains at random
2	Exposed Rebar	8	Span 1 Deck: (PAR) both overhangs, delaminations/spalls (up to 4 inch diameter x 1/2 inch deep) with exposed rusted rebar at random

3314 **Beam 1** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 1 Beam 1: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 9 inch x 2 inch) with corrosion reinitiated

3314 **Beam 2** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 1 Beam 2: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (1/4 inch average remaining x 10 inch x 2 inch)

3314 **Beam 3** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 1 Beam 3: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1 inch) with adjacent painted over pitting (up to 1/8 inch deep x 2 inch x 3 inch) with corrosion reinitiated

3314 **Beam 4** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 1 Beam 4: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 7 inch x 1 inch) with corrosion reinitiated

3314 **Beam 5** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 1 Beam 5: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 9 inch x up to 2 feet) with corrosion reinitiated; top flange, rust scale

Span2

3326 **Deck** Reinforced Concrete Deck

Priority Level	Defect Type	Quantity	Defect Description

? Priority Action Request (PAR) 1 Assigned Routine Maintenance 2 Assigned Priority Maintenance 3 Assigned Critical Find

Priority Actions Request

Structure Number **110171**

1	Efflorescence/Rust Staining	300	Span 2 Deck: (PAR) throughout underside of deck, in all bays, transverse cracks (up to 1/32 inch x full width) and areas of map cracks (hairline) with efflorescence buildup and some rust stains
2	Exposed Rebar	8	Span 2 Deck: (PAR) 8 - spalls with exposed reinforcing up to 2 inch diameter x 1/2 inch deep, underside of right overhang, at random.

3334 **Beam 1** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Connection	1	Span 2 Beam 1 - Far Bearing 1: (PAR) stacked plates, laterally misaligned (up to 1/2 inch) in relation to sole plate; no anchor bolts installed through beam
2	Connection	1	Span 2 Beam 1 - Near Bearing 1: (PAR) stacked plates, laterally misaligned (up to 1/2 inch) in relation to sole plate; no anchor bolts installed

3314 **Beam 2** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 2 Beam 2: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 9 inch x 1 inch)
2	Connection	1	Span 2 Beam 2 - Far Bearing 2: (PAR) along east face, between sole plate and bottom flange, broken weld; right anchor bolt nut backed off
2	Distortion	20	Span 2 Beam 2: (PAR) over both travel lanes, underside of bottom flange and cover plate, impact scrapes with gouges (up to 1/2 inch deep); over right travel lane, bottom flange, distorted (up to 1 inch upwards x approximately 1.5 feet); no apparent destress to cover plate welds

3314 **Beam 3** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 2 Beam 3: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 6 inch x 1 inch); lower web, painted over pitting (up to 1/8 inch deep x 14 inch x 3 inch) with corrosion reinitiated

Span3

3326 **Deck** Reinforced Concrete Deck

Priority Level	Defect Type	Quantity	Defect Description
1	Efflorescence/Rust Staining	400	Span 3 Deck: (PAR) throughout underside of deck, in all bays, transverse cracks (up to 1/32 inch x full width) and areas of map cracks (hairline) with efflorescence buildup and rust stains
2	Delamination/Spall	2	Span 3 Deck: [PAR] 19 inch x 16 inch area of delamination on underside of deck in bay 1, over left shoulder

3314 **Beam 1** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 3 Beam 1: (PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 14 inch x 4 inch) with corrosion reinitiated

? Priority Action Request (PAR) 1 Assigned Routine Maintenance 2 Assigned Priority Maintenance 3 Assigned Critical Find

Priority Actions Request

Structure Number 110171

2	Corrosion	4	Span 3 Beam 1: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm (5/16 inch average remaining x 9 inch x 2 inch); lower web (3/8 inch average remaining x 4 feet x 4 inch) with corrosion reinitiated

3314 **Beam 2** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 3 Beam 2: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (7/16 inch average remaining x 4 inch x 1 inch)

3314 **Beam 3** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 3 Beam 3: (PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 10 inch x 1 inch) with corrosion reinitiated
2	Corrosion	1	Span 3 Beam 3: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1 inch)
2	Connection	1	Span 3 Near Bearing 3: (PAR) west face, between sole plate and bottom flange, poor quality weld with voids

3314 **Beam 4** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 3 Beam 4: (PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 9 inch x 5 inch) with corrosion reinitiated
2	Corrosion	1	Span 3 Beam 4: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 5 inch x 1 inch)

3314 **Beam 5** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 3 Beam 5: (PAR) at bent 2, painted over section loss: web adjacent to diaphragm (3/8 inch average remaining x 8 inch x 4 inch); lower web (3/8 inch average remaining x 10 inch x 5 inch) with corrosion reinitiated
2	Corrosion	2	Span 3 Beam 5: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 4 inch x 6 inch); web over bearing, painted over pitting (up to 1/8 inch deep x 18 inch x 10 inch) with corrosion reinitiated

Span4

3326 **Deck** Reinforced Concrete Deck

Priority Level	Defect Type	Quantity	Defect Description
2	Delamination/Spall	2	Span 4 Deck: (PAR) bay 1, near end bent 1, spall/delamination (15 inch diameter x 1.5 inch deep) with exposed rusted rebar
2	Delamination/Spall	1	Span 4 Deck: (PAR) bay 4, near midspan, spall (10 inch x 1.5 inch deep) with exposed rusted rebar
1	Efflorescence/Rust Staining	200	Span 4 Deck: (PAR) underside of all bays, near bent 3 and end bent 2, transverse cracks (up to 1/32 inch x full width) and map cracks (hairline) with efflorescence buildup and some rust stains at random

Priority Actions Request

Structure Number 110171

1	Exposed Rebar	3	Span 4 Deck: (PAR) 3 - spalls with exposed reinforcing up to 1 inch diameter x 1/2 inch deep, underside of left overhang, intermittent length of span.

3314 **Beam 1** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	2	Span 4 Beam 1: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 6 inch x 4 inch); painted over pitting, lower web (up to 1/8 inch deep x 2 feet x 4 inch) with corrosion reinitiated

3314 **Beam 2** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 4 Beam 2: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 10 inch x 1 inch)

3314 **Beam 3** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 4 Beam 3: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 8 inch x 1 inch) with corrosion reinitiated

3314 **Beam 4** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 4 Beam 4: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1.5 inch)

3314 **Beam 5** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	3	Span 4 Beam 5: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm (1/4 inch average remaining x 10 inch x 4 inch); lower web (3/8 inch average remaining x 2.5 feet x 4 inches) with corrosion reinitiated

Bent 1

3350 **Abutment** Reinforced Concrete Abutment

Priority Level	Defect Type	Quantity	Defect Description
2	Efflorescence/Rust Staining	1	End Bent 1 Abutment: (PAR) area of rust staining in bay 1.

Bent 2

? Priority Action Request (PAR) 1 Assigned Routine Maintenance 2 Assigned Priority Maintenance 3 Assigned Critical Find

Priority Actions Request

Structure Number **110171**

3350 **Abutment** Reinforced Concrete Abutment

Priority Level	Defect Type	Quantity	Defect Description
2	Efflorescence/Rust	1	End Bent 2 Abutment: (PAR) top of abutment, in bay 3, rust stains

Approach Guardrail and Barriers

3120 **Approach Guardrail and Barriers** Approach Guardrail and Barriers

Priority Level	Defect Type	Quantity	Defect Description
2		1	(PAR) northeast guardrail termination, impact damage (1 foot)
2		1	(PAR) northwest guardrail attachment, improper lap
2		38	(PAR) northwest guardrail, impact damage (38 feet)
2		1	(PAR) southeast guardrail attachment, improper lap
2		7	(PAR) southeast guardrail transition, impact damage (7 feet) with (1) decayed post
2		1	(PAR) southwest guardrail transition, (1) decayed post
2		25	(PAR) southwest guardrail, areas of impact damage (25 feet total)

Element Condition and Maintenance Data

Structure Number: **110171** Inspection Date: **10/04/2023**

Span 1 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,805	1,477	28	300	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 12	Efflorescence/Rust Staining	(PAR) underside of all bays, transverse and map cracks (up to 1/32 inch) with efflorescence buildup and some rust stains at random	3	300	300	Square Feet
☑ 12	Cracking (RC and Other)	both overhangs, transverse cracks (up to 1/32 inch x full width) at random	2	20	20	Square Feet
☑ 12	Efflorescence/Rust Staining	(combined with other notes 2023) transverse and longitudinal cracks up to 1/32 inch wide with efflorescence, underside of deck in bay 2, near end bent 1.	2			Square Feet
☑ 12	Exposed Rebar	(PAR) both overhangs, delaminations/spalls (up to 4 inch diameter x 1/2 inch deep) with exposed rusted rebar at random	2	8	8	Square Feet
☑ 12	Delamination/Spall	(combined with other notes 2023) 2 - spalls with exposed reinforcing up to 3 inch diameter x 1/2 inch deep, in right overhang, at end bent 1.	1			Square Feet
☑ 12	Delamination/Spall	(combined with other notes 2023) 3 inch diameter x 1/2 inch deep spall with exposed reinforcing and transverse crack up to 1/32 inch wide, in right overhang, 15 feet from end bent 1 (5 others similar at random).	1			Square Feet
☑ 12	Efflorescence/Rust Staining	(combined with other notes 2023) 2 inch x 3 inch area of rust stain underside at end bent 1, by bay 1	1			Square Feet
☑ 12	Efflorescence/Rust Staining	(combined with other notes 2023) transverse and longitudinal cracks up to 1/32 inch wide with efflorescence, underside of deck in bay 3, near bent 1.	1			Square Feet
☑ 12	Efflorescence/Rust Staining	(combined with other notes 2023) transverse and longitudinal cracks up to 1/32 inch wide with efflorescence, underside of deck in bay 4, near midspan.	1			Square Feet

General Comments

Span 1 Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	24	27	0	1	Feet
515	Steel Protective Coating	507	491	0	16	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 107	Corrosion	(PAR) at bent 1, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 9 inch x 2 inch) with corrosion reinitiated	4	1	1	Feet
☑ 107	Damage	15 inch x 6 inch x 2 inch deep spall with exposed reinforcing in end diaphragm overhang, west side, at bent 1.	3		1	Feet

☑ **107**	Damage	bent 1 end diaphragm at bent 1, patched area (4.5 foot x 1 foot) with hairline cracks with efflorescence; adjacent to beam 2, delamination (1 foot x 6 inch)	3			Feet
☑ **107**	Corrosion	along the length of the beam, both flanges and web, areas of surface rust	2	12		Feet
☑ **107**	Corrosion	inside face of web, previous grinding (up to 1/16 inch deep); areas painted	2	15		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	16	16	Square Feet

General Comments

Span 1 Beam 2

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	48	3	0	1	Feet
515	Steel Protective Coating	507	504	0	3	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 1, web adjacent to diaphragm, painted over section loss (1/4 inch average remaining x 10 inch x 2 inch)	4	1	1	Feet
☑ **107**	Corrosion	near end bent 1, both flanges and web, surface rust at random	2	3		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	near end bent 1, both flanges and web, surface rust at random	3	3		Square Feet

General Comments

Span 1 Beam 3

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	39	12	0	1	Feet
515	Steel Protective Coating	507	494	0	13	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1 inch) with adjacent painted over pitting (up to 1/8 inch deep x 2 inch x 3 inch) with corrosion reinitiated	4	1	1	Feet
☑ **107**	Corrosion	near end bent 1 and bent 1, both flanges and web, surface rust at random	2	12		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	13	13	Square Feet

General Comments

Span 1 Beam 4

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	46	5	0	1	Feet
515	Steel Protective Coating	507	501	0	6	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 1, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 7 inch x 1 inch) with corrosion reinitiated	4	1	1	Feet
☑ **107**	Corrosion	near end bent 1 and bent 1, both flanges and web, surface rust at random	2	5		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	6	6	Square Feet

General Comments

Span 1 Beam 5

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	48	3	0	1	Feet
515	Steel Protective Coating	507	502	0	4	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 9 inch x up to 2 feet) with corrosion reinitiated; top flange, rust scale	4	1	1	Feet
☑ **107**	Corrosion	near end bent 1 and bent 1, both flanges and web, surface rust at random	2	3		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	at bent 1, top flange, rust scale	4	1	1	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	4	4	Square Feet

General Comments

Span 1 Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	53	45	0	8	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Delamination/Spall	8 - spalls with exposed reinforcing up to 14 inch x 2 inch x 1/2 inch deep, in side of rail posts, at random.	3	8	8	Feet

General Comments

Span 1 — Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	53	42	11	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Delamination/Spall	16 - spalls with exposed reinforcing up to 2 inch x 1 inch x 1/2 inch deep, in outside face, at random.	2	11	11	Feet

General Comments

Span 1 — Near Bearing 1

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	surface rust on masonry plate only.	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	limited effectiveness of protective coating on masonry plate.	3	1	1	Square Feet

General Comments

Span 1 — Far Bearing 1

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	pack rust.	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 1 — Near Bearing 2

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	surface rust on masonry plate only.	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	limited effectiveness of protective coating on masonry plate.	3	1	1	Square Feet

General Comments

Span 1 Far Bearing 2

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 311	Corrosion	pack rust.	3	1	1	Each
☑ 515	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 1 Near Bearing 3

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 313	Corrosion	surface rust	2	1		Each
☑ 515	Effectiveness (Steel Protective Coatings)	limited effectiveness of protective coating on masonry plate.	3	1	1	Square Feet

General Comments

Span 1 Far Bearing 3

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 311	Corrosion	painted over section loss (up to 3/16 inch deep) and pack rust	3	1	1	Each
☑ 515	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 1 Near Bearing 4

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

☑ **313**	Corrosion	surface rust/rust scale		2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust/rust scale.		4	1	1	Square Feet

General Comments

Span 1 Far Bearing 4

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	pack rust.	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 1 Near Bearing 5

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	surface rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	limited effectiveness of protective coating.	3	1	1	Square Feet

General Comments

Span 1 Far Bearing 5

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	pack rust.	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 1 — Wearing Surface

Asphalt Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
510	Wearing Surface	1,363	1,363	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **510**	Crack (Wearing Surface)	2023 repaved, previously noted as: random areas of map cracking.	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: 2 - up to 20 inch diameter repair patches in south bound lane at end bent 1, unsound with cracks up to 1/8 inch wide, asphalt secure.	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: 3- repair patches up to 6 feet x 4 feet, northbound lane midspan to bent 1	1			Square Feet

General Comments

Span 2 — Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	2,269	1,935	34	300	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **12**	Efflorescence/Rust Staining	(PAR) throughout underside of deck, in all bays, transverse cracks (up to 1/32 inch x full width) and areas of map cracks (hairline) with efflorescence buildup and some rust stains	3	300	300	Square Feet
☑ **12**	Cracking (RC and Other)	transverse cracks up to 1/32 inch wide, some with efflorescence, in both overhangs, intermittent length of span	2	26	26	Square Feet
☑ **12**	Exposed Rebar	(PAR) 8 - spalls with exposed reinforcing up to 2 inch diameter x 1/2 inch deep, underside of right overhang, at random.	2	8	8	Square Feet
☑ **12**	Cracking (RC and Other)	(combined with other notes 2023) transverse and longitudinal cracks with efflorescence, underside of bay 4, from bent 1 to midspan.	1			Square Feet

General Comments

Span 2 — Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	15	51	0	0	Feet
515	Steel Protective Coating	646	600	0	45	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Damage	at bent 2, bay 1 end diaphragm, spall/delamination (3.5 feet x 6 inch x 2 inches deep) with exposed rusted rebar	3			Feet

☑ **107**	Damage	end diaphragm on both sides has been removed with exposed rusted rebar, at both ends, when beam was replaced.	3		2	Feet
☑ **107**	Corrosion	at bent 2, top flange, rust scale	2	1		Feet
☑ **107**	Corrosion	surface rust at edges of top and bottom flange, at random, along beam.	2	45		Feet
☑ **107**	Damage	20 feet from bent 1, bottom flange, impact damage	2			Feet
☑ **107**	Distortion	impact scrapes on bottom flange with gouges up to 1/8 inch deep, 20 feet from bent 1.	2	5		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	at bent 2, top flange, rust scale	4	1	1	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	limited effectiveness of protective coating on flanges at random.	3	45	45	Square Feet

General Comments

beam previously replaced

Span 2 Beam 2

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	44	1	20	1	Feet
515	Steel Protective Coating	646	644	0	1	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 9 inch x 1 inch)	4	1	1	Feet
☑ **107**	Damage	over both travel lanes, impact damage	3			Feet
☑ **107**	Distortion	(PAR) over both travel lanes, underside of bottom flange and cover plate, impact scrapes with gouges (up to 1/2 inch deep); over right travel lane, bottom flange and cover plate, distorted (up to 1 inch upwards x approximately 1.5 feet); no apparent distress to cover plate welds	3	20	20	Feet
☑ **107**	Corrosion	at bent 2, web adjacent to diaphragm, painted over section loss (7/16 inch average remaining x 4 inch x 1 inch) with corrosion reinitated; top flange, upper web and bottom flange, rust scale	2	1		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	at bent 2, upper web and bottom flange, rust scale	4	1	1	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	at bent 2, web adjacent to diaphragm, surface rust	3	1	1	Square Feet

General Comments

Span 2 Beam 3

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	47	17	1	1	Feet
515	Steel Protective Coating	646	634	0	11	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

☑ **107**	Corrosion	(PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 6 inch x 1 inch); lower web, painted over pitting (up to 1/8 inch deep x 14 inch x 3 inch) with corrosion reinitiated	4	1	1	Feet
☑ **107**	Corrosion	at bent 2, corrosion with section loss: web adjacent to diaphragm (7/16 inch x 10 inch x up to 2 feet); top flange (3/4 inch average remaining x 3 inches)	3	1	1	Feet
☑ **107**	Corrosion	along the edge of the top flange, surface rust at random	2	10		Feet
☑ **107**	Damage	over right travel lane, bottom flange and cover plate, impact damage	2			Feet
☑ **107**	Distortion	over right travel lane, underside of bottom flange and cover plate, impact scrapes with surface gouges; left edge of bottom flange, distorted upwards (approximately 1/4 inch x 8 inches)	2	7		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	at bent 2, corrosion with section loss	4	1	1	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	11	11	Square Feet

General Comments

Span 2 Beam 4

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	58	7	1	0	Feet
515	Steel Protective Coating	646	644	0	2	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at bent 2, web adjacent to diaphragm, painted over section loss (7/16 inch average remaining x 8 inch x 9 inch) with corrosion reinitiated	3	1	1	Feet
☑ **107**	Corrosion	at bent 1, web adjacent to diaphragm, surface rust	2	1		Feet
☑ **107**	Damage	over right travel lane, bottom flange and cover plate, impact damage	2			Feet
☑ **107**	Distortion	over right travel lane, bottom flange and cover plate, impact scrapes with surface gouges	2	6		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	at bents 1 and 2, web adjacent to diaphragm, surface rust	3	2	2	Square Feet

General Comments

Span 2 Beam 5

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	46	18	2	0	Feet
515	Steel Protective Coating	646	636	0	10	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at bent 1, web adjacent to diaphragm, web adjacent to diaphragm (7/16 inch average remaining x 6 inch x 3 inch) with corrosion reinitiated	3	1	1	Feet

☑ **107**	Corrosion	at bent 2, web adjacent to diaphragm, painted over section loss (7/16 inch x 9 inch x 6 inch) with corrosion reinitiated	3	1	1	Feet
☑ **107**	Corrosion	along the edge of the top flange, surface rust at random	2	8		Feet
☑ **107**	Damage	over both travel lanes, bottom flange and cover plate, impact damage	2			Feet
☑ **107**	Distortion	over both travel lanes, bottom flange and cover plate, impact scrapes with surface gouges	2	10		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	10	10	Square Feet

General Comments

Span 2 — Expansion Joint at Bent 1

Standard Joint

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
301	Pourable Joint Seal	34	27	0	0	7	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **301**	Seal Damage	both sidewalks, seal damaged/missing	4	7	7	Feet
☑ **301**	Seal Adhesion	(2023 joint is asphalt plug joint) asphalt repair patch sealing joint, full width	1			Feet

General Comments

Span 2 — Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	66	54	3	9	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Cracking (RC and Other)	20 feet from bent 1, diagonal crack (1/8 inch wide) with edge spall (4 inch x 1 inch x 1 inch deep)	3	1	1	Feet
☑ **331**	Delamination/Spall	along the length of the rail, spalls (up to 14 inch x 3 inch x 1 inch deep) with exposed rusted rebar	3	8	8	Feet
☑ **331**	Cracking (RC and Other)	near bent 1, vertical cracks (up to 1/32 inch x 9 inches)	2	3		Feet
☑ **331**	Delamination/Spall	(combined with other notes 2023) 2 - spalls with exposed reinforcing in traffic face up to 1 foot x 3 inch x 1 inch deep, 8 feet from bent 2.	1			Feet

General Comments

Span 2 — Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	66	64	0	2	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Delamination/Spall	(2) spalls up to 9 inch x 2 inch x 1 inch deep with exposed reinforcing, outside face, near bent 2	3	2	2	Feet

General Comments

Span 2 — Near Bearing 1

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	1	0	0	0	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**313**	Connection	(PAR) stacked plates, laterally misaligned (up to 1/2 inch) in relation to sole plate; no anchor bolts installed through beam or into cap	3	1	1	Each
☑	**515**	Effectiveness (Steel Protective Coatings)	(not found 2023) limited effectiveness of protective coating	1			Square Feet

General Comments

Span 2 — Far Bearing 1

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**311**	Connection	(PAR) stacked plates, laterally misaligned (up to 1/2 inch) in relation to sole plate; no anchor bolts installed through beam and masonry plate anchor bolts too long with disengaged nuts	3	1	1	Each
☑	**311**	Corrosion	surface rust.	2			Each
☑	**515**	Effectiveness (Steel Protective Coatings)	limited effectiveness of protective coating	3	1	1	Square Feet

General Comments

Span 2 — Near Bearing 2

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**313**	Corrosion	pack rust.	3	1	1	Each
☑	**515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 2 — Far Bearing 2

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Connection	(PAR) along east face, between sole plate and bottom flange, broken weld; right anchor bolt nut backed off	3	1	1	Each
☑ **311**	Corrosion	freckled rust.	2			Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 2 — Near Bearing 3

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	freckled rust.	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 2 — Far Bearing 3

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	freckled rust.	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 2 — Near Bearing 4

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**313**	Corrosion	pack rust.	3	1	1	Each
☑	**515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 2 — Far Bearing 4

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**311**	Corrosion	surface rust/pack rust.	3	1	1	Each
☑	**515**	Effectiveness (Steel Protective Coatings)	surface rust/pack rust	4	1	1	Square Feet

General Comments

Span 2 — Near Bearing 5

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**313**	Corrosion	pack rust.	3	1	1	Each
☑	**515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 2 — Far Bearing 5

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**311**	Corrosion	freckled rust.	2	1		Each

☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet	

General Comments

Span 2 — Wearing Surface

Asphalt Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
510	Wearing Surface	1,712	1,712	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **510**	Crack (Wearing Surface)	2023 repaved, previously noted as: alligator cracking near midspan in southbound lane.	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: 6 inch diameter full depth pothole, center of Southbound lane 10 feet past bent 1	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: extensive repair patches, in both lanes, from bent 1 to midspan.	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: previously noted as: 2 - repair patches, Southbound lane up to 15 feet from bent 2	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: repair patch, 5 feet x 2.5 feet from centerline to edge of southbound lane, 15 feet from bent 1.	1			Square Feet

General Comments

Span 3 — Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	2,266	1,844	22	400	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **12**	Efflorescence/Rust Staining	(PAR) throughout underside of deck, in all bays, transverse cracks (up to 1/32 inch x full width) and areas of map cracks (hairline) with efflorescence buildup and rust stains	3	400	400	Square Feet
☑ **12**	Cracking (RC and Other)	both overhangs, transverse cracks (up to 1/32 inch x full height), some with efflorescence at random	2	20	20	Square Feet
☑ **12**	Delamination/Spall	[PAR] 19 inch x 16 inch area of delamination on underside of deck in bay 1, over left shoulder	2	2	2	Square Feet
☑ **12**	Delamination/Spall	(2023 defect moved to span 3 beam 1) 2.5 feet x 6 inch x 3 inch deep spall with exposed reinforcement in end diaphragm at bent 3 bay 1	1			Square Feet

General Comments

Span 3 — Expansion Joint at Bent 2

Standard Joint

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
301	Pourable Joint Seal	34	27	0	0	7	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

☑ **301**	Seal Damage	both sidewalks, seal damaged/missing	4	7	7	Feet
☑ **301**	Seal Cracking	(2023 joint is asphaltic plug joint) joint has been patched since last inpection	1			Feet

General Comments

Span 3 Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	26	35	0	5	Feet
515	Steel Protective Coating	646	611	0	35	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 14 inch x 4 inch) with corrosion reinitiated	4	1	1	Feet
☑ **107**	Corrosion	(PAR) at bent 3, painted over section loss: web adjacent to diaphragm (5/16 inch average remaining x 9 inch x 2 inch); lower web (3/8 inch average remaining x 4 feet x 4 inch) with corrosion reinitiated	4	4	4	Feet
☑ **107**	Damage	at bent 3, bay 1 end diaphragm, spall (1.5 feet x 6 inch x 2 inch deep) with exposed rusted rebar	3			Feet
☑ **107**	Corrosion	along the length of the beam, along edges of top flange, surface rust at random	2	33		Feet
☑ **107**	Damage	over both travel lanes, along underside of cover plate, impact damage	2			Feet
☑ **107**	Distortion	over both travel lanes, along underside of cover plate, impact scrapes with surface gouges	2	2		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	limited effectiveness of protective coating on flanges and web, at random.	3	35	35	Square Feet

General Comments

Span 3 Beam 2

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	60	4	1	1	Feet
515	Steel Protective Coating	646	645	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 3, web adjacent to diaphragm, painted over section loss (7/16 inch average remaining x 4 inch x 1 inch)	4	1	1	Feet
☑ **107**	Corrosion	at bent 2, web adjacent to diaphragm, painted over section loss (7/16 inch average remaining x 10 inch x 1 inch) with corrosion reinitiated	3	1	1	Feet
☑ **107**	Damage	at bent 3, bay 2 end diaphragm, spall (1 feet x 6 inch x 2 inch deep) with exposed rusted rebar	3			Feet
☑ **107**	Damage	20 feet from bent 3, bottom flange, impact damage	2			Feet
☑ **107**	Distortion	scrape marks along bottom flange of beam, 20 feet from bent 3.	2	4		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	at bent 2, web adjacent to diaphragm, surface rust	3	1	1	Square Feet

General Comments

Span 3 Beam 3

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	56	8	0	2	Feet
515	Steel Protective Coating	646	640	0	6	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 10 inch x 1 inch) with corrosion reinitiated	4	1	1	Feet
☑ **107**	Corrosion	(PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1 inch)	4	1	1	Feet
☑ **107**	Damage	at bent 3, bay 3 end diaphragm, spalls (up to 3 feet x 6 inch x 2 inch deep) with exposed rusted rebar	3			Feet
☑ **107**	Corrosion	along the length of the beam, near bent 3, along edges of top flange, surface rust at random	2	5		Feet
☑ **107**	Damage	over right travel lane, along bottom flange at cover plate, impact damage	2			Feet
☑ **107**	Distortion	over right travel lane, along bottom flange at cover plate, impact scrapes with surface gouges	2	3		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	6	6	Square Feet

General Comments

Span 3 Beam 4

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	61	3	0	2	Feet
515	Steel Protective Coating	646	642	0	4	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 9 inch x 5 inch) with corrosion reinitiated	4	1	1	Feet
☑ **107**	Corrosion	(PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 5 inch x 1 inch)	4	1	1	Feet
☑ **107**	Corrosion	along the length of the beam, near bent 3, along edges of top flange, surface rust at random	2	3		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	4	4	Square Feet

General Comments

Span 3 Beam 5

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	66	37	26	0	3	Feet
515	Steel Protective Coating	646	618	0	28	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 2, painted over section loss: web adjacent to diaphragm (3/8 inch average remaining x 8 inch x 4 inch); lower web (3/8 inch average remaining x 10 inch x 5 inch) with corrosion reinitiated	4	1	1	Feet
☑ **107**	Corrosion	(PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 4 inch x 6 inch); web over bearing, painted over pitting (up to 1/8 inch deep x 18 inch x 10 inch) with corrosion reinitiated	4	2	2	Feet
☑ **107**	Damage	2 - up to 33 inch x 10 inch x 4 inch deep spalls with exposed reinforcing on end diaphragm at both sides of beam, at bents 2 and 3.	3		1	Feet
☑ **107**	Corrosion	along the length of the beam, along edges of top flange, surface rust at random	2	25		Feet
☑ **107**	Damage	over right travel lane, along underside of bottom flange and cover plate, impact damage	2			Feet
☑ **107**	Distortion	over right travel lane, along underside of bottom flange and cover plate, impact scrapes and gouges (approximately 1/2 inch deep)	2	1		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	28	28	Square Feet

General Comments

Span 3 Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	66	55	0	11	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Delamination/Spall	along the length of the rail, spalls (up to 19 inch x 3 inch x 1 inch deep) with exposed rusted rebar	3	11	11	Feet
☑ **331**	Cracking (RC and Other)	(2023 defect moved to deck) thoughout underside adjacent to overhang, multiple areas of hairline map cracking	1			Feet
☑ **331**	Delamination/Spall	(combined with other notes 2023) 5 inch x 2 inch x 2 inch deep spall with exposed reinforcing, in traffic face, 15 feet from bent 3.	1			Feet
☑ **331**	Delamination/Spall	10 inch x 1 inch x 1 inch deep spall with exposed reinforcing, in outside face, 10 feet from bent 2.	1			Feet

General Comments

Span 3 — Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	66	61	5	0	0	Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**331**	Exposed Rebar	5 - spalls with exposed reinforcing up to 1 inch diameter x 1/2 inch deep, in outside face, at base of rail at random.	2	5	5	Feet
☑	**331**	Cracking (RC and Other)	(2023 defect moved to deck) thoughout underside adjacent to overhang, multiple areas of hairline map cracking	1			Feet

General Comments

Span 3 — Near Bearing 1

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**313**	Corrosion	freckled rust.	2	1		Each
☑	**515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 3 — Far Bearing 1

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**311**	Corrosion	surface rust/pack rust.	3	1	1	Each
☑	**515**	Effectiveness (Steel Protective Coatings)	surface rust/pack rust	4	1	1	Square Feet

General Comments

Span 3 — Near Bearing 2

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

☑ **313**	Corrosion	freckled rust.		2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust		2	1	1	Square Feet

General Comments

Span 3 Far Bearing 2

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	pack rust	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 3 Near Bearing 3

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Connection	(PAR) west face, between sole plate and bottom flange, poor quality weld with voids	3	1	1	Each
☑ **313**	Corrosion	freckled rust.	2			Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 3 Far Bearing 3

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	painted over section loss (up to 3/16 inch deep) and pack rust	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 3 Near Bearing 4

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**313**	Corrosion	freckled rust.	2	1		Each
☑	**515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 3 Far Bearing 4

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**311**	Corrosion	freckled rust/pack rust	3	1	1	Each
☑	**515**	Effectiveness (Steel Protective Coatings)	freckled rust/pack rust	4	1	1	Square Feet

General Comments

Span 3 Near Bearing 5

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**313**	Corrosion	freckled rust.	2	1		Each
☑	**515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 3 Far Bearing 5

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**311**	Corrosion	surface rust/pack rust.	3	1	1	Each

☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust/pack rust	4	1	1	Square Feet

General Comments

Span 3 — Wearing Surface

Asphalt Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
510	Wearing Surface	1,712	1,712	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **510**	Crack (Wearing Surface)	2023 repaved, previously noted as: transverse and longitudinal cracking in asphalt wearing surface, at random.	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: 5 repair patches up to 5 feet x 3 feet in both lanes midspan to bent 3.	1			Square Feet

General Comments

Span 4 — Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,805	1,279	323	203	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **12**	Delamination/Spall	(PAR) bay 1, near end bent 1, spall/delamination (15 inch diameter x 1.5 inch deep) with exposed rusted rebar	3	2	2	Square Feet
☑ **12**	Delamination/Spall	(PAR) bay 4, near midspan, spall (10 inch diameter x 1.5 inch deep) with exposed rusted rebar	3	1	1	Square Feet
☑ **12**	Efflorescence/Rust Staining	(PAR) underside of all bays, near bent 3 and end bent 2, transverse cracks (up to 1/32 inch x full width) and map cracks (hairline) with efflorescence buildup and some rust stains at random	3	200	200	Square Feet
☑ **12**	Cracking (RC and Other)	throughout underside of deck, map cracks (hairline) at random	2	300	300	Square Feet
☑ **12**	Cracking (RC and Other)	underside of both overhangs, transverse cracks up to 1/32 inch wide x full width, intermittent length of span	2	20	20	Square Feet
☑ **12**	Exposed Rebar	(PAR) 3 - spalls with exposed reinforcing up to 1 inch diameter x 1/2 inch deep, underside of left overhang, intermittent length of span.	2	3	3	Square Feet
☑ **12**	Cracking (RC and Other)	(2023 defect moved to span 4 beam 1) 1/16 inch wide transverse crack in end diaphragm at bent 3 bay 1	1			Square Feet

General Comments

Span 4 — Expansion Joint at Bent 3

Standard Joint

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
301	Pourable Joint Seal	34	27	0	0	7	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **301**	Seal Damage	both sidewalks, seal damaged/missing	4	7	7	Feet

General Comments

Span 4 Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	39	11	0	2	Feet
515	Steel Protective Coating	507	494	0	13	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 6 inch x 4 inch); painted over pitting, lower web (up to 1/8 inch deep x 2 feet x 4 inch) with corrosion reinitiated	4	2	2	Feet
☑ **107**	Damage	at bent 3, bay 1 end diaphragm, spall (2 feet x 10 inch x 2 inch deep) with exposed rusted rebar	3			Feet
☑ **107**	Corrosion	near bent 3 and end bent 2, both flanges and web, surface rust at random	2	11		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	13	13	Square Feet

General Comments

Span 4 Beam 2

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	45	6	0	1	Feet
515	Steel Protective Coating	507	501	0	6	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 10 inch x 1 inch)	4	1	1	Feet
☑ **107**	Corrosion	near end bent 2, edges of top flange, surface rust at random	2	6		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	near end bent 2, edges of top flange, surface rust at random	3	6	6	Square Feet

General Comments

Span 4 Beam 3

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	39	12	0	1	Feet
515	Steel Protective Coating	507	494	0	13	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 8 inch x 1 inch) with corrosion reinitiated	4	1	1	Feet
☑ **107**	Corrosion	near bent 3 and end bent 2, edges of top flange, surface rust at random	2	12		Feet

☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	13	13	Square Feet

General Comments

Span 4 Beam 4

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	40	11	0	1	Feet
515	Steel Protective Coating	507	496	0	11	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1.5 inch)	4	1	1	Feet
☑ **107**	Damage	at bent 3, bay 4 end diaphragm, spall/delamination (18 inch x 6 inch x 1.5 inch deep) with exposed rusted rebar	3			Feet
☑ **107**	Corrosion	near bent 3 and end bent 2, edges of both flanges, surface rust at random	2	11		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	near bent 3 and end bent 2, edges of both flanges, surface rust at random	3	11	11	Square Feet

General Comments

Span 4 Beam 5

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	52	31	18	0	3	Feet
515	Steel Protective Coating	507	486	0	21	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	(PAR) at bent 3, painted over section loss: web adjacent to diaphragm (1/4 inch average remaining x 10 inch x 4 inch); lower web (3/8 inch average remaining x 2.5 feet x 4 inches) with corrosion reinitiated	4	3	3	Feet
☑ **107**	Corrosion	surface rust along edge of top flange, on west side, and along east face of web, at random.	2	18		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	limited effectiveness of protective coating along edge of top flange and web, at random.	3	21	21	Square Feet

General Comments

Span 4 Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	53	44	0	9	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Delamination/Spall	along the length of the rail, spalls (up to 12 inch x 2 inch x 1/2 inch deep) with exposed rusted rebar	3	9	9	Feet

☑ **331**	Delamination/Spall	(combined with other notes 2023) 12 inch x 1 inch x 1 inch deep spall with exposed reinforcing, in outside face, near midspan.	1		Feet
☑ **331**	Delamination/Spall	(combined with other notes 2023) 12 inch x 2 inch x 1/2 inch deep and 8 inch x 1 inch x 1/2 inch deep spalls with exposed reinforcing, in traffic face, 5 feet from end bent 2.	1		Feet

General Comments

Span 4 — Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	53	44	0	9	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Delamination/Spall	4 inch x 4 inch x 1.5 inch deep spall, in traffic face, at bent 3.	3	1	1	Feet
☑ **331**	Delamination/Spall	along the length of the rail, spalls (up to 12 inch x 2 inch x 1/2 inch deep) with exposed rusted rebar	3	8	8	Feet
☑ **331**	Delamination/Spall	(combined with other notes 2023) 2 - spalls with exposed reinforcing up to 2 inch x 2 inch x 1/2 inch deep, in traffic face, 15 feet from bent 3.	1			Feet

General Comments

Span 4 — Near Bearing 1

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	painted over section loss (up to 3/16 inch) and pack rust	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 4 — Far Bearing 1

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	freckled rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 4 — Near Bearing 2

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	pack rust	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 4 — Far Bearing 2

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	freckled rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 4 — Near Bearing 3

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	pack rust	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 4 — Far Bearing 3

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	freckled rust	2	1		Each

☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 4 — Near Bearing 4

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	painted over section loss (up to 1/8 inch deep) and pack rust	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	pack rust	4	1	1	Square Feet

General Comments

Span 4 — Far Bearing 4

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	freckled rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 4 — Near Bearing 5

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	surface rust/pack rust.	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust/pack rust	4	1	1	Square Feet

General Comments

Span 4 — Far Bearing 5

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	1	0	0	Each
515	Steel Protective Coating	1	0	1	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Corrosion	freckled rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust	2	1	1	Square Feet

General Comments

Span 4 — Wearing Surface

Asphalt Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
510	Wearing Surface	1,363	1,363	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **510**	Crack (Wearing Surface)	2023 repaved, previously noted as: alligator cracking at random.	1			Square Feet
☑ **510**	Crack (Wearing Surface)	2023 repaved, previously noted as: transverse crack up to 1/4 inch wide at end bent 2.	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: 60 square foot of potholes and patches, near centerline, near bent 3.	1			Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	2023 repaved, previously noted as: repair patches in both lanes up to 15 feet x 5 feet, near end bent 2.	1			Square Feet

General Comments

End Bent 1 — Abutment

Reinforced Concrete Abutment

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinforced Concrete Abutment	49	43	5	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **215**	Efflorescence/Rust Staining	(PAR) area of rust staining in bay 1.	3	1	1	Feet
☑ **215**	Delamination/Spall	6 inch x 2 inch delamination with crack up to 1/4 inch wide, left side of beam 3 (similar at all beams).	2	5	5	Feet

General Comments

End Bent 1 — Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	47	36	0	11	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

☑ **234**	Cracking (RC and Other)	under bays 3 and 4 on both faces, delaminations [up to 5.5 feet x up to 16 inch] with cracks [up to 1/16 inch]	3	11	11	Feet	

General Comments

Bent 1 — Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	36	23	13	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **234**	Cracking (RC and Other)	north face, below beam 3, delamination (3 feet x 6 inch) with associated cracks (up to 1/32 inch)	2			Feet
☑ **234**	Cracking (RC and Other)	south face, below bay 1, longitudinal crack (1/32 inch x 15 inches)	2	2		Feet
☑ **234**	Delamination/Spall	at Northeast corner, lower edge, delamination [20 inch x 1 foot]	2	2	2	Feet
☑ **234**	Delamination/Spall	north face, lower edge, below beam 4, delamination (3 feet x 6 inch) with associated cracks (up to 1/32 inch)	2	3	3	Feet
☑ **234**	Delamination/Spall	south face, below beam 3, delamination (6 feet x 1 foot) with associated cracks (up to 1/32 inch)	2	6	6	Feet
☑ **234**	Cracking (RC and Other)	(not found 2023) 2 foot transverse crack up to 1/32 inch wide, under beam 2, on underside of cap.	1			Feet

General Comments

Bent 1 — Pile 2

Reinforced Concrete Column

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
205	Reinforced Concrete Column	1	0	1	0	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **205**	Delamination/Spall	at Northeast corner adjacent to corbel, delamination [8 inch x 13 inch]	2	1	2	Each
☑ **205**	Patched Area	6 foot x 18 inch sound patch at southwest corner, near base of column.	2			Each

General Comments

Bent 2 — Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	36	13	6	17	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **234**	Cracking (RC and Other)	at North face and extending to top face between beam 3 to beam 5, delaminations [up to 6 feet x 1 foot] with associated cracks [up to 1/16 inch]	3	12	12	Feet
☑ **234**	Cracking (RC and Other)	south face, below bay 3, (2) delaminations (up to 5 feet x 15 inch) with associated cracks (up to 1/16 inch)	3		5	Feet

☑ **234**	Delamination/Spall	1 foot x 3 inch x 1/2 inch deep spall with exposed reinforcing [no measurable section loss], underside of east end of overhang.	3	1	1	Feet
☑ **234**	Patched Area	41 inch x 23 inch patch, south face, under beam 3 with cracks up to 1/32 inch, with form bolts left in place	3	4	4	Feet
☑ **234**	Cracking (RC and Other)	2.5 foot x 6 inch delamination with associated cracks up to 1/32 inch wide, south face, under bay 2 at bottom corner	2	3		Feet
☑ **234**	Cracking (RC and Other)	2.5 foot x 6 inch delamination, with associated cracks up to 1/32 inch wide, south face, under bay 1.	2	3		Feet
☑ **234**	Cracking (RC and Other)	south face, below bay 4, longitudinal crack (1/32 inch x 2 feet)	2			Feet
☑ **234**	Delamination/Spall	under bay 3 at North face extending to underside, delamination [31 inch x 6 inch] with associated cracks [up to 1/32 inch]	2		3	Feet
☑ **234**	Patched Area	plate repair (25 inch x 11 inch), at south face, under beam 5.	2			Feet

General Comments

Bent 2 — Pile 1

Reinforced Concrete Column

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
205	Reinforced Concrete Column	1	0	1	0	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **205**	Delamination/Spall	6 inch x 4 inch x 1 inch deep spall, at southwest corner, 8.5 feet above ground.	2		1	Each
☑ **205**	Delamination/Spall	7 inch x 4 inch x 1 inch deep spall, at southwest corner, 1 feet above ground.	2	1	1	Each

General Comments

Bent 2 — Pile 2

Reinforced Concrete Column

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
205	Reinforced Concrete Column	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **205**	Delamination/Spall	2 - spalls up to 15 inch x 6 inch x 1.5 inch deep [no exposed rusted reinforcing] south face, at corbel near top of column.	3	1	2	Each

General Comments

End Bent 2 — Abutment

Reinforced Concrete Abutment

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinforced Concrete Abutment	49	31	17	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

☑ **215**	Efflorescence/Rust Staining	(PAR) top of abutment, in bay 3, rust stains	3	1	1	Feet
☑ **215**	Cracking (RC and Other)	along the length of the abutment, vertical cracks (up to 1/32 inch x 1 foot) and areas of map cracks (hairline) at random	2	12		Feet
☑ **215**	Delamination/Spall	delamination up to 6 inch x 8 inch, east side of beam 3 (typical at all beams at end bent 2).	2	5	5	Feet

General Comments

End Bent 2 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	47	43	0	4	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **234**	Cracking (RC and Other)	4 foot x 8 inch delamination with associated cracks up to 1/16 inch, face of cap, under beam 5.	3	4	4	Feet

General Comments

Bent 3 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	36	12	0	24	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **234**	Delamination/Spall	1 foot x 1 foot x 2.5 inch spall with exposed primary reinforcing, west end of south corner	3	1	1	Feet
☑ **234**	Delamination/Spall	2 foot x 15 inch x 1 inch deep spall with exposed reinforcing, south face, above column 1	3	3	3	Feet
☑ **234**	Delamination/Spall	south and north faces, below bays 2-4, delaminations/spalls (up to 10 feet x 2 feet x 1 inch deep) with associated cracks (up to 1/4 inch)	3	20	20	Feet
☑ **234**	Cracking (RC and Other)	(combined with other notes 2023) 5 feet of transverse cracks up to 3/8 inch wide, in top of cap, under bay 1.	1			Feet
☑ **234**	Delamination/Spall	(combined with other notes 2023) at top and bottom Northeast corner, delamination [12 inch x 12 inch]	1			Feet
☑ **234**	Delamination/Spall	(combined with other notes 2023) bay 4 at North face and top face, delamination [6 feet x 19 inches]	1			Feet

General Comments

Elements Verfied

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1805
Span 1	Beam 1	Plate Girder	Steel Open Girder/Beam	52
Span 1	Beam 2	Plate Girder	Steel Open Girder/Beam	52
Span 1	Beam 3	Plate Girder	Steel Open Girder/Beam	52
Span 1	Beam 4	Plate Girder	Steel Open Girder/Beam	52
Span 1	Beam 5	Plate Girder	Steel Open Girder/Beam	52
Span 1	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	53
Span 1	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	53
Span 1	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1363
Span 1	Near Bearing 1	Fixed Bearing	Fixed Bearing	1
Span 1	Far Bearing 1	Movable Bearing	Movable Bearing	1
Span 1	Far Bearing 2	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing 2	Fixed Bearing	Fixed Bearing	1
Span 1	Near Bearing 3	Fixed Bearing	Fixed Bearing	1
Span 1	Far Bearing 3	Movable Bearing	Movable Bearing	1
Span 1	Far Bearing 4	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing 4	Fixed Bearing	Fixed Bearing	1
Span 1	Near Bearing 5	Fixed Bearing	Fixed Bearing	1
Span 1	Far Bearing 5	Movable Bearing	Movable Bearing	1
Span 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	2269
Span 2	Beam 1	Plate Girder	Steel Open Girder/Beam	66
Span 2	Beam 2	Plate Girder	Steel Open Girder/Beam	66
Span 2	Beam 3	Plate Girder	Steel Open Girder/Beam	66
Span 2	Beam 4	Plate Girder	Steel Open Girder/Beam	66
Span 2	Beam 5	Plate Girder	Steel Open Girder/Beam	66
Span 2	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	66
Span 2	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	66
Span 2	Expansion Joint at Bent 1	Standard Joint	Pourable Joint Seal	34
Span 2	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1712
Span 2	Far Bearing 1	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing 1	Fixed Bearing	Fixed Bearing	1
Span 2	Near Bearing 2	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing 2	Movable Bearing	Movable Bearing	1
Span 2	Far Bearing 3	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing 3	Fixed Bearing	Fixed Bearing	1
Span 2	Near Bearing 4	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing 4	Movable Bearing	Movable Bearing	1
Span 2	Far Bearing 5	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing 5	Fixed Bearing	Fixed Bearing	1
Span 3	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	2266
Span 3	Beam 1	Plate Girder	Steel Open Girder/Beam	66
Span 3	Beam 2	Plate Girder	Steel Open Girder/Beam	66
Span 3	Beam 3	Plate Girder	Steel Open Girder/Beam	66
Span 3	Beam 4	Plate Girder	Steel Open Girder/Beam	66
Span 3	Beam 5	Plate Girder	Steel Open Girder/Beam	66

Elements Verfied

Location	Name	Component	Element Name	Amount
Span 3	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	66
Span 3	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	66
Span 3	Expansion Joint at Bent 2	Standard Joint	Pourable Joint Seal	34
Span 3	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1712
Span 3	Near Bearing 1	Fixed Bearing	Fixed Bearing	1
Span 3	Far Bearing 1	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing 2	Movable Bearing	Movable Bearing	1
Span 3	Near Bearing 2	Fixed Bearing	Fixed Bearing	1
Span 3	Near Bearing 3	Fixed Bearing	Fixed Bearing	1
Span 3	Far Bearing 3	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing 4	Movable Bearing	Movable Bearing	1
Span 3	Near Bearing 4	Fixed Bearing	Fixed Bearing	1
Span 3	Near Bearing 5	Fixed Bearing	Fixed Bearing	1
Span 3	Far Bearing 5	Movable Bearing	Movable Bearing	1
Span 4	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1805
Span 4	Beam 1	Plate Girder	Steel Open Girder/Beam	52
Span 4	Beam 2	Plate Girder	Steel Open Girder/Beam	52
Span 4	Beam 3	Plate Girder	Steel Open Girder/Beam	52
Span 4	Beam 4	Plate Girder	Steel Open Girder/Beam	52
Span 4	Beam 5	Plate Girder	Steel Open Girder/Beam	52
Span 4	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	53
Span 4	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	53
Span 4	Expansion Joint at Bent 3	Standard Joint	Pourable Joint Seal	34
Span 4	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1363
Span 4	Far Bearing 1	Fixed Bearing	Fixed Bearing	1
Span 4	Near Bearing 1	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing 2	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing 2	Fixed Bearing	Fixed Bearing	1
Span 4	Far Bearing 3	Fixed Bearing	Fixed Bearing	1
Span 4	Near Bearing 3	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing 4	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing 4	Fixed Bearing	Fixed Bearing	1
Span 4	Far Bearing 5	Fixed Bearing	Fixed Bearing	1
Span 4	Near Bearing 5	Movable Bearing	Movable Bearing	1
Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
Bent 1	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 2	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 3	Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	47
End Bent 1	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	49
Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
Bent 2	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 2	Pile 2	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 2	Pile 3	Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	47

Elements Verfied

Location	Name	Component	Element Name	Amount
End Bent 2	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	49
Bent 3	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
Bent 3	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 3	Pile 2	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 3	Pile 3	Reinforced Concrete Column	Reinforced Concrete Column	1

General Inspection Notes

National Bridge and NC Inspection Items

Structure Number: 110171 **Inspection Date:** 10/04/2023

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	**5**
Item 59: Superstructure	0 - 9 , N	**6**
Item 60: Substructure	0 - 9 , N	**6**
Item 61: Channel and Channel Protection	0 - 9 , N	**N**
Item 62: Culvert	0 - 9 , N	**N**
Item 71: Waterway Adequacy	0 - 9 , N	**N**
Item 72: Approach Roadway Alignment	0 - 9 , N	**8**

Note:

Items 58,59,60,62 reflect this inspection only.

For overall NBI coding grade, see cover sheet.

Note: If NBI Inspection Item is not present, code NBI item with "N"

NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	**G**	**0**	**3376**
Drainage System	G, F, P, or C	**G**	**0**	**3332**
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C	**F**	**400**	**3352**
Scour	G, F, P, or C			
Wingwall	G, F, P, or C	**G**	**0**	**3350**
Field Scour Evaluation				
Drift	G, F, P, or C		**0**	**3366**
Fender System	G, F, P, or C		**0**	**3364**
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	**G**		
Superstructure Paint Code		**I**		

Note: If NC SMU Insepction Item is not present, leave NC SMU item blank

Inspection Information

Item	Grade Scale	Grade
Sign Noticed Issued	YES/NO	**N**
Priority Maintenance Request Submitted	YES/NO	**Y**
Inspection Time	Hours	**10**
Traffic Control Time	Hours	
Snooper Time	Hours	
Ladder Used	YES/NO	**Y**
Bucket Truck Used	YES/NO	**N**
Boat Used	YES/NO	**N**
Other Equipment Used	YES/NO	**N**
Portion of Structure in > 3' of water	YES/NO	**N**

National Bridge and NC SMU Inspection Item Details

Structure Number: 110171 **Inspection Date:** 10/04/2023

Item Slope Protection **Grade** F **Maint Code** 3352 **Qty.** 400

Details end bent 2 slope protection, at east end, section settled/shifted to the east (up to 1.5 inch) with adjacent transverse crack (up to 1 inch wide x 6 feet)
end bent 1 slope protection, west end, tree growing between sections; section settled/shifted to the west (up to 1 inch)

Item General Comments and Misc Items **Grade** **Maint Code** **Qty.** 0

Details (PAR) southeast guardrail transition, impact damage (7 feet) with (1) decayed post
(PAR) southeast guardrail attachment, improper lap
(PAR) northeast guardrail termination, impact damage (1 foot)
(PAR) northwest guardrail, impact damage (38 feet)
(PAR) northwest guardrail attachment, improper lap
(PAR) southwest guardrail, areas of impact damage (25 feet total)
south and north approach asphalt, repaved since previous inspection
(PAR) southwest guardrail transition, (1) decayed post

(PAR) southeast guardrail transition, impact damage (7 feet) with (1) decayed post

(PAR) southeast guardrail transition, impact damage (7 feet) with (1) decayed post

(PAR) southeast guardrail attachment, improper lap

(PAR) northeast guardrail termination, impact damage (1 foot)

(PAR) northwest guardrail, impact damage (38 feet)

(PAR) northwest guardrail attachment, improper lap

(PAR) southwest guardrail, areas of impact damage (25 feet total)

Span 2 Expansion Joint at Bent 1: both sidewalks, seal damaged/missing

Span 1 Right Bridge Rail: 16 - spalls with exposed reinforcing up to 2 inch x 1 inch x 1/2 inch deep, in outside face, at random.

Span 4 Right Bridge Rail: 4 inch x 4 inch x 1.5 inch deep spall, in traffic face, at bent 3.

Span 4 Left Bridge Rail: along the length of the rail, spalls (up to 12 inch x 2 inch x 1/2 inch deep) with exposed rusted rebar

Span 2 Left Bridge Rail: 20 feet from bent 1, diagonal crack (1/8 inch wide) with edge spall (4 inch x 1 inch x 1 inch deep)

Span 2 Left Bridge Rail: near bent 1, vertical cracks (up to 1/32 inch x 9 inches)

End Bent 2 Abutment: delamination up to 6 inch x 8 inch, east side of beam 3 (typical at all beams at end bent 2).

End Bent 2 Abutment: along the length of the abutment, vertical cracks (up to 1/32 inch x 1 foot) and areas of map cracks (hairline) at random

End Bent 2 Cap 1: 4 foot x 8 inch delamination with associated cracks up to 1/16 inch, face of cap, under beam 5.

End Bent 2 Abutment: (PAR) top of abutment, in bay 3, rust stains

Span 4 Beam 1 - Far Bearing 1: freckled rust

Span 4 Beam 1: near bent 3 and end bent 2, both flanges and web, surface rust at random

Span 4 Beam 5: surface rust along edge of top flange, on west side, and along east face of web, at random.

Span 4 Beam 1: at bent 3, bay 1 end diaphragm, spall (2 feet x 10 inch x 2 inch deep) with exposed rusted rebar

Span 4 Deck: (PAR) underside of all bays, near bent 3 and end bent 2, transverse cracks (up to 1/32 inch x full width) and map cracks (hairline) with efflorescence buildup and some rust stains at random

Span 4 Deck: underside of both overhangs, transverse cracks up to 1/32 inch wide x full width, intermittent length of span

Span 4 Deck: (PAR) bay 1, near end bent 1, spall/delamination (15 inch diameter x 1.5 inch deep) with exposed rusted rebar

Span 4 Deck: throughout underside of deck, map cracks (hairline) at random

end bent 2 slope protection, at east end, section settled/shifted to the east (up to 1.5 inch) with adjacent transverse crack (up to 1 inch wide x 6 feet)

Span 4 Deck: (PAR) 3 - spalls with exposed reinforcing up to 1 inch diameter x 1/2 inch deep, underside of left overhang, intermittent length of span.

(PAR) southwest guardrail transition, (1) decayed post

end bent 1 slope protection, west end, tree growing between sections; section settled/shifted to the west (up to 1 inch)

End Bent 1 Abutment: 6 inch x 2 inch delamination with crack up to 1/4 inch wide, left side of beam 3 (similar at all beams).

End Bent 1 Abutment: (PAR) area of rust staining in bay 1.

End Bent 1 Cap 1: under bays 3 and 4 on both faces, delaminations [up to 5.5 feet x up to 16 inch] with cracks [up to 1/16 inch]

End Bent 1 Cap 1: under bays 3 and 4 on both faces, delaminations [up to 5.5 feet x up to 16 inch] with cracks [up to 1/16 inch]

Span 1 Beam 3 - Near Bearing 3: surface rust

Span 1 Beam 4 - Near Bearing 4: surface rust/rust scale

Span 1 Beam 1: inside face of web, previous grinding (up to 1/16 inch deep); areas painted

Span 1 Beam 1: inside face of web, previous grinding (up to 1/16 inch deep); areas painted

Span 1 Beam 3: near end bent 1 and bent 1, both flanges and web, surface rust at random

Span 1 Deck: (PAR) both overhangs, delaminations/spalls (up to 4 inch diameter x 1/2 inch deep) with exposed rusted rebar at random

Span 1 Deck: (PAR) underside of all bays, transverse and map cracks (up to 1/32 inch) with efflorescence buildup and some rust stains at random

Span 1 Deck: (PAR) underside of all bays, transverse and map cracks (up to 1/32 inch) with effloresence buildup and some rust stains at random

Span 1 Deck: (PAR) underside of all bays, transverse and map cracks (up to 1/32 inch) with effloresence buildup and some rust stains at random

Span 1 Beam 1: 15 inch x 6 inch x 2 inch deep spall with exposed reinforcing in end diaphragm overhang, west side, at bent 1.

Span 1 Beam 1: bent 1 end diaphragm at bent 1, patched area (4.5 foot x 1 foot) with hairline cracks with efflorescence; adjacent to beam 2, delamination (1 foot x 6 inch)

Span 4 Deck: (PAR) bay 4, near midspan, spall (10 inch diameter x 1.5 inch deep) with exposed rusted rebar

Span 4 Deck: (PAR) underside of all bays, near bent 3 and end bent 2, transverse cracks (up to 1/32 inch x full width) and map cracks (hairline) with efflorescence buildup and some rust stains at random

Span 4 Deck: (PAR) underside of all bays, near bent 3 and end bent 2, transverse cracks (up to 1/32 inch x full width) and map cracks (hairline) with efflorescence buildup and some rust stains at random

Span 4 Beam 5: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm (1/4 inch average remaining x 10 inch x 4 inch); lower web (3/8 inch average remaining x 2.5 feet x 4 inches with corrosion reinitiated

Span 4 Beam 5 - Near Bearing 5: surface rust/pack rust.

Span 3 Beam 5: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 4 inch x 6 inch); web over bearing, painted over pitting (up to 1/8 inch deep x 18 inch x 10 inch) with corrosion reinitiated

Span 3 Beam 4: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 5 inch x 1 inch)

Span 4 Beam 4: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1.5 inch)

Span 4 Beam 4 - Near Bearing 4: painted over section loss (up to 1/8 inch deep) and pack rust

Span 3 Beam 5: 2 - up to 33 inch x 10 inch x 4 inch deep spalls with exposed reinforcing on end diaphragm at both sides of beam, at bents 2 and 3.

Bent 3 Cap 1: south and north faces, below bays 2-4, delaminations/spalls (up to 10 feet x 2 feet x 1 inch deep) with associated cracks (up to 1/4 inch)

Bent 3 Cap 1: south and north faces, below bays 2-4, delaminations/spalls (up to 10 feet x 2 feet x 1 inch deep) with associated cracks (up to 1/4 inch)

Bent 3 Cap 1: south and north faces, below bays 2-4, delaminations/spalls (up to 10 feet x 2 feet x 1 inch deep) with associated cracks (up to 1/4 inch)

Bent 3 Cap 1: 2 foot x 15 inch x 1 inch deep spall with exposed reinforcing, south face, above column 1

Span 3 Beam 3: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1 inch)

Span 4 Beam 3: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 8 inch x 1 inch) with corrosion reinitiated

Span 4 Beam 2: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 10 inch x 1 inch)

Span 3 Beam 2: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (7/16 inch average remaining x 4 inch x 1 inch)

Span 3 Beam 1: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm (5/16 inch average remaining x 9 inch x 2 inch); lower web (3/8 inch average remaining x 4 feet x 4 inch) with corrosion reinitiated

Span 4 Beam 1: (PAR) at bent 3, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 6 inch x 4 inch); painted over pitting, lower web (up to 1/8 inch deep x 2 feet x 4 inch) with corrosion reinitiated

Span 3 Beam 3: at bent 3, bay 3 end diaphragm, spalls (up to 3 feet x 6 inch x 2 inch deep) with exposed rusted rebar

Span 3 Deck: (PAR) throughout underside of deck, in all bays, transverse cracks (up to 1/32 inch x full width) and areas of map cracks (hairline) with efflorescence buildup and rust stains

Span 3 Deck: (PAR) throughout underside of deck, in all bays, transverse cracks (up to 1/32 inch x full width) and areas of map cracks (hairline) with efflorescence buildup and rust stains

Span 3 Beam 1: over both travel lanes, along underside of cover plate, impact scrapes with surface gouges

Span 3 Beam 1: along the length of the beam, along edges of top flange, surface rust at random

Span 3 Beam 3: over right travel lane, along bottom flange at cover plate, impact scrapes with surface gouges

Span 3 Beam 5: over right travel lane, along underside of bottom flange and cover plate, impact scrapes and gouges (approximately 1/2 inch deep)

Span 3 Beam 5: along the length of the beam, along edges of top flange, at random

Span 1 Beam 1: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 9 inch x 2 inch) with corrosion reinitiated

Span 2 Beam 1 - Near Bearing 1: (PAR) stacked plates, laterally misaligned (up to 1/2 inch) in relation to sole plate; no anchor bolts installed through beam or into cap

Span 2 Beam 2: at bent 1, web adjacent to diaphragm, painted over section loss (7/16 inch average remaining x 9 inch x 1 inch)

Span 1 Beam 2: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (1/4 inch average remaining x 10 inch x 2 inch)

Span 1 Beam 2 - Far Bearing 2: pack rust.

Bent 1 Cap 1: south face, below bay 1, longitudinal crack (1/32 inch x 15 inches)

Bent 1 Cap 1: south face, below beam 3, delamination (6 feet x 1 foot) with associated cracks (up to 1/32 inch)

Span 1 Beam 2: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (1/4 inch average remaining x 10 inch x 2 inch)

Span 2 Beam 2: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 9 inch x 1 inch)

Span 2 Beam 3: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 6 inch x 1 inch); lower web, painted over pitting (up to 1/8 inch deep x 14 inch x 3 inch) with corrosion reinitiated

Span 1 Beam 3: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 10 inch x 1 inch) with adjacent painted over pitting (up to 1/8 inch deep x 2 inch x 3 inch) with corrosion reinitiated

Span 1 Beam 3 - Far Bearing 3: painted over section loss (up to 3/16 inch deep) and pack rust

Span 2 Beam 3: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 6 inch x 1 inch); lower web, painted over pitting (up to 1/8 inch deep x 14 inch x 3 inch) with corrosion reinitiated

Span 1 Beam 4: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 7 inch x 1 inch) with corrosion reinitiated

Span 1 Beam 5: (PAR) at bent 1, web adjacent to diaphragm, painted over section loss (5/16 inch average remaining x 9 inch x up to 2 feet) with corrosion reinitiated; top flange, rust scale

Bent 1 Cap 1: (not found 2023) 2 foot transverse crack up to 1/32 inch wide, under beam 2, on underside of cap.

Bent 1 Cap 1: north face, below beam 3, delamination (3 feet x 6 inch) with associated cracks (up to 1/32 inch)

Bent 1 Pile 2: 6 foot x 18 inch sound patch at southwest corner, near base of column.

Bent 1 Cap 1: at Northeast corner, lower edge, delamination [20 inch x 1 foot]

Bent 1 Pile 2: at Northeast corner adjacent to corbel, delamination [8 inch x 13 inch]

Span 2 Beam 1: end diaphragm on both sides has been removed with exposed rusted rebar, at both ends, when beam was replaced.

Span 2 Beam 1: surface rust at edges of top and bottom flange, at random, along beam.

Span 2 Beam 1: impact scrapes on bottom flange with gouges up to 1/8 inch deep, 20 feet from bent 1.

Span 2 Beam 2: (PAR) over both travel lanes, underside of bottom flange and cover plate, impact scrapes with gouges (up to 1/2 inch deep); over right travel lane, bottom flange and cover plate, distorted (up to 1 inch upwards x approximately 1.5 feet); no apparent distress to cover plate welds

Span 2 Beam 2: (PAR) over both travel lanes, underside of bottom flange and cover plate, impact scrapes with gouges (up to 1/2 inch deep); over right travel lane, bottom flange and cover plate, distorted (up to 1 inch upwards x approximately 1.5 feet); no apparent distress to cover plate welds

Span 2 Beam 3: over right travel lane, underside of bottom flange and cover plate, impact scrapes with surface gouges; left edge of bottom flange, distorted upwards (approximately 1/4 inch x 8 inches)

Span 2 Beam 4: over right travel lane, bottom flange and cover plate, impact scrapes with surface gouges

Span 2 Deck: (PAR) 8 - spalls with exposed reinforcing up to 2 inch diameter x 1/2 inch deep, underside of right overhang, at random.

Span 2 Deck: (PAR) throughout underside of deck, in all bays, transverse cracks (up to 1/32 inch x full width) and areas of map cracks (hairline) with efflorescence buildup and some rust stains

Span 2 Deck: (PAR) throughout underside of deck, in all bays, transverse cracks (up to 1/32 inch x full width) and areas of map cracks (hairline) with efflorescence buildup and some rust stains

Bent 2 Pile 1: 6 inch x 4 inch x 1 inch deep spall, at southwest corner, 8.5 feet above ground.

Bent 2 Pile 2: 2 - spalls up to 15 inch x 6 inch x 1.5 inch deep [no exposed rusted reinforcing] south face, at corbel near top of column.

Bent 2 Cap 1: 1 foot x 3 inch x 1/2 inch deep spall with exposed reinforcing [no measurable section loss], underside of east end of overhang.

Bent 2 Cap 1: at North face and extending to top face between beam 3 to beam 5, delaminations [up to 6 feet x 1 foot] with associated cracks [up to 1/16 inch]

Bent 2 Cap 1: under bay 3 at North face extending to underside, delamination [31 inch x 6 inch] with associated cracks [up to 1/32 inch]

Bent 2 Cap 1: 2.5 foot x 6 inch delamination, with associated cracks up to 1/32 inch wide, south face, under bay 1.

Span 2 Beam 1: at bent 2, top flange, rust scale

Span 2 Beam 1: end diaphragm on both sides has been removed with exposed rusted rebar, at both ends, when beam was replaced.

Span 2 Beam 1 - Far Bearing 1: (PAR) stacked plates, laterally misaligned (up to 1/2 inch) in relation to sole plate; no anchor bolts installed through beam and masonry plate anchor bolts too long with disengaged nuts

Span 3 Beam 1: (PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 14 inch x 4 inch) with corrosion reinitiated

Span 2 Beam 2: at bent 2, web adjacent to diaphragm, painted over section loss (7/16 inch average remaining x 4 inch x 1 inch) with corrosion reinitated; top flange, upper web and bottom flange, rust scale

Span 2 Beam 2 - Far Bearing 2: (PAR) along east face, between sole plate and bottom flange, broken weld; right anchor bolt nut backed off

Span 3 Beam 3 - Near Bearing 3: (PAR) west face, between sole plate and bottom flange, poor quality weld with voids

Span 2 Beam 3: at bent 2, corrosion with section loss: web adjacent to diaphragm (7/16 inch x 10 inch x up to 2 feet); top flange (3/4 inch average remaining x 3 inches)

Bent 2 Cap 1: 41 inch x 23 inch patch, south face, under beam 3 with cracks up to 1/32 inch, with form bolts left in place

Bent 2 Cap 1: south face, below bay 3, (2) delaminations (up to 5 feet x 15 inch) with associated cracks (up to 1/16 inch)

Span 3 Beam 3: (PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 10 inch x 1 inch) with corrosion reinitiated

Span 2 Beam 4 - Far Bearing 4: surface rust/pack rust.

Span 3 Beam 4: (PAR) at bent 2, web adjacent to diaphragm, painted over section loss (3/8 inch average remaining x 9 inch x 5 inch) with corrosion reinitiated

Span 3 Beam 5: (PAR) at bent 2, painted over section loss: web adjacent to diaphragm (3/8 inch average remaining x 8 inch x 4 inch); lower web (3/8 inch average remaining x 10 inch x 5 inch) with corrosion reinitiated

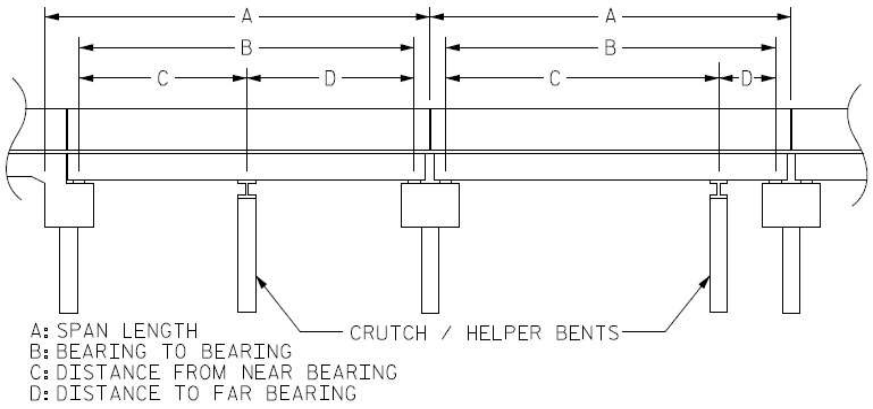
Bent 2 Cap 1: plate repair (25 inch x 11 inch), at south face, under beam 5.

Span 3 Deck: [PAR] 19 inch x 16 inch area of delamination on underside of deck in bay 1, over left shoulder

Structure Data Worksheet

Span Profile

County: **BURKE** Structure Number: **110171**



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	52.420	50.417			
2	65.830	64.583			
3	65.830	64.583			
4	52.420	50.417			

Structure Number: 110171 Span: 2 Route Name: I 40 E

roadway under span 2, looking east (I-40 eastbound)

Route Number: 11000400	**Route Name:** I 40 E			**Reference Feature:** H
Minimum Vertical Clearance 14.680 feet	**Maximum Minimum Vertical Clearance** 14.900 feet			
Total Horizontal Clearance 40.830 feet	**Lateral Clearances: Left:** 14.500 feet **Right** 8.600 feet			
☑ **Base Highway Network**	**LRS Inventory Route, Sub Route Number** 10040			
Milepost: 118.070	**Number of Lanes:** 2	**ADT:** 22500	**Year of ADT:** 2015	**Percentage of Trucks:** 16
☑ **National Highway System**		☐ **STRAHNET Highway Designator**		
Functional Classification 11 Local Principal Arterial - Interstate		**Direction of Traffic:** 1 1 - way traffic		

Structure Number: 110171 Span: 3 Route Name: I 40 W

roadway under span 3, looking west (I-40 westbound)

Route Number: 11000400	**Route Name:** I 40 W			**Reference Feature:** H
Minimum Vertical Clearance 15.167 feet	**Maximum Minimum Vertical Clearance** 15.250 feet			
Total Horizontal Clearance 42.200 feet	**Lateral Clearances: Left:** 13.820 feet **Right** 9.090 feet			
☑ **Base Highway Network**	**LRS Inventory Route, Sub Route Number** 10040			
Milepost: 118.070	**Number of Lanes:** 2	**ADT:** 22500	**Year of ADT:** 2015	**Percentage of Trucks:** 16
☑ **National Highway System**		☐ **STRAHNET Highway Designator**		
Functional Classification 11 Local Principal Arterial - Interstate		**Direction of Traffic:** 1 1 - way traffic		

Bridge Inspection Field Sketch

Roadway	20ft Wide	2 Paved Lanes	Looking North
Left Shoulder	20.5ft Wide	2.5ft Paved	18ft Unpaved
Right Shoulder	11ft Wide	2ft Paved	9ft Unpaved
Left Guardrail			
Right Guardrail			

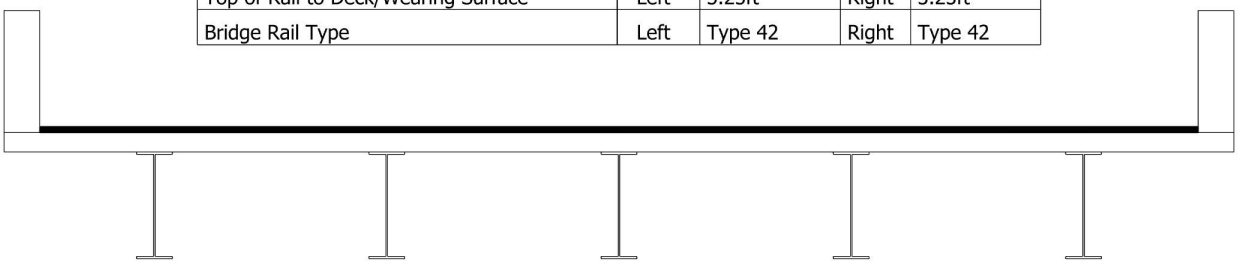
Measurements taken approximately 400 feet from end bent 1

Title	Description
APPROACH ROADWAY	LOOKING NORTH

Structure No:	Drawn By:	Date:	Filename:
110171	ITChapman	10/4/2023	S000918000506.wes

Bridge Inspection Field Sketch

Deck Width/Out to Out	34.417ft	Between Rails			32.25ft
Clear Roadway	26ft	Wearing Surface			2in
Median Width		Median Height			
Curb Height		Left	8in	Right	8in
Sidewalk Width		Left	3.125ft	Right	3.125ft
Clear Roadway (Rail to Median)		Left		Right	
Guardrail Width		Left	13in	Right	13in
Top of Rail to Deck/Wearing Surface		Left	3.25ft	Right	3.25ft
Bridge Rail Type		Left	Type 42	Right	Type 42



Measurements for Span #	1	all spans similar	
Deck Thickness	6.5in	Left Overhang	4.208ft
Top of Rail to Bottom of Beam (Avg)	6.948ft	Right Overhang	4.208ft

Beam #	Beam Type	Width	Height	Spacing	From
1	Plate Girder	12in	35.875in	4.208ft	Left Edge of Deck
2	Plate Girder	12in	35.875in	6.5ft	Beam 1
3	Plate Girder	12in	35.875in	6.5ft	Beam 2
4	Plate Girder	12in	35.875in	6.5ft	Beam 3
5	Plate Girder	12in	35.875in	6.5ft	Beam 4

BEAMS (except span 2 beam 1): 34-1/4" between flanges, 12" wide x 13/16" flange, 1/2" web

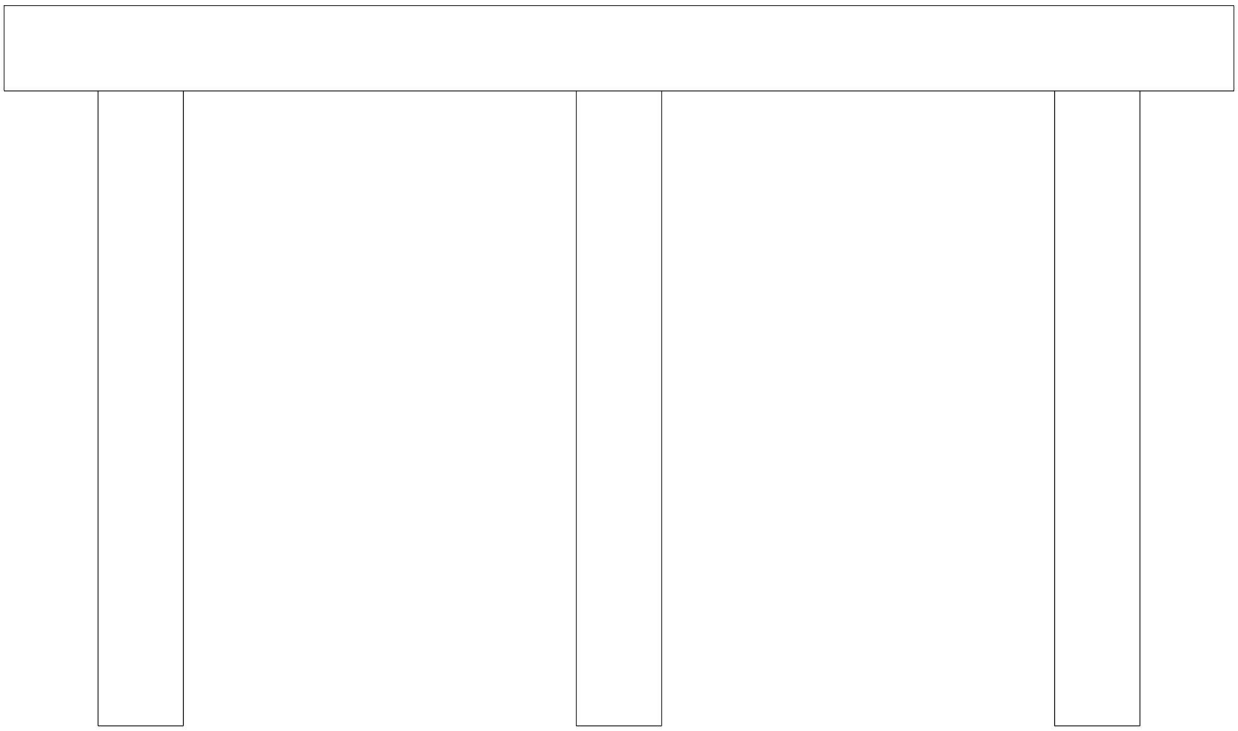
Span 2 Beam 1: 28-1/2" between flanges, 10-1/2" wide x 3/4" flange, 7/16" web

COVER PLATES (spans 2 and 3 except span 2 beam 1): 8" wide x 3/8" thick (could not verify)

Title	Description
TYPICAL SECTION	LOOKING NORTH

Structure No:	Drawn By:	Date:	Filename:
110171	ITChapman	10/4/2023	S000918000507.wes

Bridge Inspection Field Sketch



Caps							
#	Name	Type	Length	Width	Height	Left Beam to End of Cap	Right Beam to End of Cap
1	Cap 1	Reinforced Concrete Pier Cap	36ft	30in	30in	1.2ft	1.2ft

Piles							
#	Name	Type	Spacing	From	Height/Diam.	Width	Length
1	Pile 1	Reinforced Concrete Column	4ft	Left End of Bent	30in	30in	
2	Pile 2	Reinforced Concrete Column	14ft	Pile 1	30in	30in	
3	Pile 3	Reinforced Concrete Column	14ft	Pile 2	30in	30in	

Title	Description
BENTS 1-3	LOOKING NORTH

Structure No: 110171	Drawn By: ITChapman	Date: 10/4/2023	Filename: S000918000508.wes

southeast guardrail termination

southeast guardrail

southwest guardrail

south approach looking north

southeast guardrail transition

bridge ID

southeast guardrail attachment

right bridge rail

left bridge rail

asphalt wearing surface

end bent 1 asphalt

south approach looking south

bent 1 joint

bent 2 joint

roadway looking east

roadway looking west

bent 3 joint

north approach looking north

end bent 2 asphalt

northeast guardrail attachment

northeast guardrail

northeast guardrail termination

northwest guardrail termination

northwest guardrail

north approach looking south

northwest guardrail transition

bridge plaque

northwest guardrail attachment

southwest guardrail attachment

southwest guardrail termination

northwest wingwall

end bent 2

end bent 2 slope protection

end bearing assembly

northeast wingwall

southwest wingwall

end bent 1

end bent 1 slope protection

southeast wingwall

ladder used

superstructure underside

intermediate diaphragm

end diaphragm

bent 2

bent 3

roadway under span 3, looking west (I-40 westbound)

east profile looking west

interior bearing assembly

beams over bent

bent 1

typical bottom flange cover plate end, spans 2 and 3

superstructure underside, span 2; note beam 1 previously replaced

roadway under span 2, looking east (I-40 eastbound)

west profile looking east

interior bearing assembly at bent 1, span 2 beam 1 (bent 2 similar)

beams over bent 1 showing span 2 beam 1 (bent 2 similar)