NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: prompt action request; sketches updated; span 2 clearances updated; new repairs

Structure Safety Report

Routine Element Inspection - Contract

STRUCTURE NUMBER: 110112 **SAP STRUCTURE NO:** 0120112 **FHWA STRUCTURE NO:** 000000000230112

DIVISION: 13 **COUNTY:** BURKE **INSPECTION DATE:** 08/17/2023 **FREQUENCY:** 24 MONTHS

FACILITY CARRIED: SR1142 **MILE POST:**

LOCATION: .45 MI.N.JCT.SR1197

FEATURE INTERSECTED: I40

LATITUDE: 35° 43' 4.59" **LONGITUDE:** 81° 45' 8.89"

SUPERSTRUCTURE: REINFORCED CONCRETE FLOOR ON I-BEAMS

SUBSTRUCTURE: E.BTS:RC CAPS/PPC PILES;INT.BTS:RC P&B/PPC PILE FTGS.

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** 6 / 6 **SUPERSTRUCTURE** 5 / 5 **SUBSTRUCTURE** 5 / 5 **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
Juan Rodriguez		Hector Bonilla

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

11/09/2023

IDENTIFICATION

(1) STATE NAME NORTH CAROLINA BRIDGE **110112**
(8) STRUCTURE NUMBER (FEDERAL) **0230112**
(5) INVENTORY ROUTE (ON/UNDER) ON **31011420**
(2) STATE HIGHWAY DEPARTMENT DISTRICT **13**
(3) COUNTY CODE (FEDERAL) **23** (4) PLACE CODE **44400**
(6) FEATURE INTERSECTED **I40**
(7) FACILITY CARRIED **SR1142**
(9) LOCATION **.45 MI.N.JCT.SR1197**
(11) MILEPOINT **0.0**
(12) BASE HIGHWAY NETWORK **0**
(13) LRS INVENTORY ROUTE & SUBROUTE **0**
(16) LATITUDE **35° 43' 4.59"** (17) LONGITUDE **81° 45' 8.89"**
(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 **8**
(29) AVERAGE DAILY TRAFFIC **13500**
(30) YEAR OF ADT **2019** (109) TRUCK ADT PCT **7**
(19) BYPASS OR DETOUR LENGTH **4.0**

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN **60.0**
(49) STRUCTURE LENGTH **246.0**
(50) CURB OR SIDEWALK: LEFT **1.7** RIGHT **1.7**
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB **28.0**
(52) DECK WIDTH OUT TO OUT **31.5**
(32) APPROACH ROADWAY WITH (W/ SHOULDERS) **28.0**
(33) BRIDGE MEDIAN CODE **6**
(34) SKEW **35** (35) STRUCTURE FLARED **0011**
(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** **8.7**
(56) MIN LAT UNDERCLEARANCE LT: **13.3**

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 **63.74**
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 **6**
(59) SUPERSTRUCTURE **5**
(60) SUBSTRUCTURE **5**
(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-38** **68**
(65) INVENTORY RATING METHOD - **1**
(66) INVENTORY RATING **HS-23** **41**
(70) BRIDGE POSTING **No Posting Required** **5**
(41) STRUCTURE OPEN, POSTED, OR CLOSED **A**
DESCRIPTION **Open, no restriction**

APPRAISAL — CODE

(67) STRUCTURAL EVALUATION **5**
(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 **27,000** YEAR OF FUTURE ADT **2040**

INSPECTION

(90) INSPECTION DATE **08/23** (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 **110112** County **BURKE** Run Date **11/09/2023**

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	9,999.0	99.7	1	10040	11	2	20000	2017	9,999.0	H	9,999.0	9,999	9,999.9			1	☐	☐
2	I 40 E	11000400	15.1	99.7	1	10040	11	2	20000	2017	41.8	H	14.9	8.8	13.4	3		1	☐	☐
3	I 40 W	11000400	14.9	99.7	1	10040	11	2	20000	2017	40.5	H	14.7	8.7	13.3	3		1	☐	☐
3	I-40W	11000400	9,999.0	99.7	1	10040	11	2	20000	2017	9,999.0	H	9,999.0	9,999	9,999.9			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** 61.500 **Skew** 55.000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
1	Asphalt Wearing Surface	Wearing Surface	1722 Square Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1938 Square Feet		
4	Movable Bearing	Movable Bearing	4 Each	Legacy Non Lead Primer System with various Topcoats	4
4	Plate Girder	Steel Open Girder/Beam	244 Feet	Legacy Non Lead Primer System with various Topcoats	2280
4	Fixed Bearing	Fixed Bearing	4 Each	Legacy Non Lead Primer System with various Topcoats	4
2	Concrete Railing	Reinforced Concrete Bridge Railing	124 Feet		

Span Number 2 **Span Length** 61.500 **Skew** 55.000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
1	Standard Joint	Pourable Joint Seal	33 Feet		
4	Plate Girder	Steel Open Girder/Beam	248 Feet	Legacy Non Lead Primer System with various Topcoats	2256
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1938 Square Feet		
4	Fixed Bearing	Fixed Bearing	4 Each	Legacy Non Lead Primer System with various Topcoats	4
1	Asphalt Wearing Surface	Wearing Surface	1722 Square Feet		
2	Concrete Railing	Reinforced Concrete Bridge Railing	124 Feet		
4	Movable Bearing	Movable Bearing	4 Each	Legacy Non Lead Primer System with various Topcoats	4

Span Number 3 **Span Length** 61.500 **Skew** 55.000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
1	Standard Joint	Pourable Joint Seal	33 Feet		
4	Fixed Bearing	Fixed Bearing	4 Each	Legacy Non Lead Primer System with various Topcoats	4
2	Concrete Railing	Reinforced Concrete Bridge Railing	124 Feet		
1	Asphalt Wearing Surface	Wearing Surface	1722 Square Feet		

Superstructure Build Details

4	Movable Bearing	Movable Bearing	4	Each	Legacy Non Lead Primer System with various Topcoats	4
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1938	Square Feet		
4	Plate Girder	Steel Open Girder/Beam	248	Feet	Legacy Non Lead Primer System with various Topcoats	2256

Span Number 4 **Span Length** 61.500 **Skew** 55.000

Number of Items	Type of Component	Element Name	Quantity		Protective System Applied	Quantity (Sq Ft)
4	Plate Girder	Steel Open Girder/Beam	244	Feet	Legacy Non Lead Primer System with various Topcoats	2240
4	Fixed Bearing	Fixed Bearing	4	Each	Legacy Non Lead Primer System with various Topcoats	4
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1938	Square Feet		
1	Asphalt Wearing Surface	Wearing Surface	1722	Square Feet		
2	Concrete Railing	Reinforced Concrete Bridge Railing	124	Feet		
4	Movable Bearing	Movable Bearing	4	Each	Legacy Non Lead Primer System with various Topcoats	4
1	Standard Joint	Pourable Joint Seal	33	Feet		

Structure Element Scoring

Structure Number: **110112**

Inspection Date **8/17/2023**

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	7,752	6,127	1,625	0	0
107		Steel Open Girder/Beam	Beam	984	887	77	18	2
515	107	Steel Protective Coating	Beam	9,032	8,933	0	78	21
205		Reinforced Concrete Column	Piles and Columns	9	3	1	4	1
215		Reinforced Concrete Abutment	Abutments	110	99	2	9	0
220		Reinforced Concrete Pile Cap/Footing	Footing	15	15	0	0	0
226		Prestressed Concrete Pile	Piles and Columns	12	12	0	0	0
234		Reinforced Concrete Pier Cap	Caps	189	68	20	69	32
301		Pourable Joint Seal	Expansion Joints	99	99	0	0	0
311		Movable Bearing	Bearing Device	16	0	7	9	0
515	311	Steel Protective Coating	Bearing Device	16	0	1	6	9
313		Fixed Bearing	Bearing Device	16	3	9	1	3
515	313	Steel Protective Coating	Bearing Device	16	3	3	2	8
331		Reinforced Concrete Bridge Railing	Bridge Rail	496	440	54	1	1
510		Wearing Surface	Wearing Surfaces	6,888	5,858	900	130	0

Summary of Maintenance Needs

Maintenance By Defect

Structure Number: **110112** Inspection Date: **08/17/2023**

MMS Code	Element Name	Defect Name	Recommended Quantity
3326	Reinforced Concrete Deck	Cracking (RC and Other)	1625 Square Feet
3314	Steel Open Girder/Beam	Corrosion	13 Feet
3314	Steel Open Girder/Beam	Connection	5 Feet
3314	Steel Open Girder/Beam	Distortion	7 Feet
3348	Reinforced Concrete Column	Efflorescence/Rust Staining	1 Each
3348	Reinforced Concrete Column	Cracking (RC and Other)	5 Each
3348	Reinforced Concrete Column	Exposed Rebar	2 Each
3350	Reinforced Concrete Abutment	Delamination/Spall	5 Feet
3350	Reinforced Concrete Abutment	Cracking (RC and Other)	4 Feet
3348	Reinforced Concrete Pier Cap	Exposed Rebar	37 Feet
3348	Reinforced Concrete Pier Cap	Efflorescence/Rust Staining	4 Feet
3348	Reinforced Concrete Pier Cap	Cracking (RC and Other)	84 Feet
3334	Movable Bearing	Corrosion	9 Each
3334	Fixed Bearing	Corrosion	1 Each
3334	Fixed Bearing	Connection	3 Each
3334	Fixed Bearing	Loss of Bearing Area	1 Each
3318	Reinforced Concrete Bridge Railing	Delamination/Spall	3 Feet
2816	Wearing Surface	Crack (Wearing Surface)	1028 Square Feet
2816	Wearing Surface	Patched Area/Pothole (Wearing Surface)	2 Square Feet
3342	Steel Protective Coating	Peeling/Bubbling/Cracking (steel Protective Coatings)	1 Square Feet
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	127 Square Feet

Element Structure Maintenance Quantities

Structure Number: **110112** Inspection Date **08/17/2023**

Location	MMS Code	Description	Maint Quantity	Total Quantity	Severe Quantity	Poor Quantity	Fair Quantity	Good Quantity
Beam	3314	Maintenance Steel Superstructure Components	25	984	2.000	18.000	77.000	887.000
Beam	3342	Clean and Paint Steel	99	9032	21.000	78.000	0.000	8933.000
Bearing Device	3334	Bridge Bearing	9	16	0.000	9.000	7.000	0.000
Bearing Device	3334	Bridge Bearing	5	16	3.000	1.000	9.000	3.000
Bearing Device	3342	Clean and Paint Steel	16	16	9.000	6.000	1.000	0.000
Bearing Device	3342	Clean and Paint Steel	13	16	8.000	2.000	3.000	3.000
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	3	496	1.000	1.000	54.000	440.000
Deck	3326	Maintenance of Concrete Deck	1625	7752	0.000	0.000	1625.000	6127.000
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	0	99	0.000	0.000	0.000	99.000
Wearing Surfaces	2816	Asphalt Surface Repair	1030	6888	0.000	130.000	900.000	5858.000
Abutments	3350	Maintenance of Concrete Wings and Wall	9	110	0.000	9.000	2.000	99.000
Caps	3348	Maintenance of Concrete Substructure	125	189	32.000	69.000	20.000	68.000
Footing	3348	Maintenance of Concrete Substructure	0	15	0.000	0.000	0.000	15.000
Piles and Columns	3348	Maintenance of Concrete Substructure	8	9	1.000	4.000	1.000	3.000
Piles and Columns	3348	Maintenance of Concrete Substructure	0	12	0.000	0.000	0.000	12.000

Priority Actions Request

Structure Number 110112

Span1

3318 **Left Bridge Rail** Concrete Railing

Priority Level	Defect Type	Quantity	Defect Description
2	Delamination/Spall	1	Span 1 Left Bridge Rail: [PAR] at base of rail post 8, spall [12 inch x 7 inch x up to 4 inch deep] with exposed rusted reinforcing with no loss

Span2

3314 **Beam 1** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Distortion	7	Span 2 Beam 1: (PAR) over both travel lanes, multiple vehicle impact with gouges [up to 3 inch x 1 inch x 1/2 inch deep]

3314 **Beam 4** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	1	Span 2 Beam 4: (PAR) at bent 1, web adjacent to diaphragm, rust scale (10 inch); right stiffener (0.20 inch average remaining x full width x full height} with corrosion holes (up to 2 inch x 1 inch)
2	Corrosion	1	Span 2 Beam 4: [PAR] at far end, corrosion with section loss: web below diaphragm [11 inch x 2 inch x 7/16 inch average remaining]; right stiffener [0.30 inch average remaining x full width x full height]

Span 3

3334 **Beam 1** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Connection	1	Span 3 Near Bearing 1: [PAR] right and left attachment bolt sheared
2	Corrosion	1	Span 3 Beam 1: (PAR) 16 INCH X 10 INCH X 6 INCH DIAPHRAGM SPALL WITH EXPOSED REINFORCING WEST OVERHANG AT BENT 3
2	Corrosion	5	Span 3 Beam 1: (PAR) UP TO 8 FOOT X 10 INCH X 2 INCH DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, BAY 1 OVER BENT 3

3314 **Beam 2** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	3	Span 3 Beam 2: (PAR) 4 FOOT X 10 INCH X 6 INCH X 2.5 INCH DEEP DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, BAY 2 OVER BENT 3
2	Loss of Bearing Area	1	Span 3 Beam 2 - Near Bearing 2: [PAR] SPAN 3 BEAM 2 NEAR BEARING NORTHWEST CORNER HAS 5 INCH X 3 INCH X 4 INCH DEEP AREA OF BEARING LOSS. DUE TO BENT 2 CAP SPALLED AREA.

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

Priority Actions Request

Structure Number 110112

3334 **Beam 3** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Connection	1	Span 3 Beam 3 - Near Bearing 3: [PAR] right and left attachment bolt sheared
2	Corrosion	1	Span 3 Beam 3: (PAR) 5 FOOT X UP TO 12 INCH X 2.5 INCH DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED RUSTED REBAR APPROXIMATELY 25 PERCENT LOSS, BAY 3 OVER BENT 3

3334 **Beam 4** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Connection	1	Span 3 Beam 4 - Near Bearing 4: [PAR] right and left attachment bolt sheared, masonry plate rotated
2	Corrosion	2	Span 3 Beam 4: (PAR) 2 FOOT X 10 INCH X 8 INCH DIAPHRAGM SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, EAST OVERHANG AT BENT 3
2	Distortion	1	Span 3 Beam 4: (PAR) over right travel lane, impact damage (12 inch x 1 inch x 1/4 inch deep)

Bent 1

3348 **Cap 1** Reinforced Concrete Pier Cap

Priority Level	Defect Type	Quantity	Defect Description
2	Exposed Rebar	28	Bent 1 Cap 1: (PAR) MULTIPLE UP TO 8 FOOT X 2.5 FOOT CRACKED/FAILED PATCHED AREAS WITH EXPOSED RUSTED REBAR APPROXIMATELY 25 PERCENT LOSS, THROUGHOUT BOTTOM AND SOUTH FACE

Bent 2

3348 **Cap 1** Reinforced Concrete Pier Cap

Priority Level	Defect Type	Quantity	Defect Description
2	Efflorescence/Rust	4	Bent 2 Cap 1: (PAR) CRACKED PATCHED AREA SOUTHEAST BOTTOM CORNER WITH EFFLORESCENCE BUILD-UP
2	Exposed Rebar	4	Bent 2 Cap 1: (PAR) 4 FOOT X 1 FOOT X 1 FOOT X 3 INCH DEEP CORNER SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, NORTH FACE UNDER BEAM 2
2	Exposed Rebar	3	Bent 2 Cap 1: [PAR] South face at East end, corner spall [27 inch x 14 inch x 12 inch x 3 inch deep] with exposed rusted reinforcing [section loss up to 1/8 inch]

Bent 3

3348 **Cap 1** Reinforced Concrete Pier Cap

Priority Level	Defect Type	Quantity	Defect Description
2	Exposed Rebar	2	Bent 3 Cap 1: (PAR) North face below beam 1, spall [13 inch x 15 inch x 1 inch deep] with exposed rusted reinforcing [section loss up to 1/16 inch]

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

Priority Actions Request

Structure Number 110112

3348 **Pile 1** Reinforced Concrete Column

Priority Level	Defect Type	Quantity	Defect Description
2	Exposed Rebar	1	Bent 3 Pile 1: (PAR) 34 INCH X UP TO 13 INCH X 1.5 INCH DEEP SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, 8 FOOT FROM BOTTOM OF CAP EAST FACE

3348 **Pile 2** Reinforced Concrete Column

Priority Level	Defect Type	Quantity	Defect Description
2	Exposed Rebar	1	Bent 3 Pile 2: [PAR] at Southeast corner, spall [8.5 foot x 11 inch x 2.5 inch deep] with exposed rusted reinforcing [section loss up to 1/8 inch]

3348 **Pile 3** Reinforced Concrete Column

Priority Level	Defect Type	Quantity	Defect Description
2	Efflorescence/Rust Staining	1	Bent 3 Pile 3: (PAR) 2 - VERTICAL CRACKS UP TO FULL HEIGHT X UP TO 1/8 INCH WITH RUST STAINS AND ADJACENT DELAMINATION FULL HEIGHT X 2 FOOT ON WEST FACE

Approach Guardrail and Barriers

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

Priority Level	Defect Type	Quantity	Defect Description
2		1	(PAR) southwest guardrail, 2nd post from end bent 1, decay (full height x full width x full depth)

Element Condition and Maintenance Data

Structure Number: **110112** Inspection Date: **08/17/2023**

Span 1 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,938	1,838	100	0	0	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**12**	Cracking (RC and Other)	MAP CRACKING UP TO 1/64 INCH SOME WITH EFFLORESCENCE DECK UNDERSIDE AT RANDOM THROUGHOUT	2	100	100	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	61	61	0	0	0	Feet
515	Steel Protective Coating	570	570	0	0	0	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**107**	Distortion	2023 new repair, previously noted as: IMPACT DAMAGE - THE SOUTH MOST 30 FOOT DEFLECTED 1 INCH EASTWARD . SCATTERED SCRAPES WITH 1/16 INCH INDENTIONS THROUGH OUT A 7 FOOT LONG X 2 FOOT-7 INCH HIGH AREA AT 12 FOOT OUT FROM END BENT 1 (POINT OF IMPACT). THERE IS A 1 FOOT-8 INCH LONG X 1/2 INCH WIDE X 1/16 INCH DEEP SCRAPE ON THE BOTTOM FLANGE AT 12 FOOT OUT FROM END BENT 1 .	1			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	61	60	0	1	0	Feet
515	Steel Protective Coating	570	569	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**107**	Corrosion	at bent 1, corrosion with section loss: web adjacent to diaphragm (1/2 inch average remaining x 10 inch x 5 inch); left stiffener (0.35 inch average remaining x full width x full height)	3	1	1	Feet
☑	**515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss	4	1	1	Square Feet
☐	**515**	Effectiveness (Steel Protective Coatings)	DEFECT NOT FOUND 08/07/2019	1			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	61	60	1	0	0	Feet
515	Steel Protective Coating	570	569	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at bent 1, web adjacent to diaphragm, rust scale (10 inch)	2	1		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	rust scale	4	1	1	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	61	60	1	0	0	Feet
515	Steel Protective Coating	570	569	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at bent 1, web adjacent to diaphragm, rust scale (10 inch)	2	1		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	rust scale	4	1	1	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	62	52	9	0	1	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Delamination/Spall	[PAR] at base of rail post 8, spall [12 inch x 7 inch x up to 4 inch deep] with exposed rusted reinforcing with no loss	4	1	1	Feet
☑ **331**	Cracking (RC and Other)	along sidewalk multiple transverse cracks [up to 1/32 inch x full width]	2	9		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	62	58	3	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Delamination/Spall	at Southeast corner, spall [5 inch x full width x 1/2 inch deep]	3	1	1	Feet

☑ **331**	Cracking (RC and Other)	along sidewalk multiple transverse cracks [up to 1/32 inch x full width]	2	3		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	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 1

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	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **311**	Corrosion	surface rust	2	1		Each
☑ **515**	Peeling/Bubbling/Cracking (steel Protective Coatings)	surface rust	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	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	
☑ **311**	Corrosion	surface rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	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	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	
☑ **311**	Corrosion	surface rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	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	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)	surface rust	3	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	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	
☑ **311**	Corrosion	freckled rust/surface rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	freckled rust/surface rust	3	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	1,722	1,407	250	65	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **510**	Crack (Wearing Surface)	32 FOOT X UP TO 1/4 INCH TRANSVERSE CRACKS OVER END BENT 1 AND BENT 1 WITH VEGETATION GROWTH	3	64	64	Square Feet

☑ **510**	Patched Area/Pothole (Wearing Surface)	near midspan, southbound lane, pothole/broken asphalt [5 inch x 11 inch x up to 1 inch deep]	3	1	1	Square Feet
☑ **510**	Crack (Wearing Surface)	scattered throughout, multiple transverse and longitudinal cracks [up to 6 foot x up to 1/32 inch]	2	250	250	Square Feet
☑ **510**	Patched Area/Pothole (Wearing Surface)	(NOT FOUND 2023) SPAN 1 WEARING SURFACE HAS SCATTERED PATCHED AREAS WITH SOME HAIRLINE CRACKS. PATCHES APPEAR TO BE SOUND.	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	1,938	1,763	175	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **12**	Cracking (RC and Other)	scattered in underside of deck, transverse cracks (up to 1/32 inch x full width) and map cracking (hairline)	2	175	175	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	62	54	0	8	0	Feet
515	Steel Protective Coating	564	553	0	10	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at bent 2, corrosion with section loss: web adjacent to diaphragm (1/2 inch average remaining x 10 inch x 1 inch); right stiffener (0.30 average remaining x full width x full height)	3	1	1	Feet
☑ **107**	Damage	over both travel lanes, impact damage	3			Feet
☑ **107**	Distortion	(PAR) over both travel lanes, multiple vehicle impact with gouges [up to 3 inch x 1 inch x 1/2 inch deep] with surface rust	3	7	7	Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss	4	1	1	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	underside of coverplate over right travel lane, impact scrapes with surface rust	3	10	10	Square Feet

General Comments

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	62	51	11	0	0	Feet
515	Steel Protective Coating	564	553	0	10	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at bent 2, web adjacent to diaphragm, rust scale (10 inch)	2	1		Feet

☑	**107**	Corrosion	underside of coverplate over right travel lane, impact scrapes with surface rust	2	10		Feet
☑	**107**	Damage	impact damage	2			Feet
☑	**515**	Effectiveness (Steel Protective Coatings)	rust scale	4	1	1	Square Feet
☑	**515**	Effectiveness (Steel Protective Coatings)	underside of coverplate over right travel lane, impact scrapes with surface rust	3	10	10	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	62	50	12	0	0	Feet
515	Steel Protective Coating	564	552	0	10	2	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**107**	Corrosion	at bent 1, web adjacent to diaphragm, rust scale (10 inch)	2	1		Feet
☑	**107**	Corrosion	at bent 2, web adjacent to diaphragm, rust scale (10 inch)	2	1		Feet
☑	**107**	Corrosion	underside of coverplate over right travel lane, impact scrapes with surface rust	2	10		Feet
☑	**107**	Damage	impact damage	2			Feet
☑	**515**	Effectiveness (Steel Protective Coatings)	rust scale	4	2	2	Square Feet
☑	**515**	Effectiveness (Steel Protective Coatings)	underside of coverplate over right travel lane, impact scrapes with surface rust	3	10	10	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	62	50	10	0	2	Feet
515	Steel Protective Coating	564	552	0	10	2	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**107**	Corrosion	(PAR) at bent 1, web adjacent to diaphragm, rust scale (10 inch); right stiffener (0.20 inch average remaining x full width x full height} with corrosion holes (up to 2 inch x 1 inch)	4	1	1	Feet
☑	**107**	Corrosion	[PAR] at far end, corrosion with section loss: web below diaphragm [11 inch x 2 inch x 7/16 inch average remaining]; right stiffener [0.30 inch average remaining x full width x full height]	4	1	1	Feet
☑	**107**	Corrosion	underside of coverplate over right travel lane, impact scrapes with surface rust	2	10		Feet
☑	**107**	Damage	impact damage	2			Feet
☑	**515**	Effectiveness (Steel Protective Coatings)	rust scale/corrosion with section loss	4	2	2	Square Feet
☑	**515**	Effectiveness (Steel Protective Coatings)	underside of coverplate over right travel lane, impact scrapes with surface rust	3	10	10	Square Feet

General Comments

Span 2 — Expansion Joint 1

Standard Joint

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
301	Pourable Joint Seal	33	33	0	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☐ **301**	Debris Impaction	MOVED TO ASPHALT WEARING SURFACE	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	62	56	6	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Cracking (RC and Other)	along sidewalk multiple transverse cracks [up to 1/32 inch x full width]	2	6		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	62	57	5	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Cracking (RC and Other)	along sidewalk multiple transverse cracks [up to 1/32 inch x full width]	2	5		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	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

Structure Number: **110112** Inspection Date: **08/17/2023**

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	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	
☑ **311**	Corrosion	surface rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	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	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 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	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	
☑ **311**	Corrosion	surface rust	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust	3	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	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 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	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	rust scale	2	1		Each
☑ **515**	Effectiveness (Steel Protective Coatings)	rust scale	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/rust scale and pack rust (up to 1/4 inch)	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust/rust scale/pack rust	4	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	1,722	1,489	200	33	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 510	Crack (Wearing Surface)	32 FOOT X UP TO 1/4 INCH TRANSVERSE CRACKS OVER BENT 2 WITH MULTIPLE AREAS OF BROKEN ASPHALT	3	32	32	Square Feet
☑ 510	Patched Area/Pothole (Wearing Surface)	at bent 2 beside white line in Southbound lane, pothole [9 inch x up to 3 inch x full depth] and by centerline pothole [3 inch diameter x full depth]	3	1	1	Square Feet
☑ 510	Crack (Wearing Surface)	scattered throughout, multiple transverse and longitudinal cracks [up to 4 foot x up to 1/32 inch]	2	200	200	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	1,938	1,788	150	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 12	Cracking (RC and Other)	SPAN 3 BOTTOM OF DECK HAS SCATTERED MAP CRACKS HAIRLINE AND TRANSVERSE CRACKS UP 1/32 INCH X FULL WIDTH	2	150	150	Square 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	62	39	21	2	0	Feet
515	Steel Protective Coating	564	541	0	20	3	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 107	Connection	(PAR) UP TO 8 FOOT X 10 INCH X 2 INCH DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, BAY 1 OVER BENT 3	4		1	Feet
☑ 107	Connection	(PAR) 16 INCH X 10 INCH X 6 INCH DIAPHRAGM SPALL WITH EXPOSED REINFORCING WEST OVERHANG AT BENT 3	3		1	Feet
☑ 107	Corrosion	at far end arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1 inch x 1/2 inch average remaining]; arrested metal loss, lower web [8 inch x 1.5 inch x 9/16 inch average remaining]	3	2	2	Feet
☑ 107	Corrosion	at bent 2, web adjacent to diaphragm, rust scale (10 inch)	2	1		Feet
☑ 107	Corrosion	underside of coverplate over right travel lane, impact scrapes with surface rust	2	20		Feet
☑ 107	Damage	impact damage	2			Feet

☑ **107**	Connection	(2023 defect moved to bearing) right and left attachment bolt sheared		1			Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	rust scale/corrosion with section loss		4	3	3	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	underside of coverplate over right travel lane, impact scrapes with surface rust		3	20	20	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	62	50	11	1	0	Feet
515	Steel Protective Coating	564	552	0	10	2	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Connection	(PAR) 4 FOOT X 10 INCH X 6 INCH X 2.5 INCH DEEP DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, BAY 2 OVER BENT 3	4		1	Feet
☑ **107**	Corrosion	at far end, arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1 inch x 9/16 inch average remaining]; pitting [up to 1/8 inch deep]	3	1	1	Feet
☑ **107**	Corrosion	at bent 2, painted over pitting with corrosion reactivating: web (up to 1/16 inch x 10 inch x full height)	2	1		Feet
☑ **107**	Corrosion	underside of coverplate over right travel lane, impact scrapes with surface rust	2	10		Feet
☑ **107**	Damage	impact damage	2			Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss	4	2	2	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	underside of coverplate over right travel lane, impact scrapes with surface rust	3	10	10	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	62	55	6	1	0	Feet
515	Steel Protective Coating	564	557	0	5	2	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Connection	(PAR) 5 FOOT X UP TO 12 INCH X 2.5 INCH DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED RUSTED REBAR APPROXIMATELY 25 PERCENT LOSS, BAY 3 OVER BENT 3	4		1	Feet
☑ **107**	Corrosion	at far end arrested metal loss/pitting with corrosion reactivating, web at diaphragm [10 inch x 3 inch x 1/16 inch deep]	3	1	1	Feet
☑ **107**	Corrosion	at bent 2, web adjacent to diaphragm, rust scale (10 inch)	2	1		Feet
☑ **107**	Corrosion	underside of coverplate over both travel lanes, impact scrapes with surface rust	2	5		Feet

☑ **107**	Damage	impact damage		2			Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	rust scale/corrosion with section loss		4	2	2	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	underside of coverplate over both travel lanes, impact scrapes with surface rust		3	5	5	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	62	57	4	1	0	Feet
515	Steel Protective Coating	564	560	0	3	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Connection	(PAR) 2 FOOT X 10 INCH X 8 INCH DIAPHRAGM SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, EAST OVERHANG AT BENT 3	4		1	Feet
☑ **107**	Corrosion	at bent 2, painted over pitting: web (up to 1/8 inch deep x 10 inch x full height)	3	1	1	Feet
☑ **107**	Corrosion	at bent 3, web adjacent to diaphragm, rust scale (10 inch)	2	1		Feet
☑ **107**	Damage	over right travel lane, impact damage	2			Feet
☑ **107**	Distortion	(PAR) over right travel lane, impact damage with distortion (12 inch x 1 inch x 1/4 inch deep) and scrapes with surface rust	2	3		Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	rust scale	4	1	1	Square Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	underside of coverplate over right travel lane, impact scrapes with surface rust	3	3	3	Square Feet

General Comments

Span 3 Expansion Joint 2

Standard Joint

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
301	Pourable Joint Seal	33	33	0	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☐ **301**	Debris Impaction	MOVED TO ASPHALT WEARING SURFACE	1			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	62	59	3	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Cracking (RC and Other)	along sidewalk multiple transverse cracks [up to 1/32 inch x full width]	2	3		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	62	55	7	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **331**	Cracking (RC and Other)	along sidewalk multiple transverse cracks [up to 1/32 inch x full width]	2	7		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	0	0	1	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] right and left attachment bolt sheared	4	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 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	corrosion with section loss (up to 1/8 inch loss) with pack rust (up to 3/8 inch)	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss/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	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	corrosion with section loss (up to 1/8 inch loss)	3		1	Each
☑ **313**	Loss of Bearing Area	[PAR] SPAN 3 BEAM 2 NEAR BEARING NORTHWEST CORNER HAS 5 INCH X 3 INCH X 4 INCH DEEP AREA OF BEARING LOSS. DUE TO BENT 2 CAP SPALLED AREA.	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss	4	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	corrosion with section loss (up to 1/16 inch deep) with pack rust (up to 3/8 inch)	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss/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	0	1	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **313**	Connection	[PAR] right and left attachment bolt sheared	4	1	1	Each
☑ **313**	Corrosion	rust scale	2			Each
☑ **515**	Effectiveness (Steel Protective Coatings)	rust scale	4	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	active surface corrosion with pack rust up to 3/8 inch	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust/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	0	0	1	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] right and left attachment bolt sheared, masonry plate rotated	4	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 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	active surface corrosion with pack rust up to 3/8 inch	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	1,722	1,440	250	32	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **510**	Crack (Wearing Surface)	32 FOOT X UP TO 1/4 INCH TRANSVERSE CRACKS OVER BENT 3 WITH VEGETATION	3	32	32	Square Feet
☑ **510**	Crack (Wearing Surface)	scattered throughout, multiple transverse and longitudinal cracks [up to 4 foot x up to 1/32 inch]	2	250	250	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	1,938	738	1,200	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **12**	Cracking (RC and Other)	BOTTOM OF DECK HAS SCATTERED MAP CRACKS UP TO 1/64 INCH	2	1,200	1,200	Square 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	61	60	0	1	0	Feet
515	Steel Protective Coating	560	559	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at near end, arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1/2 inch x 9/16 inch average remaining]	3	1	1	Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss	4	1	1	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	61	60	0	1	0	Feet
515	Steel Protective Coating	560	559	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at near end, arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1/2 inch x 1/2 inch average remaining]; left stiffener [0.35 average remaining x full width x full height]	3	1	1	Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss	4	1	1	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	61	60	0	1	0	Feet
515	Steel Protective Coating	560	559	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **107**	Corrosion	at near end, arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1 inch x 9/16 inch average remaining]; lower web, pitting [10 inch x 3 inch x up to 1/16 inch deep]; left stiffener, pitting [up to 1/8 inch deep x full width x 4 inch]	3	1	1	Feet
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss	4	1	1	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	61	60	0	1	0	Feet
515	Steel Protective Coating	560	559	0	0	1	Square Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**107**	Corrosion	at near end, arrested metal loss with corrosion reactivating: web at diaphragm [10 inch x 1/2 inch x 9/16 inch average remaining]; left stiffener [0.30 inch average remaining x full width x full height]; lower web, pitting [up to 1/16 inch deep x 10 inch x 3 inch]	3	1	1	Feet
☑	**515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss	4	1	1	Square Feet

General Comments

Span 4 — Expansion Joint 3

Standard Joint

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
301	Pourable Joint Seal	33	33	0	0	0	Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☐	**301**	Debris Impaction	MOVED TO ASPHALT WEARING SURFACE	1			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	62	56	6	0	0	Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**331**	Cracking (RC and Other)	along sidewalk multiple transverse cracks [up to 1/32 inch x full width]	2	5		Feet
☑	**331**	Delamination/Spall	6th post from bent 3, spall (2 inch x 6 inch x 1 inch deep) with exposed rusted rebar	2	1	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	62	47	15	0	0	Feet

	Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑	**331**	Cracking (RC and Other)	along sidewalk multiple transverse cracks [up to 1/32 inch x full width]	2	8		Feet
☑	**331**	Patched Area	SPAN 4 RIGHT RAIL HAS A REPAIR AREA BETWEEN POSTS 5 AND 6.	2	7		Square 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	active surface corrosion with pack rust up to 1/4 inch	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss/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	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 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	corrosion with section loss (up to 1/16 inch deep) with pack rust (up to 1/4 inch)	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	corrosion with section loss/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	active surface corrosion with pack rust up to 1/4 inch	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust/pack rust	4	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	active surface corrosion with pack rust up to 1/4 inch	3	1	1	Each
☑ **515**	Effectiveness (Steel Protective Coatings)	surface rust/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	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)	surface rust	3	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	1,722	1,522	200	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **510**	Crack (Wearing Surface)	scattered throughout, multiple transverse and longitudinal cracks [up to 4 foot x up to 1/32 inch]	2	200	200	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	55	49	2	4	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **215**	Cracking (RC and Other)	along the length of the abutment, at bottom flange penetrations, delaminations (up to 7 inch x 3 inch) with cracks (up to 1/16 inch)	3	4	4	Feet
☑ **215**	Patched Area	16 INCH X UP TO 20 INCH PATCH WEST OVERHANG OF ABUTMENT	2	2		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	45	25	20	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **234**	Cracking (RC and Other)	at multiple locations throughout in all bays, wraparound vertical cracks [up to full height x 1/32 inch]	2	20		Feet
☐ **234**	Cracking (RC and Other)	DEFECT NOT FOUND 08/07/2019	1			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	33	5	0	0	28	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

☑ **234**	Exposed Rebar	(PAR) MULTIPLE UP TO 8 FOOT X 2.5 FOOT CRACKED/FAILED PATCHED AREAS WITH EXPOSED RUSTED REBAR APPROXIMATELY 25 PERCENT LOSS, THROUGHOUT BOTTOM AND SOUTH FACE	4	28	28	Feet
☑ **234**	Cracking (RC and Other)	MAP CRACKING AND HORIZONTAL CRACKS UP TO 1/16 INCH AT RANDOM THROUGHOUT NORTH AND SOUTH FACES	3		21	Feet
☑ **234**	Delamination/Spall	(combined with other notes 2023) at Southeast corner, spall [11 inch x 4 inch x 3 inch deep] with exposed rusted reinforcing [no loss noted]	1			Feet

General Comments

Bent 1 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**	Cracking (RC and Other)	2 - UP TO 4 FOOT X 1/32 INCH VERTICAL CRACKS ON WEST FACE NEAR BOTTOM OF CAP	2	1		Each

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	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **205**	Cracking (RC and Other)	2.5 FOOT X UP TO 1/16 INCH VERTICAL CRACK ON WEST FACE 6 INCH FROM BOTTOM OF CAP	3	1	1	Each

General Comments

Bent 1 Pile 3

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**	Cracking (RC and Other)	4 FOOT X UP TO 1/16 INCH VERTICAL CRACK ON EAST FACE NEAR BOTTOM OF CAP	3	1	1	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	33	3	0	26	4	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **234**	Exposed Rebar	(PAR) 4 FOOT X 1 FOOT X 1 FOOT X 3 INCH DEEP CORNER SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, NORTH FACE UNDER BEAM 2; UNDERMINING BEARING	4	4	4	Feet
☑ **234**	Cracking (RC and Other)	ALONG THE LENGTH OF THE CAP, SCATTERED LONGITUDINAL CRACKS UP TO 1/16 INCH	3	19	19	Feet
☑ **234**	Cracking (RC and Other)	North face below beam 3, delamination [29 inch x 3 inch] with cracks [up to 1/16 inch]	3	3	3	Feet
☑ **234**	Efflorescence/Rust Staining	(PAR) CRACKED PATCHED AREA SOUTHEAST BOTTOM CORNER WITH EFFLORESCENCE BUILD-UP	3	1	4	Feet
☑ **234**	Exposed Rebar	[PAR] South face at East end, corner spall [27 inch x 14 inch x 12 inch x 3 inch deep] with exposed rusted reinforcing [section loss up to 1/8 inch]	3	3	3	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	1	0	0	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☐ **205**	Cracking (RC and Other)	DEFECT NOT FOUND 08/07/2019	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	1	0	0	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☐ **205**	Cracking (RC and Other)	DEFECT NOT FOUND 08/07/2019	1			Each

General Comments

Bent 2 — Pile 3

Reinforced Concrete Column

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

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

☐ **205**	Cracking (RC and Other)	DEFECT NOT FOUND 08/07/2019	1		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	55	50	0	5	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **215**	Delamination/Spall	along the length of the abutment, at bottom flange penetrations, spall/delaminations (up to 1.5 foot x 3 inch x 1 inch) with cracks (up to 1/16 inch)	3	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	45	29	0	16	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **234**	Cracking (RC and Other)	16 FOOT X UP TO 1/16 INCH HORIZONTAL CRACK SOUTH FACE BEGINNING AT EAST END	3	16	16	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	33	6	0	27	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ **234**	Cracking (RC and Other)	along the length of the cap, near top and bottom corners, horizontal cracks (up to 1/8 inch x 9 foot)	3	25	25	Feet
☑ **234**	Exposed Rebar	(PAR) North face below beam 1, spall [13 inch x 15 inch x 1 inch deep] with exposed rusted reinforcing [section loss up to 1/16 inch]	3	2	2	Feet
☑ **234**	Cracking (RC and Other)	along length of North and South face, map cracks (hairline) at random	2			Feet
☑ **234**	Delamination/Spall	(COMBINED WITH OTHER NOTES 2023) 11 INCH X 12 INCH X 6 INCH CRACKED AND DELAMINATED AREA IN BAY 3 AND EAST OVERHANG.	1			Feet

General Comments

Bent 3 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	0	0	1	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
☑ 205	Exposed Rebar	(PAR) 34 INCH X UP TO 13 INCH X 1.5 INCH DEEP SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, 8 FOOT FROM BOTTOM OF CAP EAST FACE	4	1	1	Each
☑ 205	Cracking (RC and Other)	2 - UP TO 6 foot X 1/16 inch VERTICAL CRACKS EAST AND WEST FACES	3		1	Each
☑ 205	Cracking (RC and Other)	at East and West face, multiple vertical cracks [up to 8 foot x up to 1/32 inch]	2			Each
☑ 205	Delamination/Spall	(combined with other notes 2023) at Northeast corner, spall [35 inch x 13 inch x up to 1.5 inch deep] with exposed rusted reinforcing [section loss up to 1/8 inch] with adjacent delamination and associated certical crack [42 inch x 1/16 inch]	1			Each

General Comments

Bent 3 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	Cracking (RC and Other)	2 - VERTICAL CRACKS UP TO 9 FOOT X 1/16 INCH WITH ADJACENT DELAMINATION 9 FOOT X 2 FOOT ON WEST FACE	3		1	Each
☑ 205	Exposed Rebar	[PAR] at Southeast corner, spall [8.5 foot x 11 inch x 2.5 inch deep] with exposed rusted reinforcing [section loss up to 1/8 inch]	3	1	1	Each
☑ 205	Cracking (RC and Other)	all faces, multiple vertical cracks [1/32 inch x full height]	2			Each
☑ 205	Cracking (RC and Other)	(COMBINED WITH OTHER NOTES 2023) 2 - UP TO 9 FOOT X 1/4 INCH VERTICAL CRACKS WITH ADJACENT DELAMINATION 5 FOOT X 1 FOOT EAST FACE	1			Each

General Comments

Bent 3 Pile 3

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	Cracking (RC and Other)	East face, multiple vertical cracks {up to full height x 1/8 inch wide} with adjacent delamination (up to full height x 1.5 foot)	3		1	Each

☑ **205**	Efflorescence/Rust Staining	(PAR) 2 - VERTICAL CRACKS UP TO FULL HEIGHT X UP TO 1/8 INCH WITH RUST STAINS AND ADJACENT DELAMINATION FULL HEIGHT X 2 FOOT ON WEST FACE	3	1	1	Each
☑ **205**	Cracking (RC and Other)	(COMBINED WITH OTHER NOTES 2023) 2 - UP TO 8 FOOT X 1/8 INCH VERTICAL CRACKS	1			Each

General Comments

Elements Verfied

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1938
Span 1	Beam 1	Plate Girder	Steel Open Girder/Beam	61
Span 1	Beam 2	Plate Girder	Steel Open Girder/Beam	61
Span 1	Beam 3	Plate Girder	Steel Open Girder/Beam	61
Span 1	Beam 4	Plate Girder	Steel Open Girder/Beam	61
Span 1	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	62
Span 1	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	62
Span 1	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1722
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 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1938
Span 2	Beam 1	Plate Girder	Steel Open Girder/Beam	62
Span 2	Beam 2	Plate Girder	Steel Open Girder/Beam	62
Span 2	Beam 3	Plate Girder	Steel Open Girder/Beam	62
Span 2	Beam 4	Plate Girder	Steel Open Girder/Beam	62
Span 2	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	62
Span 2	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	62
Span 2	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1722
Span 2	Near Bearing 1	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing 1	Movable Bearing	Movable Bearing	1
Span 2	Far Bearing 2	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing 2	Fixed Bearing	Fixed Bearing	1
Span 2	Near Bearing 3	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing 3	Movable Bearing	Movable Bearing	1
Span 2	Far Bearing 4	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing 4	Fixed Bearing	Fixed Bearing	1
Span 3	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1938
Span 3	Beam 1	Plate Girder	Steel Open Girder/Beam	62
Span 3	Beam 2	Plate Girder	Steel Open Girder/Beam	62
Span 3	Beam 3	Plate Girder	Steel Open Girder/Beam	62
Span 3	Beam 4	Plate Girder	Steel Open Girder/Beam	62
Span 3	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	62
Span 3	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	62
Span 3	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1722
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

Elements Verfied

Location	Name	Component	Element Name	Amount
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 4	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1938
Span 4	Beam 1	Plate Girder	Steel Open Girder/Beam	61
Span 4	Beam 2	Plate Girder	Steel Open Girder/Beam	61
Span 4	Beam 3	Plate Girder	Steel Open Girder/Beam	61
Span 4	Beam 4	Plate Girder	Steel Open Girder/Beam	61
Span 4	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	62
Span 4	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	62
Span 4	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	1722
Span 4	Near Bearing 1	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing 1	Fixed Bearing	Fixed Bearing	1
Span 4	Far Bearing 2	Fixed Bearing	Fixed Bearing	1
Span 4	Near Bearing 2	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing 3	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing 3	Fixed Bearing	Fixed Bearing	1
Span 4	Far Bearing 4	Fixed Bearing	Fixed Bearing	1
Span 4	Near Bearing 4	Movable Bearing	Movable Bearing	1
Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	33
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	45
End Bent 1	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	55
Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	33
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	45
End Bent 2	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	55
Bent 3	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	33
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

Span 4 Expansion Joint 3

National Bridge and NC Inspection Items

Structure Number: 110112 **Inspection Date:** 08/17/2023

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	**6**
Item 59: Superstructure	0 - 9 , N	**5**
Item 60: Substructure	0 - 9 , N	**5**
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	**F**	**7752**	**3376**
Drainage System	G, F, P, or C	**F**	**0**	**3332**
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C	**G**	**0**	**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		**B**		

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	**7**
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: 110112 **Inspection Date:** 08/17/2023

Item	Deck Debris	**Grade**	F	**Maint Code**	3376	**Qty.**	7752
Details	along both curblines, debris accumulation (up to 33 inch x full length) with vegetation growth; partially obstructing drainage						

Item	Drainage System	**Grade**	F	**Maint Code**	3332	**Qty.**	0
Details	see deck debris						

Item	General Comments and Misc Items	**Grade**		**Maint Code**		**Qty.**	0
Details	(PAR) southwest guardrail, 2nd post from end bent 1, decay (full height x full width x full depth) northeast guardrail replaced since previous inspection at end bent 2, slope protection, homeless debris						

at end bent 2, slope protection, homeless debris

Span 1 Left Bridge Rail: [PAR] at base of rail post 8, spall [12 inch x 7 inch x up to 4 inch deep] with exposed rusted reinforcing with no loss

End Bent 1 Abutment: 16 INCH X UP TO 20 INCH PATCH WEST OVERHANG OF ABUTMENT

End Bent 1 Cap 1: at multiple locations throughout in all bays, wraparound vertical cracks [up to full height x 1/32 inch]

End Bent 1 Abutment: along the length of the abutment, at bottom flange penetrations, delaminations (up to 7 inch x 3 inch) with cracks (up to 1/16 inch)

Span 1 Deck: MAP CRACKING UP TO 1/64 INCH SOME WITH EFFLORESCENCE DECK UNDERSIDE AT RANDOM THROUGHOUT

Span 1 Beam 1: 2023 new repair, previously noted as: IMPACT DAMAGE - THE SOUTH MOST 30 FOOT DEFLECTED 1 INCH EASTWARD . SCATTERED SCRAPES WITH 1/16 INCH INDENTIONS THROUGH OUT A 7 FOOT LONG X 2 FOOT-7 INCH HIGH AREA AT 12 FOOT OUT FROM END BENT 1 (POINT OF IMPACT). THERE IS A 1 FOOT-8 INCH LONG X 1/2 INCH WIDE X 1/16 INCH DEEP SCRAPE ON THE BOTTOM FLANGE AT 12 FOOT OUT FROM END BENT 1 .

Span 1 Beam 1 - Near Bearing 1 - Protective System: surface rust/rust scale

(PAR) southwest guardrail, 2nd post from end bent 1, decay (full height x full width x full depth)

Span 1 Wearing Surface: (not found 2023) SPAN 1 WEARING SURFACE HAS SCATTERED PATCHED AREAS WITH SOME HAIRLINE CRACKS. PATCHES APPEAR TO BE SOUND. - NOT FOUND AT TIME OF INSPECTION. TDG 8/5/21

Span 1 Wearing Surface: 32 FOOT X UP TO 1/4 INCH TRANSVERSE CRACKS OVER END BENT 1 AND BENT 1 WITH VEGETATION GROWTH

Span 1 Wearing Surface: scattered throughout, multiple transverse and longitudinal cracks [up to 6 foot x up to 1/32 inch]

Span 1 Wearing Surface: near midspan, southbound lane, pothole/broken asphalt [5 inch x 11 inch x up to 1 inch deep]

along both curblines, debris accumulation (up to 33 inch x full length) with vegetation growth; partially obstructing drainage

Span 1 Left Bridge Rail: along sidewalk multiple transverse cracks [up to 1/32 inch x full width]

Span 1 Right Bridge Rail: at Southeast corner, spall [5 inch x full width x 1/2 inch deep]

Span 2 Wearing Surface: 32 FOOT X UP TO 1/4 INCH TRANSVERSE CRACKS OVER BENT 2 WITH MULTIPLE AREAS OF BROKEN ASPHALT

Span 2 Wearing Surface: at bent 2 beside white line in Southbound lane, pothole [9 inch x up to 3 inch x full depth] and by centerline pothole [3 inch diameter x full depth]

Span 2 Wearing Surface: scattered throughout, multiple transverse and longitudinal cracks [up to 4 foot x up to 1/32 inch]

Span 4 Right Bridge Rail: SPAN 4 RIGHT RAIL HAS A REPAIR AREA BETWEEN POSTS 5 AND 6.

Span 4 Left Bridge Rail: 6th post from bent 3, spall (2 inch x 6 inch x 1 inch deep) with exposed rusted rebar

End Bent 2 Cap 1: 16 FOOT X UP TO 1/16 INCH HORIZONTAL CRACK SOUTH FACE BEGINNING AT EAST END

End Bent 2 Abutment: along the length of the abutment, at bottom flange penetrations, spall/delaminations (up to 1.5 foot x 3 inch x 1 inch) with cracks (up to 1/16 inch)

Span 3 Beam 1 - Far Bearing 1: corrosion with section loss (up to 1/8 inch loss) with pack rust (up to 3/8 inch)

Span 3 Beam 1: (PAR) UP TO 8 FOOT X 10 INCH X 2 INCH DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, BAY 1 OVER BENT 3

Span 3 Beam 1: at far end arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1 inch x 1/2 inch average remaining]; arrested metal loss, lower web [8 inch x 1.5 inch x 9/16 inch average remaining]

Span 4 Beam 1: at near end, arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1/2 inch x 9/16 inch average remaining]

Span 3 Beam 1: (PAR) 16 INCH X 10 INCH X 6 INCH DIAPHRAGM SPALL WITH EXPOSED REINFORCING WEST OVERHANG AT BENT 3

Span 3 Beam 2: at far end, arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1 inch x 9/16 inch average remaining]; pitting [up to 1/8 inch deep]

Span 3 Beam 2 - Far Bearing 2: corrosion with section loss (up to 1/16 inch deep) with pack rust (up to 3/8 inch)

Span 3 Beam 2: (PAR) 4 FOOT X 10 INCH X 6 INCH X 2.5 INCH DEEP DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, BAY 2 OVER BENT 3

Span 4 Beam 2: at near end, arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1/2 inch x 1/2 inch average remaining]; left stiffener [0.35 average remaining x full width x full height]

Bent 3 Pile 1: (PAR) 34 INCH X UP TO 13 INCH X 1.5 INCH DEEP SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, 8 FOOT FROM BOTTOM OF CAP EAST FACE

Bent 3 Pile 1: at East and West face, multiple vertical cracks [up to 8 foot x up to 1/32 inch]

Bent 3 Pile 2: 2 - VERTICAL CRACKS UP TO 9 FOOT X 1/16 INCH WITH ADJACENT DELAMINATION 9 FOOT X 2 FOOT ON WEST FACE

Bent 3 Pile 2: [PAR] at Southeast corner, spall [8.5 foot x 11 inch x 2.5 inch deep] with exposed rusted reinforcing [section loss up to 1/8 inch]

Bent 3 Pile 2: all faces, multiple vertical cracks [1/32 inch x full height]

Bent 3 Pile 3: (PAR) 2 - VERTICAL CRACKS UP TO FULL HEIGHT X UP TO 1/8 INCH WITH RUST STAINS AND ADJACENT DELAMINATION FULL HEIGHT X 2 FOOT ON WEST FACE

Bent 3 Pile 3: East face, multiple vertical cracks {up to full height x 1/8 inch wide} with adjacent delamination (up to full height x 1.5 foot)

Bent 3 Cap 1: along the length of the cap, near top and bottom corners, horizontal cracks (up to 1/8 inch x 9 foot)

Bent 3 Cap 1: along the length of the cap, near top and bottom corners, horizontal cracks (up to 1/8 inch x 9 foot)

Span 3 Beam 3: at far end arrested metal loss/pitting with corrosion reactivating, web at diaphragm [10 inch x 3 inch x 1/16 inch deep]

Span 3 Beam 3: (PAR) 5 FOOT X UP TO 12 INCH X 2.5 INCH DIAPHRAGM SPALL/DELAMINATION WITH EXPOSED RUSTED REBAR APPROXIMATELY 25 PERCENT LOSS, BAY 3 OVER BENT 3

Span 4 Beam 3: at near end, arrested metal loss with corrosion reactivating, web at diaphragm [10 inch x 1 inch x 9/16 inch average remaining]; lower web, pitting [10 inch x 3 inch x up to 1/16 inch deep]; left stiffener, pitting [up to 1/8 inch deep x full width x 4 inch]

Bent 3 Cap 1: (PAR) North face below beam 1, spall [13 inch x 15 inch x 1 inch deep] with exposed rusted reinforcing [section loss up to 1/16 inch]

Span 3 Beam 4: at bent 3, web adjacent to diaphragm, rust scale (10 inch)

Span 4 Beam 4: at near end, arrested metal loss with corrosion reactivating: web at diaphragm [10 inch x 1/2 inch x 9/16 inch average remaining]; left stiffener [0.30 inch average remaining x full width x full height]; lower web, pitting [up to 1/16 inch deep x 10 inch x 3 inch]

Span 3 Beam 4: (PAR) 2 FOOT X 10 INCH X 8 INCH DIAPHRAGM SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, EAST OVERHANG AT BENT 3

Span 3 Deck: SPAN 3 BOTTOM OF DECK HAS SCATTERED MAP CRACKS HAIRLINE AND TRANSVERSE CRACKS UP 1/32 INCH X FULL WIDTH

Span 3 Beam 1: underside of coverplate over right travel lane, impact scrapes with surface rust

Span 3 Beam 2: underside of coverplate over right travel lane, impact scrapes with surface rust

Span 3 Beam 3: underside of coverplate over both travel lanes, impact scrapes with surface rust

Span 3 Beam 4: (PAR) over right travel lane, impact damage with distortion (12 inch x 1 inch x 1/4 inch deep) and scrapes and surface rust

Span 3 Beam 4 - Near Bearing 4: [PAR] right and left attachment bolt sheared, masonry plate rotated

Span 3 Beam 4: at bent 2, painted over pitting: web (up to 1/8 inch deep x 10 inch x full height)

Span 2 Beam 4: [PAR] at far end, corrosion with section loss: web below diaphragm [11 inch x 2 inch x 7/16 inch average remaining]; right stiffener [0.30 inch average remaining x full width x full height]

Span 3 Beam 3 - Near Bearing 3: [PAR] right and left attachment bolt sheared

Bent 2 Cap 1: North face below beam 3, delamination [29 inch x 3 inch] with cracks [up to 1/16 inch]

Bent 2 Cap 1: ALONG THE LENGTH OF THE CAP, SCATTERED LONGITUDINAL CRACKS UP TO 1/16 INCH

Span 3 Beam 2 - Near Bearing 2: [PAR] SPAN 3 BEAM 2 NEAR BEARING NORTHWEST CORNER HAS 5 INCH X 3 INCH X 4 INCH DEEP AREA OF BEARING LOSS. DUE TO BENT 2 CAP SPALLED AREA.

Span 3 Beam 2 - Near Bearing 2: [PAR] SPAN 3 BEAM 2 NEAR BEARING NORTHWEST CORNER HAS 5 INCH X 3 INCH X 4 INCH DEEP AREA OF BEARING LOSS. DUE TO BENT 2 CAP SPALLED AREA.

Span 3 Beam 2: at bent 2, painted over pitting with corrosion reactivating: web (up to 1/16 inch x 10 inch x full height)

Bent 2 Cap 1: (PAR) 4 FOOT X 1 FOOT X 1 FOOT X 3 INCH DEEP CORNER SPALL WITH EXPOSED REINFORCING APPROXIMATELY 25 PERCENT LOSS, NORTH FACE UNDER BEAM 2; UNDERMINING BEARING

Span 3 Near Bearing 1: [PAR] right and left attachment bolt sheared

Span 2 Beam 1: at bent 2, corrosion with section loss: web adjacent to diaphragm (1/2 inch average remaining x 10 inch x 1 inch); right stiffener (0.30 average remaining x full width x full height)

Span 2 Beam 1: at bent 2, corrosion with section loss: web adjacent to diaphragm (1/2 inch average remaining x 10 inch x 1 inch); right stiffener (0.30 average remaining x full width x full height)

Bent 2 Cap 1: [PAR] South face at East end, corner spall [27 inch x 14 inch x 12 inch x 3 inch deep] with exposed rusted reinforcing [section loss up to 1/8 inch]

Bent 2 Cap 1: (PAR) CRACKED PATCHED AREA SOUTHEAST BOTTOM CORNER WITH EFFLORESCENCE BUILD-UP

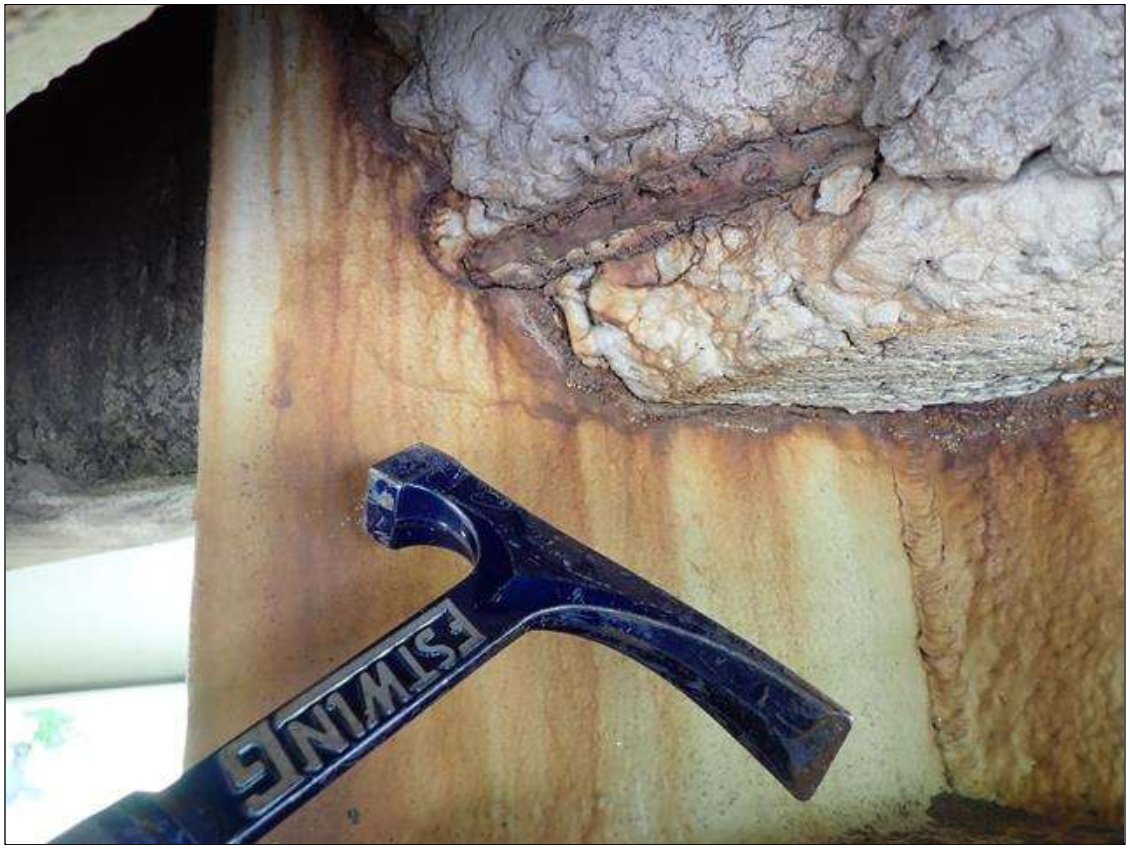
Span 2 Beam 4: (PAR) at bent 1, web adjacent to diaphragm, rust scale (10 inch); right stiffener (0.20 inch average remaining x full width x full height} with corrosion holes (up to 2 inch x 1 inch)

Bent 1 Cap 1: (PAR) MULTIPLE UP TO 8 FOOT X 2.5 FOOT CRACKED/FAILED PATCHED AREAS WITH EXPOSED RUSTED REBAR APPROXIMATELY 25 PERCENT LOSS, THROUGHOUT BOTTOM AND SOUTH FACE

Bent 1 Cap 1: (PAR) MULTIPLE UP TO 8 FOOT X 2.5 FOOT CRACKED/FAILED PATCHED AREAS WITH EXPOSED RUSTED REBAR APPROXIMATELY 25 PERCENT LOSS, THROUGHOUT BOTTOM AND SOUTH FACE

Bent 1 Cap 1: (PAR) MULTIPLE UP TO 8 FOOT X 2.5 FOOT CRACKED/FAILED PATCHED AREAS WITH EXPOSED RUSTED REBAR APPROXIMATELY 25 PERCENT LOSS, THROUGHOUT BOTTOM AND SOUTH FACE

Span 1 Beam 2: at bent 1, corrosion with section loss: web adjacent to diaphragm (1/2 inch average remaining x 10 inch x 5 inch); left stiffener (0.35 inch average remaining x full width x full height)



Span 1 Beam 2: at bent 1, corrosion with section loss: web adjacent to diaphragm (1/2 inch average remaining x 10 inch x 5 inch); left stiffener (0.35 inch average remaining x full width x full height)

Bent 1 Cap 1: MAP CRACKING AND HORIZONTAL CRACKS UP TO 1/16 INCH AT RANDOM THROUGHOUT NORTH AND SOUTH FACES

Span 2 Beam 1: (PAR) over both travel lanes, multiple vehicle impact with gouges [up to 3 inch x 1 inch x 1/2 inch deep] with surface rust

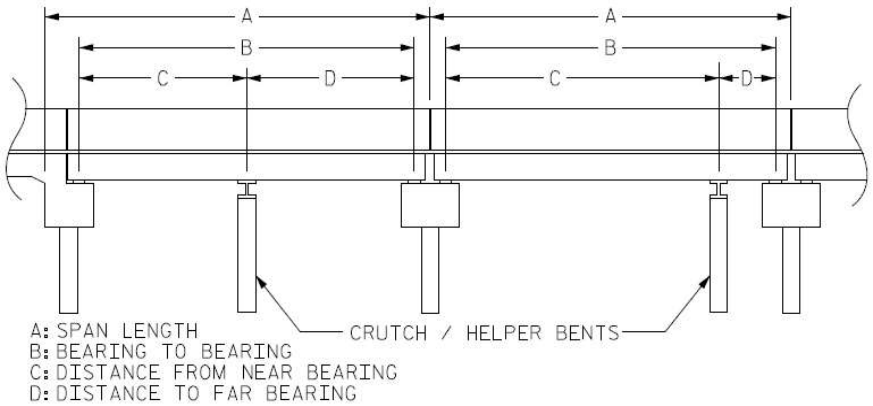
Bent 1 Pile 2: 2.5 FOOT X UP TO 1/16 INCH VERTICAL CRACK ON WEST FACE 6 INCH FROM BOTTOM OF CAP

Span 2 Beam 4: underside of coverplate over right travel lane, impact scrapes with surface rust

Structure Data Worksheet

Span Profile

County: **BURKE** Structure Number: **110112**



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	61.500	59.250			
2	61.500	60.250			
3	61.500	60.250			
4	61.500	59.250			

Structure Number: 110112 Span: 2 Route Name: I 40 E

roadway under span 2, looking east

Route Number: 11000400	**Route Name:** I 40 E			**Reference Feature:** H
Minimum Vertical Clearance 14.890 feet	**Maximum Minimum Vertical Clearance** 15.120 feet			
Total Horizontal Clearance 41.750 feet	**Lateral Clearances: Left:** 13.410 feet **Right** 8.810 feet			
☑ **Base Highway Network**	**LRS Inventory Route, Sub Route Number** 10040			
Milepost: 99.730	**Number of Lanes:** 2	**ADT:** 20000	**Year of ADT:** 2017	**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: 110112 Span: 3 Route Name: I 40 W

roadway under span 3, looking west

Route Number: 11000400	**Route Name:** I 40 W			**Reference Feature:** H
Minimum Vertical Clearance 14.710 feet	**Maximum Minimum Vertical Clearance** 14.850 feet			
Total Horizontal Clearance 40.480 feet	**Lateral Clearances: Left:** 13.310 feet **Right** 8.650 feet			
☑ **Base Highway Network**	**LRS Inventory Route, Sub Route Number** 10040			
Milepost: 99.730	**Number of Lanes:** 2	**ADT:** 20000	**Year of ADT:** 2017	**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	24ft Wide	2 Paved Lanes	Looking North
Left Shoulder	7ft Wide	2ft Paved	5ft Unpaved
Right Shoulder	8.5ft Wide	2.5ft Paved	6ft Unpaved
Left Guardrail			
Right Guardrail			

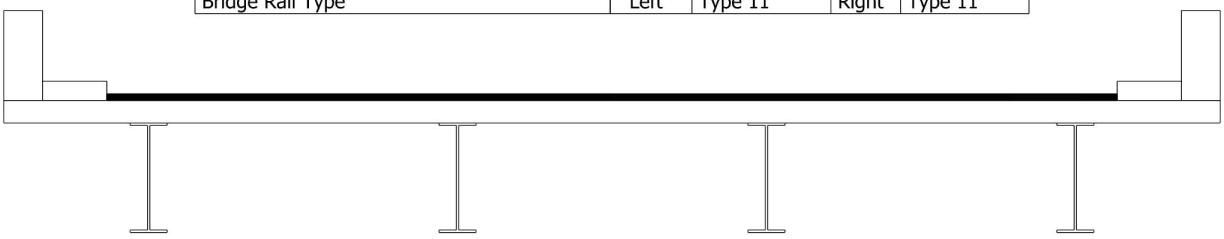
measurements taken approximately 400 feet from end bent 1

Title	Description
APPROACH ROADWAY SKETCH	LOOKING NORTH

Structure No:	Drawn By:	Date:	Filename:
110112	HABonilla	8/17/2023	S000906000217.wes

Bridge Inspection Field Sketch

Deck Width/Out to Out	31.5ft	Between Rails			31.333ft
Clear Roadway	28ft	Wearing Surface			2in
Median Width		Median Height			
Curb Height		Left	7.5in	Right	7.5in
Sidewalk Width		Left	1.667ft	Right	1.667ft
Clear Roadway (Rail to Median)		Left		Right	
Guardrail Width		Left	8in	Right	8in
Top of Rail to Deck/Wearing Surface		Left	2.333ft	Right	2.333ft
Bridge Rail Type		Left	Type 11	Right	Type 11



Measurements for Span #	1	ALL SPANS SIMILAR	
Deck Thickness	7in	Left Overhang	3.75ft
Top of Rail to Bottom of Beam (Avg)	5.75ft	Right Overhang	3.75ft

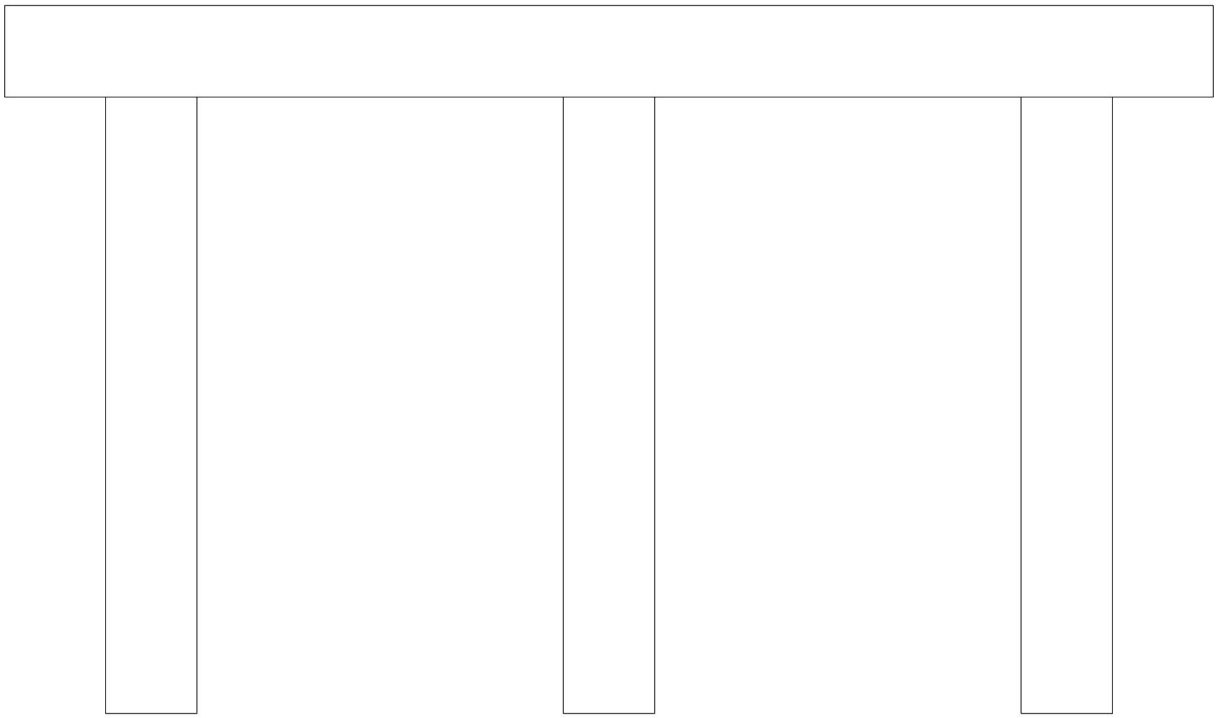
Beam #	Beam Type	Width	Height	Spacing	From
1	Plate Girder	11.5in	34in	3.75ft	Left Edge of Deck
2	Plate Girder	11.5in	34in	8ft	Beam 1
3	Plate Girder	11.5in	34in	8ft	Beam 2
4	Plate Girder	11.5in	34in	8ft	Beam 3

BEAM DIMENSIONS: between flanges 31-3/4"; flange width 11.5" x 3/4" thick; web 5/8" thick
COVERPLATE DIMENSIONS: 10" X 3/4"

Title TYPICAL SECTION SKETCH	Description LOOKING NORTH

Structure No: 110112	Drawn By: HABonilla	Date: 8/17/2023	Filename: S000906000218.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	33ft	30in	30in	1ft	2.5ft

Piles							
#	Name	Type	Spacing	From	Height/Diam.	Width	Length
1	Pile 1	Reinforced Concrete Column	4ft	Left End of Bent	30in	30in	16ft
2	Pile 2	Reinforced Concrete Column	12.5ft	Pile 1	30in	30in	16ft
3	Pile 3	Reinforced Concrete Column	12.5ft	Pile 2	30in	30in	16ft

Title	Description
BENT SKETCH	LOOKING NORTH

Structure No: 110112	Drawn By: HABonilla	Date: 8/17/2023	Filename: S000906000219.wes

end bent 2 and slope protection

northeast wingwall

northwest wingwall

intermediate diaphragm

end bearing assembly

bent 3

northeast guardrail termination

northeast guardrail

northeast guardrail attachment

end bent 2 asphalt

northwest guardrail attachment

northwest guardrail transition

northwest guardrail termination

north approach looking south

northwest guardrail

bent 3 asphalt

north approach looking north

roadway looking east

bent 2 asphalt

roadway looking west

bent 1 asphalt

southwest guardrail attachment

southwest guardrail

end bent 1 asphalt

southwest guardrail termination

southeast guardrail termination

southeast guardrail transition

asphalt wearing surface

left bridge rail

southeast guardrail attachment

right bridge rail

south approach looking south

south approach looking north

southwest wingwall

end bent 1 and slope protection

southeast wingwall

bent 1

superstructure underside

bent 2

east profile looking west

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

west profile looking east

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

ladder used

interior bearing assembly

beams over bent

typical coverplate termination