NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

**ATTENTION:** prompt action request, sketches revised, horizontal clearances revised

# Structure Safety Report

## Routine Element Inspection - Contract

**STRUCTURE NUMBER:** 110029 **SAP STRUCTURE NO:** 0120029 **FHWA STRUCTURE NO:** 000000000230029

**DIVISION:** 13 **COUNTY:** BURKE **INSPECTION DATE:** 08/16/2023 **FREQUENCY:** 24 MONTHS

**FACILITY CARRIED:** NC114 **MILE POST:**

**LOCATION:** 0.1 MI.S.JCT.SR1713

**FEATURE INTERSECTED:** I-40

**LATITUDE:** 35° 43' 41.5" **LONGITUDE:** 81° 37' 2.7"

**SUPERSTRUCTURE:** RC FLOOR ON I-BEAMS

**SUBSTRUCTURE:** E.BTS:RC CAPS/TIMBER PILES;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** 6 / 6 **SUPERSTRUCTURE** 5 / 5 **SUBSTRUCTURE** 5 / 5 **CULVERT** N / N

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

**OTHER SIGNS PRESENT:** (2) vertical clearance signs

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 |

## IDENTIFICATION

(1) STATE NAME NORTH CAROLINA BRIDGE **110029**
(8) STRUCTURE NUMBER (FEDERAL) **0230029**
(5) INVENTORY ROUTE (ON/UNDER) ON **31001140**
(2) STATE HIGHWAY DEPARTMENT DISTRICT **13**
(3) COUNTY CODE (FEDERAL) **23** (4) PLACE CODE **69520**
(6) FEATURE INTERSECTED **I-40**
(7) FACILITY CARRIED **NC114**
(9) LOCATION **0.1 MI.S.JCT.SR1713**
(11) MILEPOINT **0.0**
(12) BASE HIGHWAY NETWORK **0**
(13) LRS INVENTORY ROUTE & SUBROUTE **0**
(16) LATITUDE **35° 43' 41.5"** (17) LONGITUDE **81° 37' 2.7"**
(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 **1955**
(106) YEAR RECONSTRUCTED **0**
(42) TYPE OF SERVICE ON - **Overpass Structure**
OFF - **Highway** CODE **61**
(28) LANES ON STRUCTURE **2** LANES UNDER STRUCTURE **12**
(29) AVERAGE DAILY TRAFFIC **6200**
(30) YEAR OF ADT **2017** (109) TRUCK ADT PCT **6**
(19) BYPASS OR DETOUR LENGTH **0.0**

## GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN **74.0**
(49) STRUCTURE LENGTH **270.0**
(50) CURB OR SIDEWALK: LEFT **1.6** RIGHT **1.6**
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB **26.0**
(52) DECK WIDTH OUT TO OUT **31.5**
(32) APPROACH ROADWAY WITH (W/ SHOULDERS) **26.0**
(33) BRIDGE MEDIAN CODE **6**
(34) SKEW **48** (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** **14.5**
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE **H** **4.3**
(56) MIN LAT UNDERCLEARANCE LT: **13.8**

## 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 **65.92**
STATUS =

## CLASSIFICATION — CODE

(112) NBIS BRIDGE SYSTEM **Y**
(104) HIGHWAY SYSTEM **Inventory Route not on NHS** **0**
(26) FUNCTIONAL CLASS **Urban Minor Collector** **16**
(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-28** **50**
(65) INVENTORY RATING METHOD - **1**
(66) INVENTORY RATING **HS-17** **30**
(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 **12,400** 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 **110029** County **BURKE** Run Date **11/08/2023**

| 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 EBL | 11000400 | 18.8 | 107.5 | 1 | 10040 | 11 | 3 | 23000 | 2015 | 41.5 | H | 17.7 | 9.9 | 13.0 | 4 | | 1 | ☐ | ☐ |
| 3 | I 40 WBL | 11000400 | 15.4 | 107.5 | 1 | 10040 | 11 | 3 | 23000 | 2015 | 39.8 | H | 14.5 | 7.6 | 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** 68.000 **Skew** 138.000

| Number of Items | Type of Component | Element Name | Quantity | | Protective System Applied | Quantity (Sq Ft) |
|---|---|---|---|---|---|---|
| 4 | Movable Bearing | Movable Bearing | 4 | Each | Unknown | 4 |
| 1 | Reinforced Concrete Deck | Reinforced Concrete Deck | 2006 | Square Feet | | |
| 4 | Plate Girder | Steel Open Girder/Beam | 268 | Feet | Unknown | 2656 |
| 1 | Asphalt Wearing Surface | Wearing Surface | 1768 | Square Feet | | |
| 4 | Fixed Bearing | Fixed Bearing | 4 | Each | Unknown | 4 |
| 2 | Concrete Railing | Reinforced Concrete Bridge Railing | 136 | Feet | | |

**Span Number** 2 **Span Length** 75.000 **Skew** 138.000

| Number of Items | Type of Component | Element Name | Quantity | | Protective System Applied | Quantity (Sq Ft) |
|---|---|---|---|---|---|---|
| 2 | Concrete Railing | Reinforced Concrete Bridge Railing | 150 | Feet | | |
| 4 | Plate Girder | Steel Open Girder/Beam | 300 | Feet | Unknown | 2960 |
| 1 | Standard Joint | Pourable Joint Seal | 38 | Feet | | |
| 1 | Reinforced Concrete Deck | Reinforced Concrete Deck | 2213 | Square Feet | | |
| 1 | Asphalt Wearing Surface | Wearing Surface | 1950 | Square Feet | | |
| 4 | Movable Bearing | Movable Bearing | 4 | Each | Unknown | 4 |
| 4 | Fixed Bearing | Fixed Bearing | 4 | Each | Unknown | 4 |

**Span Number** 3 **Span Length** 75.000 **Skew** 138.000

| Number of Items | Type of Component | Element Name | Quantity | | Protective System Applied | Quantity (Sq Ft) |
|---|---|---|---|---|---|---|
| 2 | Concrete Railing | Reinforced Concrete Bridge Railing | 150 | Feet | | |
| 4 | Fixed Bearing | Fixed Bearing | 4 | Each | Unknown | 4 |
| 1 | Asphalt Wearing Surface | Wearing Surface | 1950 | Square Feet | | |
| 2 | Vertical Clearance | Regulatory Sign | 2 | Each | | |

# Superstructure Build Details

| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | Plate Girder | Steel Open Girder/Beam | 300 | Feet | Unknown | 2960 |
| 1 | Standard Joint | Pourable Joint Seal | 38 | Feet | | |
| 4 | Movable Bearing | Movable Bearing | 4 | Each | Unknown | 4 |
| 1 | Reinforced Concrete Deck | Reinforced Concrete Deck | 2213 | Square Feet | | |

**Span Number** 4 **Span Length** 52.000 **Skew** 138.000

| Number of Items | Type of Component | Element Name | Quantity | | Protective System Applied | Quantity (Sq Ft) |
|---|---|---|---|---|---|---|
| 1 | Reinforced Concrete Deck | Reinforced Concrete Deck | 1534 | Square Feet | | |
| 1 | Asphalt Wearing Surface | Wearing Surface | 1352 | Square Feet | | |
| 4 | Fixed Bearing | Fixed Bearing | 4 | Each | Unknown | 4 |
| 4 | Plate Girder | Steel Open Girder/Beam | 204 | Feet | Unknown | 2028 |
| 1 | Standard Joint | Pourable Joint Seal | 38 | Feet | | |
| 4 | Movable Bearing | Movable Bearing | 4 | Each | Unknown | 4 |
| 2 | Concrete Railing | Reinforced Concrete Bridge Railing | 104 | Feet | | |

# Structure Element Scoring

Structure Number: **110029**

Inspection Date **8/16/2023**

| 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 | 7,966 | 6,014 | 1,360 | 592 | 0 |
| 107 | | Steel Open Girder/Beam | Beam | 1,072 | 863 | 148 | 53 | 8 |
| 515 | 107 | Steel Protective Coating | Beam | 10,604 | 10,400 | 0 | 198 | 6 |
| 205 | | Reinforced Concrete Column | Piles and Columns | 9 | 0 | 0 | 9 | 0 |
| 215 | | Reinforced Concrete Abutment | Abutments | 98 | 57 | 23 | 18 | 0 |
| 220 | | Reinforced Concrete Pile Cap/Footing | Footing | 22 | 22 | 0 | 0 | 0 |
| 228 | | Timber Pile | Piles and Columns | 22 | 22 | 0 | 0 | 0 |
| 234 | | Reinforced Concrete Pier Cap | Caps | 215 | 118 | 24 | 73 | 0 |
| 521 | 234 | Concrete Protective Coating | Caps | 208 | 208 | 0 | 0 | 0 |
| 301 | | Pourable Joint Seal | Expansion Joints | 114 | 0 | 0 | 0 | 114 |
| 311 | | Movable Bearing | Bearing Device | 16 | 0 | 4 | 11 | 1 |
| 515 | 311 | Steel Protective Coating | Bearing Device | 16 | 0 | 0 | 4 | 12 |
| 313 | | Fixed Bearing | Bearing Device | 16 | 0 | 9 | 7 | 0 |
| 515 | 313 | Steel Protective Coating | Bearing Device | 16 | 0 | 2 | 11 | 3 |
| 331 | | Reinforced Concrete Bridge Railing | Bridge Rail | 540 | 468 | 61 | 11 | 0 |
| 510 | | Wearing Surface | Wearing Surfaces | 7,020 | 5,530 | 7 | 1,408 | 75 |
| 601 | | Regulatory Sign | Ground Mounted Signs | 2 | 2 | 0 | 0 | 0 |

# Summary of Maintenance Needs

Maintenance By Defect

Structure Number: **110029** Inspection Date: **08/16/2023**

| MMS Code | Element Name | Defect Name | Recommended Quantity |
|---|---|---|---|
| 3326 | Reinforced Concrete Deck | Patched Areas | 20 Square Feet |
| 3326 | Reinforced Concrete Deck | Cracking (RC and Other) | 1339 Square Feet |
| 3326 | Reinforced Concrete Deck | Delamination/Spall | 194 Square Feet |
| 3326 | Reinforced Concrete Deck | Efflorescence/Rust Staining | 460 Square Feet |
| 3326 | Reinforced Concrete Deck | Exposed Rebar | 4 Square Feet |
| 3314 | Steel Open Girder/Beam | Corrosion | 61 Feet |
| 3348 | Reinforced Concrete Column | Efflorescence/Rust Staining | 19 Each |
| 3348 | Reinforced Concrete Column | Delamination/Spall | 8 Each |
| 3348 | Reinforced Concrete Column | Patched Area | 31 Each |
| 3348 | Reinforced Concrete Column | Cracking (RC and Other) | 69 Each |
| 3350 | Reinforced Concrete Abutment | Exposed Rebar | 3 Feet |
| 3350 | Reinforced Concrete Abutment | Delamination/Spall | 6 Feet |
| 3350 | Reinforced Concrete Abutment | Cracking (RC and Other) | 12 Feet |
| 3348 | Reinforced Concrete Pier Cap | Patched Area | 13 Feet |
| 3348 | Reinforced Concrete Pier Cap | Delamination/Spall | 5 Feet |
| 3348 | Reinforced Concrete Pier Cap | Efflorescence/Rust Staining | 59 Feet |
| 3310 | Pourable Joint Seal | Debris Impaction | 18 Feet |
| 3310 | Pourable Joint Seal | Seal Damage | 114 Feet |
| 3334 | Movable Bearing | Corrosion | 12 Each |
| 3334 | Movable Bearing | Loss of Bearing Area | 1 Each |
| 3334 | Fixed Bearing | Corrosion | 7 Each |
| 3318 | Reinforced Concrete Bridge Railing | Exposed Rebar | 12 Feet |
| 3318 | Reinforced Concrete Bridge Railing | Delamination/Spall | 4 Feet |
| 3318 | Reinforced Concrete Bridge Railing | Patched Area | 5 Square Feet |
| 3318 | Reinforced Concrete Bridge Railing | Cracking (RC and Other) | 2 Feet |
| 2816 | Wearing Surface | Crack (Wearing Surface) | 1402 Square Feet |
| 2816 | Wearing Surface | Patched Area/Pothole (Wearing Surface) | 7 Square Feet |
| 2816 | Wearing Surface | Delamination/Spall (Wearing Surfaces) | 74 Square Feet |
| 3342 | Steel Protective Coating | Peeling/Bubbling/Cracking (steel Protective Coatings) | 1 Square Feet |
| 3342 | Steel Protective Coating | Effectiveness (Steel Protective Coatings) | 235 Square Feet |

# Element Structure Maintenance Quantities

Structure Number: **110029** Inspection Date **08/16/2023**

| Location | MMS Code | Description | Maint Quantity | Total Quantity | Severe Quantity | Poor Quantity | Fair Quantity | Good Quantity |
|---|---|---|---|---|---|---|---|---|
| Beam | 3314 | Maintenance Steel Superstructure Components | 61 | 1072 | 8.000 | 53.000 | 148.000 | 863.000 |
| Beam | 3342 | Clean and Paint Steel | 204 | 10604 | 6.000 | 198.000 | 0.000 | 10400.000 |
| Bearing Device | 3334 | Bridge Bearing | 13 | 16 | 1.000 | 11.000 | 4.000 | 0.000 |
| Bearing Device | 3334 | Bridge Bearing | 7 | 16 | 0.000 | 7.000 | 9.000 | 0.000 |
| Bearing Device | 3342 | Clean and Paint Steel | 16 | 16 | 12.000 | 4.000 | 0.000 | 0.000 |
| Bearing Device | 3342 | Clean and Paint Steel | 16 | 16 | 3.000 | 11.000 | 2.000 | 0.000 |
| Bridge Rail | 3318 | Maintenance of Concrete Bridge Rail | 23 | 540 | 0.000 | 11.000 | 61.000 | 468.000 |
| Deck | 3326 | Maintenance of Concrete Deck | 2017 | 7966 | 0.000 | 592.000 | 1360.000 | 6014.000 |
| Expansion Joints | 3310 | Maintenance of Standard Bridge Expansion Joints | 132 | 114 | 114.000 | 0.000 | 0.000 | 0.000 |
| Ground Mounted Signs | 3250 | Install or Replace Ground Mounted Signs | 0 | 2 | 0.000 | 0.000 | 0.000 | 2.000 |
| Wearing Surfaces | 2816 | Asphalt Surface Repair | 1483 | 7020 | 75.000 | 1408.000 | 7.000 | 5530.000 |
| Abutments | 3350 | Maintenance of Concrete Wings and Wall | 21 | 98 | 0.000 | 18.000 | 23.000 | 57.000 |
| Caps | 3348 | Maintenance of Concrete Substructure | 77 | 215 | 0.000 | 73.000 | 24.000 | 118.000 |
| Caps | 5603 | Partial Cleaning and Painting of Structural Steel | 0 | 208 | 0.000 | 0.000 | 0.000 | 208.000 |
| Footing | 3348 | Maintenance of Concrete Substructure | 0 | 22 | 0.000 | 0.000 | 0.000 | 22.000 |
| Piles and Columns | 3344 | Maintenance To Timber Substructure | 0 | 22 | 0.000 | 0.000 | 0.000 | 22.000 |
| Piles and Columns | 3348 | Maintenance of Concrete Substructure | 127 | 9 | 0.000 | 9.000 | 0.000 | 0.000 |

# Priority Actions Request

**Structure Number** 110029

## Span1

**3326** **Deck** Reinforced Concrete Deck

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 1 | Exposed Rebar | 4 | Span 1 Deck: (PAR) left and right overhangs, near end bent 1, spalls (up to 6 inch x 4 inch x 1 inch deep) with exposed rusted rebar |

**2816** **Wearing Surface** Asphalt Wearing Surface

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Delamination/Spall | 8 | Span 1 Wearing Surface: (PAR) at bent 1, areas of missing asphalt (up to 1 foot x 4 inch) |

## Span2

**3326** **Deck** Reinforced Concrete Deck

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Cracking (RC and | 5 | Span 2 Deck: (PAR) both overhangs, delaminations (approximately 1 foot diameter) with cracks (up to 1/8 inch); some areas over travel lanes |

**2816** **Wearing Surface** Asphalt Wearing Surface

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Delamination/Spall | 13 | Span 2 Wearing Surface: (PAR) at bent 2, areas of missing asphalt (up to 2 feet x 3 inch) at random |
| 2 | Patched Area/Pothole | 1 | Span 2 Wearing Surface: (PAR) along centerline of roadway, approximately 25 feet from bent 2, spall (11 inch x 6 inch x full depth) |

## Span3

**3326** **Deck** Reinforced Concrete Deck

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Delamination/Spall | 2 | Span 3 Deck: (PAR) top of deck near bent 2, spall (2 feet x 15 inch x 1.5 inch deep) with exposed rusted rebar at area of missing asphalt |

**3318** **Right Bridge Rail** Concrete Railing

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Patched Area | 4 | Span 3 Right Bridge Rail: (PAR) within patched area over left and right travel lanes of I-40, area of delamination with cracking (up to 1/16 inch), could possibly fall into traffic below |

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

# Priority Actions Request

**Structure Number** 110029

**2816** **Wearing Surface** Asphalt Wearing Surface

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Delamination/Spall | 30 | Span 3 Wearing Surface: (PAR) at bent 2, areas of missing asphalt (up to 3 feet x 2 inches) at random; northbound lane, at bent 3, areas of missing asphalt (up to 3.5 feet x 2 feet) |
| 2 | Delamination/Spall | 6 | Span 3 Wearing Surface: (PAR) centerline of roadway, near bent 2, spalls (up to 2 feet x 15 inch x full depth) |

## Span4

**3326** **Deck** Reinforced Concrete Deck

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 1 | Efflorescence/Rust Staining | 460 | Span 4 Deck: (PAR) throughout underside of deck, transverse cracks (up to 1/32 inch x full bay width) and map cracks (hairline), some with efflorescence buildup and rust stains at random |

**3334** **Beam 2** Plate Girder

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Corrosion | 1 | Span 4 Beam 2 - Near Bearing 2: (PAR) painted over section loss (up to 1/8 inch deep); left anchor bolt, approximately 50 percent section loss; pack rust |
| 2 | Corrosion | 5 | Span 4 Beam 2: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm (7/16 inch average remaining x 7 inch x 2 inch); lower web (1/2 inch average remaining x 4.5 feet x 4 inches); bottom flange (0.71 inch average remaining x 6 inches) with corrosion reinitiated |
| 2 | Loss of Bearing Area | 1 | Span 4 Near Bearing 2: (PAR) northwest corner, loss of bearing (4 inch x 3 inch x up to 1/2 inch deep) due to cap spall |

**3314** **Beam 3** Plate Girder

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Corrosion | 3 | Span 4 Beam 3: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm and upper web (7/16 inch average remaining x 6 inch x 2 foot); lower web (1/2 average remaining x up to 2.5 feet long x 6 inches high); bottom flange (0.77 inch average remaining x 8 inches); top flange, painted over pitting (up to 1/8 inch deep) with corrosion reinitiated |

**2816** **Wearing Surface** Asphalt Wearing Surface

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Delamination/Spall | 14 | Span 4 Wearing Surface: (PAR) at bent 3, areas of missing asphalt (up to 2 feet x 2 inch) at random |
| 2 | Delamination/Spall | 3 | Span 4 Wearing Surface: (PAR) throughout wearing surface, scattered areas of missing asphalt (up to 5 inch diameter) |

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

# Priority Actions Request

**Structure Number** 110029

## Bent 1

**3348** **Cap 1** Reinforced Concrete Pier Cap

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Efflorescence/Rust Staining | 12 | Bent 1 Cap 1: (PAR) BENT 1 CAP HAS SCATTERED CRACKS UP TO 1/32 INCH, SOME WITH RUST STAINS. |

**3348** **Pile 3** Reinforced Concrete Column

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Delamination/Spall | 8 | Bent 1 Pile 3: southeast and northeast corners, vertical cracks (up to 1/16 inch x 5.5 feet) with rust stains, and adjacent delaminations (up to 4 feet x 6 inch); southeast corner, at ground, spall (2 feet x 6 inch x 1.5 inch deep) with exposed rusted primary reinforcement |

## Bent 2

**3348** **Cap 1** Reinforced Concrete Pier Cap

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Efflorescence/Rust Staining | 2 | Bent 2 Cap 1: (PAR) underside of cap, adjacent to column 3, patched area (2 feet x 18 inch) with cracks (up to 1/32 inch) |

**3348** **Pile 2** Reinforced Concrete Column

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Efflorescence/Rust Staining | 11 | Bent 2 Pile 2: (PAR) at southeast corner, vertical cracks (up to 1/8 inch x full height) with rust stains and adjacent delaminations (up to 4 feet x 6 inch) |

**3348** **Pile 3** Reinforced Concrete Column

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Efflorescence/Rust Staining | 8 | Bent 2 Pile 3: (PAR) UP TO 1/8 INCH VERTICAL CRACKS WITH RUST STAINS AT RANDOM THROUGHOUT with adjacent delaminations up to 6 feet x 1 foot |

**3348** **Cap 1** Reinforced Concrete Pier Cap

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 1 | Efflorescence/Rust Staining | 27 | End Bent 2 Cap 1: (PAR) along the length of the cap, vertical and longitudinal cracks (up to 1/32 inch x 5 feet), some with rust stains at random |

## Bent 3

**3348** **Cap 1** Reinforced Concrete Pier Cap

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

# Priority Actions Request

**Structure Number** **110029**

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Delamination/Spall | 3 | Bent 3 Cap 1: (PAR) 3 FOOT X 18 INCH X 4 INCH DEEP FAILED PATCH/SPALL WITH EXPOSED REINFORCING, CAUSING LOSS OF BEARING, AT PREVIOUSLY PATCHED AREA NORTH FACE BELOW BEAM 2. |
| 1 | Efflorescence/Rust Staining | 18 | Bent 3 Cap 1: (PAR) UP TO 1/32 INCH MAP CRACKING, SOME WITH EFFLORESCENCE AND RUST STAINS, AT RANDOM THROUGHOUT |

**3348** **Pile 2** Reinforced Concrete Column

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Patched Area | 7 | Bent 3 Pile 2: (PAR) at Southwest corner, failed patch, 7 feet high x 22 inches wide x up to 3.5 inches deep with exposed rusted and debonded primary reinforcing |

**3348** **Pile 3** Reinforced Concrete Column

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | Patched Area | 8 | Bent 3 Pile 3: (PAR) at Southeast corner, failed patch/delamination/spall, 8 feet x up to 2 feet x 2.5 inches deep, with exposed rusted primary reinforcing |

## Approach Guardrail and Barriers

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

| Priority Level | Defect Type | Quantity | Defect Description |
|---|---|---|---|
| 2 | | 30 | (PAR) northeast guardrail and transition, areas of impact damage (up to 15 feet long, 30 feet total) |
| 2 | | 1 | (PAR) northwest guardrail attachment, improper lap |
| 2 | | 5 | (PAR) northwest guardrail transition, impact damage (5 feet) |
| 2 | | 30 | (PAR) southwest guardrail, areas of impact damage (up to 15 feet long, 30 feet total) |
| 2 | | 200 | (PAR) east side of span 1, extending from behind southeast wingwall to toe of end bent 1 slope protection, erosion channel (approximately 100 feet long x 3 feet long x 1.5 feet deep) undermining slope protection (up to 1 foot high x 1.5 foot deep) |
| 2 | | 35 | (PAR) end bent 1 slope protection, between slope and end bent berm, gap/settled (up to 2 inches wide x 2 inches high) with undermining (up to 1 foot deep) extending along full width of slope protection |

# Element Condition and Maintenance Data

Structure Number: **110029** Inspection Date: **08/16/2023**

## Span 1 Deck

### Reinforced Concrete Deck

| Element Number | Element Name | Total Qty | CS1 Qty | CS2 Qty | CS3 Qty | CS4 Qty | |
|---|---|---|---|---|---|---|---|
| 12 | Reinforced Concrete Deck | 2,006 | 1,799 | 207 | 0 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 12 | Delamination/Spall | at bent 1, end diaphragm in all bays, spalls/delaminations (up to ful bay width x 8 inch x 2 inches deep) with exposed rusted rebar and cracks (up to 1/8 inch) | 3 | | 24 | Square Feet |
| ☑ 12 | Cracking (RC and Other) | left overhang, near end bent 1, longitudinal crack (1/32 inch x 3 feet) | 2 | 3 | 3 | Square Feet |
| ☑ 12 | Cracking (RC and Other) | underside of deck, in all bays and overhangs, areas of map cracks (hairline); both overhangs (up to 1/32 inch x full width) at random | 2 | 200 | 200 | Square Feet |
| ☑ 12 | Exposed Rebar | (PAR) left and right overhangs, near end bent 1, spalls (up to 6 inch x 4 inch x 1 inch deep) with exposed rusted rebar | 2 | 4 | 4 | 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 | 67 | 60 | 6 | 1 | 0 | Feet |
| 515 | Steel Protective Coating | 664 | 657 | 0 | 6 | 1 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 107 | Corrosion | at bent 1, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 3 inch x 4 inch); bottom flange (0.85 inch x 6 inches) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ 107 | Corrosion | along the edge of the top flange, surface rust at random | 2 | 5 | | Feet |
| ☑ 107 | Corrosion | at end bent 1, web and bottom flange, rust scale | 2 | 1 | | Feet |
| ☑ 515 | Effectiveness (Steel Protective Coatings) | at end bent 1, web and bottom flange, rust scale | 4 | 1 | 1 | Square Feet |
| ☑ 515 | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 6 | 6 | 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 | 67 | 65 | 1 | 1 | 0 | Feet |
| 515 | Steel Protective Coating | 664 | 662 | 0 | 2 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty |
|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 1, web adjacent to diaphragm, painted over section loss (9/16 inch average remaining x 3 inch x 1 inch) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | at bent 1, edge of top flange, surface rust | 2 | 1 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 2 | 2 | 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 | 67 | 65 | 1 | 1 | 0 | Feet |
| 515 | Steel Protective Coating | 664 | 662 | 0 | 2 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 1, painted over section loss: web adjacent to diaphragm (1/2 inch average remaining x 4 inch x 3 inch) lower web (9/16 inch average remaining x 1 foot x 2 inch) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | at bent 1, edge of top flange, surface rust | 2 | 1 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 2 | 2 | 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 | 67 | 53 | 12 | 2 | 0 | Feet |
| 515 | Steel Protective Coating | 664 | 650 | 0 | 14 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 1, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 4 inch x 2 inch); lower web (9/16 inch average remaining x 2 feet x 4 inches) with corrosion reinitiated | 3 | 2 | 2 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 12 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 14 | 14 | Square 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 | 68 | 67 | 0 | 1 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **331** | Delamination/Spall | underside of rail section 7, spall (10 inch x 3 inch x 1. 5 inch deep) with exposed rusted rebar | 3 | 1 | 1 | 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 | 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 | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | painted over section loss (up to 3/16 inch deep) with corrosion reinitiated | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 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 | painted over section loss (up to 1/8 inch deep) with corrosion reinitiated; pack rust | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust/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 | 1 | 0 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | SPAN 1 NEAR BEARING HAS SCATTERED FRECKLED RUST. | 2 | 1 | | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | freckled rust | 2 | 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 | SPAN 1 FAR BEARING HAS RUST SCALE/PACK RUST. | 3 | 1 | 1 | Each |
| ☑ | **515** | Effectiveness (Steel Protective Coatings) | rust scale/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 | 1 | 0 | 0 | Square Feet |

| | Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|---|
| ☑ | **313** | Corrosion | SPAN 1 NEAR BEARING HAS SCATTERED FRECKLED RUST. | 2 | 1 | | Each |
| ☑ | **515** | Effectiveness (Steel Protective Coatings) | freckled rust | 2 | 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 | SPAN 1 FAR BEARING HAS RUST SCALE/PACK RUST. | 3 | 1 | 1 | Each |
| ☑ | **515** | Effectiveness (Steel Protective Coatings) | rust scale/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 | 1 | 0 | Square Feet |

| | Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|---|
| ☑ | **313** | Corrosion | SPAN 1 NEAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 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 | 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) with corrosion reinitiated; pack rust | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust/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 | 1,768 | 1,624 | 4 | 132 | 8 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **510** | Delamination/Spall (Wearing Surfaces) | (PAR) at bent 1, areas of missing asphalt (up to 1 foot x 4 inch) | 4 | 8 | 8 | Square Feet |
| ☑ **510** | Crack (Wearing Surface) | over end bent 1, transverse cracks, full width x up to 1/2 inch | 3 | 32 | 32 | Square Feet |
| ☑ **510** | Crack (Wearing Surface) | SPAN 1 WEARING SURFACE HAS SCATTERED TRANSVERSE AND LONGITUDINAL CRACKS UP TO 1/8 INCH. | 3 | 100 | 100 | Square Feet |
| ☑ **510** | Patched Area/Pothole (Wearing Surface) | 2023 previously repaired, previously noted as: 1 FOOT X 4 FOOT AREA OF MISSING ASPHALT WEARING SURFACE IN SOUTHBOUND LANE AT BENT 1 | 2 | 4 | | 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 | 2,213 | 1,827 | 331 | 55 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **12** | Cracking (RC and Other) | (PAR) both overhangs, delaminations (approximately 1 foot diameter) with cracks (up to 1/8 inch); some areas over travel lanes | 3 | 5 | 5 | Square Feet |
| ☑ **12** | Delamination/Spall | at bent 1, bay 1 end diaphragm, adjacent to beam 1, spall (18 inch x 6 inch x 1.5 inch deep) with exposed rusted rebar | 3 | | 2 | Square Feet |
| ☑ **12** | Delamination/Spall | throughout underside of deck, areas of poor consolidation (up to 1/2 inch deep) at random | 3 | 50 | 50 | Square Feet |

| | | | | | | |
|---|---|---|---|---|---|---|
| ☑ **12** | Patched Areas | at bent 1, end diaphragms in all bays, and bay 3 diaphragm at bent 2, unsound patches (up to full bay with x 8 inch) with cracks (up to 1/16 inch) | 3 | | 20 | Square Feet |
| ☑ **12** | Cracking (RC and Other) | underside of deck, in all bays and overhangs, areas of map cracks (hairline), some with efflorescence; both overhangs, transverse cracks (up to 1/32 inch x full width) at random | 2 | 330 | 330 | Square Feet |
| ☑ **12** | Patched Areas | left overhang, near bent 2, formwork left in place | 2 | 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 | 75 | 52 | 15 | 8 | 0 | Feet |
| 515 | Steel Protective Coating | 740 | 717 | 0 | 23 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 1, lower web, painted over section loss (9/16 inch average remaining x 5.5 feet x up to 10 inches) with corrosion reinitiated | 3 | 6 | 6 | Feet |
| ☑ **107** | Corrosion | at bent 2, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 7 inch x 3 inch); right stiffener (1/2 inch average remaining x 4 inch x 1.5 inches); bottom flange, painted over pitting (up to 1/8 inch deep x 15 inches) with corrosion reinitiated | 3 | 2 | 2 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 15 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 23 | 23 | 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 | 75 | 72 | 0 | 3 | 0 | Feet |
| 515 | Steel Protective Coating | 740 | 735 | 0 | 4 | 1 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 1, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 14 inch x 2 inch); lower web (9/16 inch average remaining x 2 feet x 4 inch) with corrosion reinitiated | 3 | 2 | 2 | Feet |
| ☑ **107** | Corrosion | at bent 2, painted over section loss: web adjacent to diaphragm (5/8 inch average remaining x 5 inch x 1 inch); lower web 9/16 inch average remaining x 6 feet x 4 inches) with corrosion reinitiated; bottom flange, rust scale | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | at bent 1, edge of top flange, surface rust | 2 | | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | at bent 2, bottom flange, rust scale | 4 | 1 | 1 | Square Feet |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 4 | 4 | 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 | 75 | 67 | 0 | 8 | 0 | Feet |
| 515 | Steel Protective Coating | 740 | 730 | 0 | 9 | 1 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 1, painted over section loss: web adjacent to diaphragm (5/8 inch average remaining x 10 inch x 2 inch); lower web (9/16 inch average remaining x 7 feet x 4 inch) with corrosion reinitiated; bottom flange, rust scale | 3 | 7 | 7 | Feet |
| ☑ **107** | Corrosion | at bent 2, web adjacent to diaphragm, painted over section loss (9/16 inch average remaining x 4 inch x 2 inch) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | at bent 1, edge of top flange, surface rust | 2 | | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | at bent 1, bottom flange, rust scale | 4 | 1 | 1 | Square Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 9 | 9 | 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 | 75 | 53 | 15 | 7 | 0 | Feet |
| 515 | Steel Protective Coating | 740 | 718 | 0 | 22 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 1, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 8 inch x 2 inch); lower web (9/16 inch average remaining x 6 feet x 4 inch); bottom flange, painted over pitting (up to 1/8 inch deep x 1.5 feet) with corrosion reinitiated | 3 | 6 | 6 | Feet |
| ☑ **107** | Corrosion | at bent 2, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 9 inch x 2 inch); lower web 9/16 inch average remaining x 1.5 feet x 3 inches) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 15 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 22 | 22 | Square Feet |

**General Comments**

## Span 2 — Bent 1 Joint

### Standard Joint

| Element Number | Element Name | Total Qty | CS1 Qty | CS2 Qty | CS3 Qty | CS4 Qty | |
|---|---|---|---|---|---|---|---|
| 301 | Pourable Joint Seal | 38 | 0 | 0 | 0 | 38 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **301** | Seal Damage | along the length of the joint, seal deteriorated (full length) | 4 | 38 | 38 | Feet |
| ☑ **301** | Debris Impaction | EXPANSION JOINT OVER BENT 1 HAS SCATTERED AREAS OF DEBRIS IMPACTION IN BOTH SHOULDERS. | 3 | | 6 | 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 | 75 | 69 | 6 | 0 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **331** | Cracking (RC and Other) | WEST RAIL HAS SCATTERED CRACKS UP TO 1/32 INCH. | 2 | 4 | | Feet |
| ☑ **331** | Exposed Rebar | underside of rail section at bent 2, (2) shallow rebars | 2 | 2 | 2 | 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 | 75 | 68 | 4 | 3 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **331** | Delamination/Spall | rail section 2 from bent 2, spall (27 inch x 4 inch x 1.5 inch deep) with exposed rusted rebar; adjacent post with diagonal crack (up to 1/32 inch x 6 inches) | 3 | 3 | 3 | Feet |
| ☑ **331** | Exposed Rebar | underside of rail section, shallow rebars at random | 2 | 4 | 4 | Feet |

**General Comments**

## Span 2 — Near 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 | SPAN 2 NEAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 1 | 1 | Square Feet |

**General Comments**

## Span 2 — Far 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 | 0 | 0 | 0 | 1 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | SPAN 2 FAR BEARING HAS RUST SCALE/PACK RUST. | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | rust scale/pack rust | 4 | 1 | 1 | Square Feet |

**General Comments**

## Span 2 — 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 | SPAN 2 NEAR BEARING HAS RUST SCALE/PACK RUST. | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | rust scale/pack rust | 4 | 1 | 1 | Square Feet |

**General Comments**

## Span 2 — Far 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 | SPAN 2 FAR BEARING HAS RUST SCALE/PACK RUST. | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | rust scale/pack rust | 4 | 1 | 1 | Square Feet |

**General Comments**

## Span 2 — 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 | SPAN 2 NEAR BEARING HAS RUST SCALE/PACK RUST. | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | rust scale/pack rust | 4 | 1 | 1 | Square Feet |

**General Comments**

## Span 2 — Far 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 | 0 | 0 | 1 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | painted over section loss (up to 3/16 inch deep) with corrosion reinitiated; 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 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 3/16 inch deep) with corrosion reinitiated; pack rust | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust/pack rust | 4 | 1 | 1 | Square Feet |

**General Comments**

## Span 2 — 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 | SPAN 2 FAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 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 | 1,950 | 1,536 | 0 | 400 | 14 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **510** | Delamination/Spall (Wearing Surfaces) | (PAR) at bent 2, areas of missing asphalt (up to 2 feet x 3 inch) at random | 4 | 13 | 13 | Square Feet |
| ☑ **510** | Patched Area/Pothole (Wearing Surface) | (PAR) along centerline of roadway, approximately 25 feet from bent 2, spall (11 inch x 6 inch x full depth) | 4 | 1 | 1 | Square Feet |
| ☑ **510** | Crack (Wearing Surface) | SPAN 2 WEARING SURFACE HAS SCATTERED TRANSVERSE AND LONGITUDINAL CRACKS UP TO 1/16 INCH. | 3 | 400 | 400 | 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 | 2,213 | 1,336 | 800 | 77 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **12** | Delamination/Spall | (PAR) top of deck near bent 2, spall (2 feet x 15 inch x 1.5 inch deep) with exposed rusted rebar at area of missing asphalt | 3 | 2 | 2 | Square Feet |
| ☑ **12** | Delamination/Spall | at bents 2 and 3, end diaphragms in all bays, unsound patches/delaminations/spalls (up to full bay width x 8 inch x 1.5 inch deep), some with exposed rusted rebar | 3 | | 30 | Square Feet |
| ☑ **12** | Delamination/Spall | left overhang, areas of poor consolidation (up to 1/2 inch deep) at random | 3 | 75 | 75 | Square Feet |
| ☑ **12** | Cracking (RC and Other) | throughout underside of deck, transverse cracks (up to 1/32 inch x full bay width) and map cracks (hairline), some with efflorescence at random | 2 | 800 | 800 | 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 | 75 | 42 | 25 | 8 | 0 | Feet |
| 515 | Steel Protective Coating | 740 | 706 | 0 | 33 | 1 | 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 (9/16 inch average remaining x 8 inch x 3 inch); lower web, painted over pitting (up to 1/8 inch deep x 7 feet x up to 4 inch) with corrosion reinitiated; bottom flange, rust scale | 3 | 7 | 7 | Feet |
| ☑ **107** | Corrosion | at bent 3, web adjacent to diaphragm, painted over section loss (9/16 inch average remaining x 3 inch x 3 inch) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 25 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | at bent 2, bottom flange, rust scale | 4 | 1 | 1 | Square Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 33 | 33 | 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 | 75 | 70 | 2 | 3 | 0 | Feet |
| 515 | Steel Protective Coating | 740 | 735 | 0 | 5 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 2, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 4 inch x 2 inch); lower web (5/8 inch average remaining x 14 inch x 4 inches); bottom flange (1 inch average remaining x 10 inches) with corrosion reinitiated | 3 | 2 | 2 | Feet |
| ☑ **107** | Corrosion | at bent 3, painted over section loss: web adjacent to diaphragm and upper web (9/16 inch average remaining x 5 inch x 1 inch); lower web (9/16 average remaining x 5 inch x 3 inch) with adjacent pitting (up to 1/8 inch deep) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 2 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 5 | 5 | 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 | 75 | 69 | 2 | 4 | 0 | Feet |
| 515 | Steel Protective Coating | 740 | 735 | 0 | 4 | 1 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 2, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 8 inch x 2 inch); lower web 9/16 inch average remaining x 1.5 feet x 4 inches) with corrosion reinitiated; bottom flange, rust scale | 3 | 2 | 2 | Feet |
| ☑ **107** | Corrosion | at bent 3, web adjacent to diaphragm and lower web, painted over pitting (up to 1/8 inch deep x 15 inch x 10 inch) | 3 | 2 | 2 | Feet |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 2 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | at bent 2, bottom flange, rust scale | 4 | 1 | 1 | Square Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 4 | 4 | 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 | 75 | 57 | 14 | 4 | 0 | Feet |
| 515 | Steel Protective Coating | 740 | 730 | 0 | 10 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 2, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 8 inch x 2 inch); lower web 9/16 inch average remaining x 15 inch x 3 inches); bottom flange (1 inch average remaining x 3 inches) with corrosion reinitiated | 3 | 2 | 2 | Feet |
| ☑ **107** | Corrosion | at bent 3, web adjacent to diaphragm and lower web, painted over pitting (up to 1/8 inch deep x 2 feet x 9 inches) with corrosion reinitiated | 3 | 2 | 2 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 6 | | Feet |
| ☑ **107** | Damage | impact damage | 2 | | | Feet |
| ☑ **107** | Distortion | over I-40 westbound, right travel lane, bottom flange and cover plate, impact scrapes/gouges (up to 1/4 inch deep) | 2 | 8 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 10 | 10 | Square Feet |

**General Comments**

## Span 3 Bent 2 Joint

## Standard Joint

| Element Number | Element Name | Total Qty | CS1 Qty | CS2 Qty | CS3 Qty | CS4 Qty | |
|---|---|---|---|---|---|---|---|
| 301 | Pourable Joint Seal | 38 | 0 | 0 | 0 | 38 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **301** | Seal Damage | along the length of the joint, seal deteriorated (full length) | 4 | 38 | 38 | Feet |
| ☑ **301** | Debris Impaction | EXPANSION JOINT OVER BENT 2 HAS SCATTERED AREAS OF DEBRIS IMPACTION IN BOTH SHOULDERS. | 3 | | 6 | 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 | 75 | 68 | 7 | 0 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **331** | Cracking (RC and Other) | WEST RAIL HAS SCATTERED CRACKS UP TO 1/32 INCH. | 2 | 5 | | Feet |
| ☑ **331** | Exposed Rebar | underside of rail, and outriggers, shallow rebars at random | 2 | 2 | 2 | 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 | 75 | 28 | 43 | 4 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **331** | Patched Area | (PAR) within patched area over left and right travel lanes of I-40, area of delamination with cracking (up to 1/16 inch), could possibly fall into traffic below | 3 | 4 | 4 | Square Feet |
| ☑ **331** | Cracking (RC and Other) | along the safety walk, transverse cracks (up to 1/32 inch) and map cracks (hairline) at random | 2 | 18 | | Feet |
| ☑ **331** | Exposed Rebar | underside of rail section and outriggers, shallow rebars at random | 2 | 3 | 3 | Feet |
| ☑ **331** | Patched Area | 26 FOOT CONCRETE BRIDGE RAIL REPAIR NEAR MIDSPAN. | 2 | 22 | | Square Feet |

**General Comments**

## Span 3 — 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 | SPAN 3 NEAR BEARING HAS 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 — 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 | 1 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | SPAN 3 FAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 1 | 1 | Square Feet |

**General Comments**

## Span 3 — 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 | SPAN 3 NEAR BEARING HAS RUST SCALE/PACK RUST. | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | rust scale/pack rust | 4 | 1 | 1 | Square Feet |

**General Comments**

## Span 3 — Far 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 | 1 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | painted over section loss (up to 1/8 inch deep) with corrosion reinitiated | 3 | 1 | 1 | Each |
| ☑ **515** | Peeling/Bubbling/Cracking (steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 1 | 1 | Square Feet |

**General Comments**

## Span 3 — 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 | 1 | 0 | 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) with corrosion reinitiated | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 1 | 1 | Square Feet |

**General Comments**

## Span 3 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 | 0 | 1 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | SPAN 3 FAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 1 | 1 | Square Feet |

**General Comments**

## Span 3 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 | SPAN 3 NEAR BEARING HAS 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 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 | SPAN 3 FAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 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 | 1,950 | 1,420 | 0 | 494 | 36 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 510 | Delamination/Spall (Wearing Surfaces) | (PAR) at bent 2, areas of missing asphalt (up to 3 feet x 2 inches) at random; northbound lane, at bent 3, areas of missing asphalt (up to 3.5 feet x 2 feet) | 4 | 30 | 30 | Square Feet |
| ☑ 510 | Delamination/Spall (Wearing Surfaces) | (PAR) centerline of roadway, near bent 2, spalls (up to 2 feet x 15 inch x full depth) | 4 | 6 | 6 | Square Feet |
| ☑ 510 | Crack (Wearing Surface) | SPAN 3 WEARING SURFACE HAS SCATTERED MAP/TRANSVERSE AND LONGITUDINAL CRACKS UP TO 1/8 INCH. | 3 | 488 | 488 | Square Feet |
| ☑ 510 | Patched Area/Pothole (Wearing Surface) | WEARING SURFACE HAS SCATTERED PATCHED AREAS WITH SOME MAP CRACKING. | 3 | 6 | 6 | 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 | 1,534 | 1,052 | 22 | 460 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 12 | Delamination/Spall | at bent 3, end diaphragms in all bays, failed patches/delaminations/spalls (3.5 feet x 10 inch x 2 inches deep) with exposed rusted rebar | 3 | | 10 | Square Feet |
| ☑ 12 | Effloresecence/Rust Staining | (PAR) throughout underside of deck, transverse cracks (up to 1/32 inch x full bay width) and map cracks (hairline), some with efflorescence buildup and rust stains at random | 3 | 460 | 460 | Square Feet |
| ☑ 12 | Cracking (RC and Other) | top of deck, northbound lane, near end bent 2, transverse crack (up to 1/32 inch) at area of missing asphalt | 2 | 1 | 1 | Square Feet |
| ☑ 12 | Delamination/Spall | right overhang, near midspan, delamination (10 inch x 6 inch) | 2 | 1 | 1 | Square Feet |
| ☑ 12 | Patched Areas | MULTIPLE SOUND PATCHES UP TO 2.5 FEET x 2 FEET IN UNDERSIDE OF WEST OVERHANG AT RANDOM THROUGHOUT. | 2 | 20 | | 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 | 51 | 29 | 21 | 1 | 0 | Feet |
| 515 | Steel Protective Coating | 507 | 485 | 0 | 21 | 1 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty |
|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 3, painted over section loss: web adjacent to diaphragm (1/2 inch average remaining x 7 inch x 2 inch); lower web (1/2 inch average remaining x 5 inch x 5 inch); bottom flange (0.86 inch average remaining x 1 foot) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 20 | | Feet |
| ☑ **107** | Corrosion | at end bent 2, bottom flange, rust scale | 2 | 1 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | at end bent 2, bottom flange, rust scale | 4 | 1 | 1 | Square Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 21 | 21 | 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 | 51 | 40 | 5 | 1 | 5 | 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, painted over section loss: web adjacent to diaphragm (7/16 inch average remaining x 7 inch x 2 inch); lower web (1/2 inch average remaining x 4.5 feet x 4 inches); bottom flange (0.71 inch average remaining x 6 inches) with corrosion reinitiated | 4 | 5 | 5 | Feet |
| ☑ **107** | Corrosion | at end bent 2, bottom flange, behind bearing, painted over section loss (0.83 inch average remaining x 2 inches) with corrosion reinitiated | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 5 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 11 | 11 | 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 | 51 | 44 | 4 | 0 | 3 | Feet |
| 515 | Steel Protective Coating | 507 | 500 | 0 | 7 | 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 and upper web (7/16 inch average remaining x 6 inch x 2 foot); lower web (1/2 average remaining x up to 2.5 feet long x 6 inches high); bottom flange (0.77 inch average remaining x 8 inches); top flange, painted over pitting (up to 1/8 inch deep) with corrosion reinitiated | 4 | 3 | 3 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 4 | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | surface rust | 3 | 7 | 7 | 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 | 51 | 25 | 25 | 1 | 0 | Feet |
| 515 | Steel Protective Coating | 507 | 482 | 0 | 25 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **107** | Corrosion | at bent 3, web adjacent to diaphragm, painted over section loss (1/2 inch average remaining x 6 inch x 6 inch), partially covered with epoxy | 3 | 1 | 1 | Feet |
| ☑ **107** | Corrosion | along the edge of the top flange, surface rust at random | 2 | 25 | | Feet |
| ☑ **107** | Damage | 6 FOOT IMPACT DAMAGE TO BOTTOM FLANGE AND COVER PLATE WITH SCRAPES NEAR MID-SPAN. - not found at this location, moved to Span 3 beam 4 | 1 | | | Feet |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | along the edge of the top flange, surface rust at random | 3 | 25 | 25 | Square Feet |

**General Comments**

## Span 4 Bent 3 Joint

### Standard Joint

| Element Number | Element Name | Total Qty | CS1 Qty | CS2 Qty | CS3 Qty | CS4 Qty | |
|---|---|---|---|---|---|---|---|
| 301 | Pourable Joint Seal | 38 | 0 | 0 | 0 | 38 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **301** | Seal Damage | along the length of the joint, seal deteriorated (full length) | 4 | 38 | 38 | Feet |
| ☑ **301** | Debris Impaction | EXPANSION JOINT OVER BENT 3 HAS SCATTERED AREAS OF DEBRIS IMPACTION IN BOTH SHOULDERS. | 3 | | 6 | 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 | 52 | 51 | 1 | 0 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **331** | Exposed Rebar | at rail post 1, spall (5 inch x 3 inch x 1/2 inch deep) with exposed rusted rebar | 2 | 1 | 1 | Feet |
| ☑ **331** | Cracking (RC and Other) | along length, scattered cracks, hairline | 1 | 10 | | 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 | 52 | 49 | 0 | 3 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **331** | Cracking (RC and Other) | at rail post 2, cracks (up to 1/16 inch wide); adjacent rail section, vertical crack (up to 1/32 inch) | 3 | 2 | 2 | Feet |
| ☑ **331** | Patched Area | rail post 3, patched area (8 inch x 10 inch) with hairline cracks | 3 | 1 | 1 | Square Feet |
| ☑ **331** | Cracking (RC and Other) | along length, scattered cracks, hairline | 1 | 11 | | 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 | 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 | |
|---|---|---|---|---|---|---|
| ☑ **311** | Corrosion | SPAN 4 NEAR BEARING HAS 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 — Far 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 | 0 | 0 | 1 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | painted over section loss (up to 1/4 inch deep) with corrosion reinitiated | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 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 | 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 |
|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **311** | Corrosion | (PAR) painted over section loss (up to 1/8 inch deep); left anchor bolt, approximately 50 percent section loss; pack rust | 4 | 1 | 1 | Each |
| ☑ **311** | Loss of Bearing Area | (PAR) northwest corner, loss of bearing (4 inch x 3 inch x up to 1/2 inch deep) due to cap spall | 2 | | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | pack rust/corrosion with section loss | 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 | 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 | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | painted over section loss (up to 1/8 inch deep) with corrosion reinitiated | 3 | 1 | 1 | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 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 | 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 | SPAN 4 NEAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 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 | 0 | 1 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **313** | Corrosion | SPAN 4 FAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 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 | 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 | SPAN 4 NEAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 3 | 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 | SPAN 4 FAR BEARING HAS SCATTERED SURFACE RUST. | 2 | 1 | | Each |
| ☑ **515** | Effectiveness (Steel Protective Coatings) | limited effectiveness, corrosion initiated | 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 | 1,352 | 950 | 3 | 382 | 17 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **510** | Delamination/Spall (Wearing Surfaces) | (PAR) at bent 3, areas of missing asphalt (up to 2 feet x 2 inch) at random | 4 | 14 | 14 | Square Feet |
| ☑ **510** | Delamination/Spall (Wearing Surfaces) | (PAR) throughout wearing surface, scattered areas of missing asphalt (up to 5 inch diameter) | 4 | 3 | 3 | Square Feet |
| ☑ **510** | Crack (Wearing Surface) | over end bent 2, transverse crack (1/4 inch x full width of roadway) | 3 | 32 | 32 | Square Feet |
| ☑ **510** | Crack (Wearing Surface) | SPAN 4 WEARING SURFACE HAS SCATTERED MAP/TRANSVERSE AND LONGITUDINAL CRACKS UP TO 1/8 INCH. | 3 | 350 | 350 | Square Feet |
| ☑ **510** | Patched Area/Pothole (Wearing Surface) | 2023 previously repaired, previously noted as: midspan Northbound lane near shoulder, pothole, 3 inch x 4 inch x full depth | 2 | 1 | | Square Feet |
| ☑ **510** | Patched Area/Pothole (Wearing Surface) | right shoulder, near end bent 2, patched area (22 inch x 16 inch) | 2 | 2 | | 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 | 37 | 0 | 12 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 215 | Cracking (RC and Other) | right side of beam 4, delamination 3.5 feet x up to 1 foot, with cracks up to 1/16 inch | 3 | 4 | 4 | Feet |
| ☑ 215 | Cracking (RC and Other) | UP TO 1/16 INCH DIAGONAL CRACKS IN ABUTMENT AT BEAM PENETRATIONS. | 3 | 8 | 8 | 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 | 52 | 42 | 10 | 0 | 0 | Feet |
| 521 | Concrete Protective Coating | 104 | 104 | 0 | 0 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 234 | Cracking (RC and Other) | UP TO 1/64 INCH VERTICAL CRACKS AT RANDOM THROUGHOUT. | 2 | 10 | | 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 | 37 | 16 | 0 | 21 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 234 | Efflorescence/Rust Staining | (PAR) BENT 1 CAP HAS SCATTERED CRACKS UP TO 1/32 INCH, SOME WITH RUST STAINS. | 3 | 12 | 12 | Feet |
| ☑ 234 | Patched Area | SOUTH FACE AND BOTTOM OF WEST END, AND BETWEEN COLUMNS 2 AND 3. HAS PATCHED AREAS UP TO 3 FEET X 15 INCHES WITH SOME HAIRLINE CRACKS AND EFFLORESCENCE VISIBLE. | 3 | 5 | 5 | Feet |
| ☑ 234 | Patched Area | southwest corner, failed patch (full height x 18 inch x up to 2 inches deep) with exposed rusted rebar | 3 | 2 | 2 | Feet |
| ☑ 234 | Patched Area | underside, at east end, unsound patched areas (up to 2 feet x 1 foot x 1 inch deep) with exposed rusted rebar | 3 | 2 | 2 | Feet |
| ☑ 234 | Delamination/Spall | (combined with other notes 2023) Southwest corner below failed patch, spall 13 inch x 8 inch x up to 3 inch deep with exposed rusted reinforcing | 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 | 0 | 1 | 0 | Each |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **205** | Cracking (RC and Other) | west and east faces, UP TO 1/16 INCH VERTICAL CRACKS AT RANDOM THROUGHOUT with adjacent delaminations up to to 24 inch vertical 8 inch | 3 | 1 | 8 | 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) | West face at top, vertical crack 9 feet x up to 1/16 inch with adjacent delamination 5 feet x 8 inches | 3 | 1 | 10 | Each |
| ☑ **205** | Cracking (RC and Other) | SOUTH AND EAST FACES HAVE UP TO 1/32 INCH VERTICAL CRACK AND DELAMINATED AREA. AREA IS: 18 INCH x 6 INCH. | 2 | | | 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** | Delamination/Spall | (PAR) southeast and northeast corners, vertical cracks (up to 1/16 inch x 5.5 feet) with rust stains, and adjacent delaminations (up to 4 feet x 6 inch); southeast corner, at ground, spall (2 feet x 6 inch x 1. 5 inch deep) with exposed rusted primary reinforcement | 3 | 1 | 8 | Each |
| ☑ **205** | Cracking (RC and Other) | (combined with other notes 2023) UP TO 1/16 INCH VERTICAL CRACKS AT RANDOM THROUGHOUT. | 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 | 37 | 19 | 14 | 4 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty |
|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☑ **234** | Efflorescence/Rust Staining | (PAR) underside of cap, adjacent to column 3, patched area (2 feet x 18 inch) with cracks (up to 1/32 inch) and rust stains | 3 | 2 | 2 | Feet |
| ☑ **234** | Patched Area | Northeast corner, failed patch with adjacent delamination, 14 inch x 14 inch, and transverse crack, 1/16 inch x full width, on underside of cap | 3 | 2 | 4 | Feet |
| ☑ **234** | Delamination/Spall | North face over column 2, vertical crack, 1/32 inch x full height, extends up from vertical crack on column 2, with adjacent delamination, 26 inch x 15 inch | 2 | 1 | 1 | Feet |
| ☑ **234** | Delamination/Spall | north face, below bay 3, spall (4 inch diameter x 1 inch deep) with exposed rusted rebar | 2 | 1 | 1 | Feet |
| ☑ **234** | Efflorescence/Rust Staining | south and north face, areas of map cracks (hairline) at random | 2 | 12 | | 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 | 0 | 1 | 0 | Each |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **205** | Cracking (RC and Other) | WEST AND EAST FACES, UP TO 1/16 INCH VERTICAL CRACKS AT RANDOM THROUGHOUT. | 3 | 1 | 9 | 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** | Cracking (RC and Other) | 6 FOOT X UP TO 1/16 INCH VERTICAL CRACK WITH EFFLORESCENCE EAST FACE AT BOTTOM OF CAP. (SIMILAR ON WEST FACE) | 3 | | 16 | Each |
| ☑ **205** | Efflorescence/Rust Staining | (PAR) at southeast corner, vertical cracks (up to 1/8 inch x full height) with rust stains and adjacent delaminations (up to 4 feet x 6 inch) | 3 | 1 | 11 | 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 | 0 | 0 | 1 | 0 | Each |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **205** | Efflorescence/Rust Staining | (PAR) UP TO 1/8 INCH VERTICAL CRACKS WITH RUST STAINS AT RANDOM THROUGHOUT with adjacent delaminations up to 6 feet x 1 foot | 3 | 1 | 8 | 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 | 20 | 23 | 6 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 215 | Delamination/Spall | adjacent to beams, spalls/delaminations (up to 18 inch x 10 inch x 1/2 inch deep) with associated cracks (up to 1/16 inch) | 3 | 6 | 6 | Feet |
| ☑ 215 | Cracking (RC and Other) | along the abutment, areas of map cracks (hairline) at random | 2 | 20 | | Feet |
| ☑ 215 | Exposed Rebar | below right overhang, exposed rusted reinforcing, no loss noted | 2 | 3 | 3 | 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 | 52 | 25 | 0 | 27 | 0 | Feet |
| 521 | Concrete Protective Coating | 104 | 104 | 0 | 0 | 0 | Square Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 234 | Efflorescence/Rust Staining | (PAR) along the length of the cap, vertical and longitudinal cracks (up to 1/32 inch x 5 feet), some with rust stains at random | 3 | 27 | 27 | 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 | 37 | 16 | 0 | 21 | 0 | Feet |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ 234 | Delamination/Spall | (PAR) 3 FOOT X 18 INCH X 4 INCH DEEP FAILED PATCH/SPALL WITH EXPOSED REINFORCING, CAUSING LOSS OF BEARING, AT PREVIOUSLY PATCHED AREA NORTH FACE BELOW BEAM 2. | 3 | 3 | 3 | Feet |
| ☑ 234 | Efflorescence/Rust Staining | (PAR) UP TO 1/32 INCH MAP CRACKING, SOME WITH EFFLORESCENCE AND RUST STAINS, AT RANDOM THROUGHOUT | 3 | 18 | 18 | 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 | 1 | 0 | Each |

| Element Number | Defect Type | Defect Description | CS | CS Qty | Maint Qty | |
|---|---|---|---|---|---|---|
| ☑ **205** | Cracking (RC and Other) | UP TO 1/8 INCH x 6 FOOT VERTICAL CRACKS AND UP TO 1/32 INCH MAP CRACKS AT RANDOM THROUGHOUT, some with efflorescence, some with adjacent delamination, up to 4 foot x 1 foot | 3 | 1 | 22 | 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) | south, north and east faces, multiple vertical cracks, up to 4 feet x 1/16 inch wide with adjacent delaminations (4 feet x 10 inch) | 3 | | 4 | Each |
| ☑ **205** | Patched Area | (PAR) at Southwest corner, failed patch, 7 feet high x 22 inches wide x up to 3.5 inches deep with exposed rusted and debonded primary reinforcing | 3 | 1 | 7 | 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** | Patched Area | (PAR) at Southeast corner, failed patch/delamination/spall, 8 feet x up to 2 feet x 2.5 inches deep, with exposed rusted primary reinforcing | 3 | 1 | 8 | Each |
| ☑ **205** | Patched Area | WEST FACE AND SOUTHWEST AND NORTHWEST CORNERS HAVE PATCHED AREAS UP TO 8.5 FEET X 1 FOOT WITH SCATTERED MAP CRACKING UP TO 1/32 INCH. | 3 | | 16 | Each |

**General Comments**

# Elements Verfied

| Location | Name | Component | Element Name | Amount |
|---|---|---|---|---|
| Span 1 | Deck | Reinforced Concrete Deck | Reinforced Concrete Deck | 2006 |
| Span 1 | Beam 1 | Plate Girder | Steel Open Girder/Beam | 67 |
| Span 1 | Beam 2 | Plate Girder | Steel Open Girder/Beam | 67 |
| Span 1 | Beam 3 | Plate Girder | Steel Open Girder/Beam | 67 |
| Span 1 | Beam 4 | Plate Girder | Steel Open Girder/Beam | 67 |
| Span 1 | Left Bridge Rail | Concrete Railing | Reinforced Concrete Bridge Railing | 68 |
| Span 1 | Right Bridge Rail | Concrete Railing | Reinforced Concrete Bridge Railing | 68 |
| Span 1 | Wearing Surface | Asphalt Wearing Surface | Wearing Surface | 1768 |
| 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 | 2213 |
| Span 2 | Beam 1 | Plate Girder | Steel Open Girder/Beam | 75 |
| Span 2 | Beam 2 | Plate Girder | Steel Open Girder/Beam | 75 |
| Span 2 | Beam 3 | Plate Girder | Steel Open Girder/Beam | 75 |
| Span 2 | Beam 4 | Plate Girder | Steel Open Girder/Beam | 75 |
| Span 2 | Left Bridge Rail | Concrete Railing | Reinforced Concrete Bridge Railing | 75 |
| Span 2 | Right Bridge Rail | Concrete Railing | Reinforced Concrete Bridge Railing | 75 |
| Span 2 | Bent 1 Joint | Standard Joint | Pourable Joint Seal | 38 |
| Span 2 | Wearing Surface | Asphalt Wearing Surface | Wearing Surface | 1950 |
| Span 2 | Near Bearing 1 | Movable Bearing | Movable Bearing | 1 |
| Span 2 | Far Bearing 1 | Fixed Bearing | Fixed Bearing | 1 |
| Span 2 | Far Bearing 2 | Fixed Bearing | Fixed Bearing | 1 |
| Span 2 | Near Bearing 2 | Movable Bearing | Movable Bearing | 1 |
| Span 2 | Near Bearing 3 | Movable Bearing | Movable Bearing | 1 |
| Span 2 | Far Bearing 3 | Fixed Bearing | Fixed Bearing | 1 |
| Span 2 | Far Bearing 4 | Fixed Bearing | Fixed Bearing | 1 |
| Span 2 | Near Bearing 4 | Movable Bearing | Movable Bearing | 1 |
| Span 3 | Deck | Reinforced Concrete Deck | Reinforced Concrete Deck | 2213 |
| Span 3 | Beam 1 | Plate Girder | Steel Open Girder/Beam | 75 |
| Span 3 | Beam 2 | Plate Girder | Steel Open Girder/Beam | 75 |
| Span 3 | Beam 3 | Plate Girder | Steel Open Girder/Beam | 75 |
| Span 3 | Beam 4 | Plate Girder | Steel Open Girder/Beam | 75 |
| Span 3 | Left Bridge Rail | Concrete Railing | Reinforced Concrete Bridge Railing | 75 |
| Span 3 | Right Bridge Rail | Concrete Railing | Reinforced Concrete Bridge Railing | 75 |
| Span 3 | Bent 2 Joint | Standard Joint | Pourable Joint Seal | 38 |
| Span 3 | Wearing Surface | Asphalt Wearing Surface | Wearing Surface | 1950 |
| Span 3 | Near Bearing 1 | Movable Bearing | Movable Bearing | 1 |
| Span 3 | Far Bearing 1 | Fixed Bearing | Fixed Bearing | 1 |
| Span 3 | Far Bearing 2 | Fixed Bearing | Fixed Bearing | 1 |

# Elements Verfied

| Location | Name | Component | Element Name | Amount |
|---|---|---|---|---|
| Span 3 | Near Bearing 2 | Movable Bearing | Movable Bearing | 1 |
| Span 3 | Near Bearing 3 | Movable Bearing | Movable Bearing | 1 |
| Span 3 | Far Bearing 3 | Fixed Bearing | Fixed Bearing | 1 |
| Span 3 | Far Bearing 4 | Fixed Bearing | Fixed Bearing | 1 |
| Span 3 | Near Bearing 4 | Movable Bearing | Movable Bearing | 1 |
| Span 3 | Left Vertical Clearance Sign | Vertical Clearance | Regulatory Sign | 1 |
| Span 3 | Right Vertical Clearance Sign | Vertical Clearance | Regulatory Sign | 1 |
| Span 4 | Deck | Reinforced Concrete Deck | Reinforced Concrete Deck | 1534 |
| Span 4 | Beam 1 | Plate Girder | Steel Open Girder/Beam | 51 |
| Span 4 | Beam 2 | Plate Girder | Steel Open Girder/Beam | 51 |
| Span 4 | Beam 3 | Plate Girder | Steel Open Girder/Beam | 51 |
| Span 4 | Beam 4 | Plate Girder | Steel Open Girder/Beam | 51 |
| Span 4 | Left Bridge Rail | Concrete Railing | Reinforced Concrete Bridge Railing | 52 |
| Span 4 | Right Bridge Rail | Concrete Railing | Reinforced Concrete Bridge Railing | 52 |
| Span 4 | Bent 3 Joint | Standard Joint | Pourable Joint Seal | 38 |
| Span 4 | Wearing Surface | Asphalt Wearing Surface | Wearing Surface | 1352 |
| 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 | 37 |
| 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 | 52 |
| End Bent 1 | Abutment | Reinforced Concrete Abutment | Reinforced Concrete Abutment | 49 |
| Bent 2 | Cap 1 | Reinforced Concrete Pier Cap | Reinforced Concrete Pier Cap | 37 |
| 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 | 52 |
| End Bent 2 | Abutment | Reinforced Concrete Abutment | Reinforced Concrete Abutment | 49 |
| Bent 3 | Cap 1 | Reinforced Concrete Pier Cap | Reinforced Concrete Pier Cap | 37 |
| 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:** 110029 **Inspection Date:** 08/16/2023

### 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** | **7966** | **3376** |
| Drainage System | G, F, P, or C | **P** | **0** | **3332** |
| Utilities | G, F, P, or C | | | |
| Slope Protection | G, F, P, or C | **P** | **235** | **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 | **F** | | |
| Superstructure Paint Code | | **U** | | |

*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 | **9** |
| 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:** 110029 **Inspection Date:** 08/16/2023

---

**Item** Deck Debris **Grade** F **Maint Code** 3376 **Qty.** 7966

**Details** along the curblines, debris accumulation (up to 1.5 feet wide x 3 inches high) with vegetation, obstructing deck drainage

---

**Item** Drainage System **Grade** P **Maint Code** 3332 **Qty.** 0

**Details** see deck debris notes

---

**Item** Slope Protection **Grade** P **Maint Code** 3352 **Qty.** 235

**Details** (PAR) east side of span 1, extending from behind southeast wingwall to toe of end bent 1 slope protection, erosion channel (approximately 100 feet long x 3 feet long x 1.5 feet deep) undermining slope protection (up to 1 foot high x 1.5 foot deep)
(PAR) end bent 1 slope protection, between slope and end bent berm, gap/settled (up to 2 inches wide x 2 inches high) with undermining (up to 1 foot deep) extending along full width of slope protection

---

**Item** Response to live load **Grade** F **Maint Code** **Qty.** 0

**Details** vibrations felt under heavy vehicle loads

---

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

**Details** (PAR) southwest guardrail, areas of impact damage (up to 15 feet long, 30 feet total)
(PAR) northwest guardrail attachment, improper lap
(PAR) northwest guardrail transition, impact damage (5 feet)
(PAR) northeast guardrail and transition, areas of impact damage (up to 15 feet long, 30 feet total)
behind northeast approach curb, area of erosion (7 feet x 4 feet x 1.5 feet deep)
southeast guardrail, replaced since 2021 inspection

Bent 3 Pile 1: UP TO 1/8 INCH x 6 FOOT VERTICAL CRACKS AND UP TO 1/32 INCH MAP CRACKS AT RANDOM THROUGHOUT, some with efflorescence, some with adjacent delamination, up to 4 foot x 1 foot

Bent 3 Pile 1: UP TO 1/8 INCH x 6 FOOT VERTICAL CRACKS AND UP TO 1/32 INCH MAP CRACKS AT RANDOM THROUGHOUT, some with efflorescence, some with adjacent delamination, up to 4 foot x 1 foot

Bent 3 Pile 2: (PAR) at Southwest corner, failed patch, 7 feet high x 22 inches wide x up to 3.5 inches deep with exposed rusted and debonded primary reinforcing

Bent 3 Pile 2: (PAR) at Southwest corner, failed patch, 7 feet high x 22 inches wide x up to 3.5 inches deep with exposed rusted and debonded primary reinforcing

Bent 3 Pile 2: south, north and east faces, multiple vertical cracks, up to 4 feet x 1/16 inch wide with adjacent delaminations (4 feet x 10 inch)

Bent 3 Pile 3: (PAR) at Southeast corner, failed patch/delamination/spall, 8 feet x up to 2 feet x 2.5 inches deep, with exposed rusted primary reinforcing

Bent 3 Pile 3: WEST FACE AND SOUTHWEST AND NORTHWEST CORNERS HAVE PATCHED AREAS UP TO 8.5 FEET X 1 FOOT WITH SCATTERED MAP CRACKING UP TO 1/32 INCH.

Bent 3 Cap 1: (PAR) UP TO 1/32 INCH MAP CRACKING, SOME WITH EFFLORESCENCE AND RUST STAINS, AT RANDOM THROUGHOUT

Bent 3 Cap 1: (PAR) UP TO 1/32 INCH MAP CRACKING, SOME WITH EFFLORESCENCE AND RUST STAINS, AT RANDOM THROUGHOUT

Bent 3 Cap 1: (PAR) UP TO 1/32 INCH MAP CRACKING, SOME WITH EFFLORESCENCE AND RUST STAINS, AT RANDOM THROUGHOUT

Span 4 Beam 4: at bent 3, web adjacent to diaphragm, painted over section loss (1/2 inch average remaining x 6 inch x 6 inch), partially covered with epoxy

Span 3 Beam 4: at bent 3, web adjacent to diaphragm and lower web, painted over pitting (up to 1/8 inch deep x 2 feet x 9 inches) with corrosion reinitiated

Span 4 Beam 3: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm and upper web (7/16 inch average remaining x 6 inch x 2 foot); lower web (1/2 average remaining x up to 2.5 feet long x 6 inches high); bottom flange (0.77 inch average remaining x 8 inches); top flange, painted over pitting (up to 1/8 inch deep) with corrosion reinitiated


Span 4 Beam 3: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm and upper web (7/16 inch average remaining x 6 inch x 2 foot); lower web (1/2 average remaining x up to 2.5 feet long x 6 inches high); bottom flange (0.77 inch average remaining x 8 inches); top flange, painted over pitting (up to 1/8 inch deep) with corrosion reinitiated

Span 4 Deck: at bent 3, end diaphragms in all bays, failed patches/delaminations/spalls (3.5 feet x 10 inch x 2 inches deep) with exposed rusted rebar

Span 4 Beam 2: (PAR) at bent 3, painted over section loss: web adjacent to diaphragm (7/16 inch average remaining x 7 inch x 2 inch); lower web (1/2 inch average remaining x 4.5 feet x 4 inches); bottom flange (0.71 inch average remaining x 6 inches) with corrosion reinitiated

Span 4 Beam 2 - Near Bearing 2: (PAR) painted over section loss (up to 1/8 inch deep); left anchor bolt, approximately 50 percent section loss; pack rust

Span 4 Beam 2 - Near Bearing 2: (PAR) northwest corner, loss of bearing (4 inch x 3 inch x up to 1/2 inch deep) due to cap spall

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

Bent 3 Cap 1: (PAR) 3 FOOT X 18 INCH X 4 INCH DEEP FAILED PATCH/SPALL WITH EXPOSED REINFORCING, CAUSING LOSS OF BEARING, AT PREVIOUSLY PATCHED AREA NORTH FACE BELOW BEAM 2.

Span 4 Beam 1: at bent 3, painted over section loss: web adjacent to diaphragm (1/2 inch average remaining x 7 inch x 2 inch); lower web (1/2 inch average remaining x 5 inch x 5 inch); bottom flange (0.86 inch average remaining x 1 foot) with corrosion reinitiated

Span 4 Deck: MULTIPLE SOUND PATCHES UP TO 2.5 FEET x 2 FEET IN UNDERSIDE OF WEST OVERHANG AT RANDOM THROUGHOUT.

Span 4 Deck: (PAR) throughout underside of deck, transverse cracks (up to 1/32 inch x full bay width) and map cracks (hairline), some with efflorescence buildup and rust stains at random

Span 4 Deck: right overhang, near midspan, delamination (10 inch x 6 inch)

Span 4 Beam 4: along the edge of the top flange, surface rust at random

Span 4 Beam 1: at end bent 2, bottom flange, rust scale

Span 4 Beam 1 - Far Bearing 1: painted over section loss (up to 1/4 inch deep) with corrosion reinitiated

End Bent 2 Abutment: adjacent to beams, spalls/delaminations (up to 18 inch x 10 inch x 1/2 inch deep) with associated cracks (up to 1/16 inch)

End Bent 2 Abutment: along the abutment, areas of map cracks (hairline) at random

End Bent 2 Cap 1: (PAR) along the length of the cap, vertical and longitudinal cracks (up to 1/32 inch x 5 feet), some with rust stains at random

Span 4 Beam 2: at end bent 2, bottom flange, behind bearing, painted over section loss (0.83 inch average remaining x 2 inches) with corrosion reinitiated

Span 4 Deck: (PAR) throughout underside of deck, transverse cracks (up to 1/32 inch x full bay width) and map cracks (hairline), some with efflorescence buildup and rust stains at random

End Bent 2 Abutment: adjacent to beams, spalls/delaminations (up to 18 inch x 10 inch x 1/2 inch deep) with associated cracks (up to 1/16 inch)

Span 3 Right Bridge Rail: (PAR) within patched area over left and right travel lanes of I-40, area of delamination with cracking (up to 1/16 inch) and rust stain, could possibly fall into traffic below

Span 3 Right Bridge Rail: underside of rail section and outriggers, shallow rebars at random

Span 3 Deck: left overhang, areas of poor consolidation (up to 1/2 inch deep) at random

Span 3 Beam 4: over I-40 westbound, right travel lane, bottom flange and cover plate, impact scrapes/gouges (up to 1/4 inch deep)

Span 3 Beam 1: along the edge of the top flange, surface rust at random

Span 3 Deck: at bents 2 and 3, end diaphragms in all bays, unsound patches/delaminations/spalls (up to full bay width x 8 inch x 1.5 inch deep), some with exposed rusted rebar

Span 3 Deck: at bents 2 and 3, end diaphragms in all bays, unsound patches/delaminations/spalls (up to full bay width x 8 inch x 1.5 inch deep), some with exposed rusted rebar

(PAR) southwest guardrail, areas of impact damage (up to 15 feet long, 30 feet total)

(PAR) southwest guardrail, areas of impact damage (up to 15 feet long, 30 feet total)

(PAR) northwest guardrail attachment, improper lap

(PAR) northwest guardrail transition, impact damage (5 feet)

(PAR) northeast guardrail and transition, areas of impact damage (up to 15 feet long, 30 feet total)

behind northeast approach curb, area of erosion (7 feet x 4 feet x 1.5 feet deep)

along the curblines, debris accumulation (up to 1.5 feet wide x 3 inches high) with vegetation, obstructing deck drainage

Span 1 Right Bridge Rail: underside of rail section 7, spall (10 inch x 3 inch x 1.5 inch deep) with exposed rusted rebar

Span 1 Wearing Surface: SPAN 1 WEARING SURFACE HAS SCATTERED TRANSVERSE AND LONGITUDINAL CRACKS UP TO 1/8 INCH.

Span 1 Wearing Surface: over end bent 1, transverse cracks, full width x up to 1/2 inch

Span 1 Wearing Surface: 2023 previously repaired, previously noted as: 1 FOOT X 4 FOOT AREA OF MISSING ASPHALT WEARING SURFACE IN SOUTHBOUND LANE AT BENT 1

Span 1 Wearing Surface: (PAR) at bent 1, areas of missing asphalt (up to 1 foot x 4 inch)

Span 2 Bent 1 Joint: along the length of the joint, seal deteriorated (full length)

Span 2 Wearing Surface: (PAR) along centerline of roadway, approximately 25 feet from bent 2, spall (11 inch x 6 inch x full depth)

Span 2 Wearing Surface: (PAR) at bent 2, areas of missing asphalt (up to 2 feet x 3 inch) at random

Span 3 Wearing Surface: (PAR) at bent 2, areas of missing asphalt (up to 3 feet x 2 inches) at random; northbound lane, at bent 3, areas of missing asphalt (up to 3.5 feet x 2 feet)

Span 2 Left Bridge Rail: WEST RAIL HAS SCATTERED CRACKS UP TO 1/32 INCH.

Span 3 Wearing Surface: SPAN 3 WEARING SURFACE HAS SCATTERED MAP/TRANSVERSE AND LONGITUDINAL CRACKS UP TO 1/8 INCH.

Span 2 Right Bridge Rail: rail section 2 from bent 2, spall (27 inch x 4 inch x 1.5 inch deep) with exposed rusted rebar; adjacent post with diagonal crack (up to 1/32 inch x 6 inches)

Span 3 Wearing Surface: WEARING SURFACE HAS SCATTERED PATCHED AREAS WITH SOME MAP CRACKING.

Span 3 Wearing Surface: (PAR) at bent 2, areas of missing asphalt (up to 3 feet x 2 inches) at random; northbound lane, at bent 3, areas of missing asphalt (up to 3.5 feet x 2 feet)

Span 3 Deck: (PAR) top of deck near bent 2, spall (2 feet x 15 inch x 1.5 inch deep) with exposed rusted rebar at area of missing asphalt

Span 3 Right Bridge Rail: along the safety walk, transverse cracks (up to 1/32 inch) and map cracks (hairline) at random

Span 3 Right Bridge Rail: 26 FOOT CONCRETE BRIDGE RAIL REPAIR NEAR MIDSPAN.

Span 3 Right Bridge Rail: (PAR) within patched area over left and right travel lanes of I-40, area of delamination with cracking (up to 1/16 inch), could possibly fall into traffic below

Span 3 Right Bridge Rail: (PAR) within patched area over left and right travel lanes of I-40, area of delamination with cracking (up to 1/16 inch), could possibly fall into traffic below

Span 3 Wearing Surface: (PAR) at bent 2, areas of missing asphalt (up to 3 feet x 2 inches) at random; northbound lane, at bent 3, area of missing asphalt (3.5 feet x 2 feet)

Span 4 Wearing Surface: (PAR) at bent 3, areas of missing asphalt (up to 2 feet x 2 inch) at random

Span 4 Wearing Surface: 2023 previously repaired, previously noted as: midspan Northbound lane near shoulder, pothole, 3 inch x 4 inch x full depth

Span 4 Wearing Surface: (PAR) throughout wearing surface, scattered areas of missing asphalt (up to 5 inch diameter)

Span 4 Deck: top of deck, northbound lane, near end bent 2, transverse crack (up to 1/32 inch) at area of missing asphalt

Span 4 Left Bridge Rail: at rail post 1, spall (5 inch x 3 inch x 1/2 inch deep) with exposed rusted rebar


Span 4 Right Bridge Rail: at rail post 2, cracks (up to 1/16 inch wide); adjacent rail section, vertical crack (up to 1/32 inch)

Span 4 Right Bridge Rail: rail post 3, patched area (8 inch x 10 inch) with hairline cracks

(PAR) east side of span 1, extending from behind southeast wingwall to toe of end bent 1 slope protection, erosion channel (approximately 100 feet long x 3 feet long x 1.5 feet deep) undermining slope protection (up to 1 foot high x 1.5 foot deep)

(PAR) east side of span 1, extending from behind southeast wingwall to toe of end bent 1 slope protection, erosion channel (approximately 100 feet long x 3 feet long x 1.5 feet deep) undermining slope protection (up to 1 foot high x 1.5 foot deep)

(PAR) east side of span 1, extending from behind southeast wingwall to toe of end bent 1 slope protection, erosion channel (approximately 100 feet long x 3 feet long x 1.5 feet deep) undermining slope protection (up to 1 foot high x 1.5 foot deep)

(PAR) end bent 1 slope protection, between slope and end bent berm, gap/settled (up to 2 inches wide x 2 inches high) with undermining (up to 1 foot deep) extending along full width of slope protection

End Bent 1 Abutment: right side of beam 4, delamination 3.5 feet x up to 1 foot, with cracks up to 1/16 inch

Span 1 Deck: (PAR) left and right overhangs, near end bent 1, spalls (up to 6 inch x 4 inch x 1 inch deep) with exposed rusted rebar


Span 1 Beam 1 - Near Bearing 1: painted over section loss (up to 3/16 inch deep) with corrosion reinitiated

Span 1 Beam 1: at end bent 1, web and bottom flange, rust scale

Span 1 Deck: left overhang, near end bent 1, longitudinal crack (1/32 inch x 3 feet)

Span 1 Deck: (PAR) left and right overhangs, near end bent 1, spalls (up to 6 inch x 4 inch x 1 inch deep) with exposed rusted rebar

Bent 1 Pile 2: West face at top, vertical crack 9 feet x up to 1/16 inch with adjacent delamination 5 feet x 8 inches

Bent 1 Pile 3: (PAR) southeast and northeast corners, vertical cracks (up to 1/16 inch x 5.5 feet) with rust stains, and adjacent delaminations (up to 4 feet x 6 inch); southeast corner, at ground, spall (2 feet x 6 inch x 1.5 inch deep) with exposed rusted primary reinforcement

Bent 1 Cap 1: SOUTH FACE AND BOTTOM OF WEST END, AND BETWEEN COLUMNS 2 AND 3. HAS PATCHED AREAS UP TO 3 FEET X 15 INCHES WITH SOME HAIRLINE CRACKS AND EFFLORESCENCE VISIBLE.

Bent 1 Cap 1: (PAR) BENT 1 CAP HAS SCATTERED CRACKS UP TO 1/32 INCH, SOME WITH RUST STAINS.

Bent 1 Cap 1: underside, at east end, unsound patched areas (up to 2 feet x 1 foot x 1 inch deep) with exposed rusted rebar

Span 1 Deck: at bent 1, end diaphragm in all bays, spalls/delaminations (up to ful bay width x 8 inch x 2 inches deep) with exposed rusted rebar and cracks (up to 1/8 inch)

Span 1 Beam 1: at bent 1, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 3 inch x 4 inch); bottom flange (0.85 inch x 6 inches) with corrosion reinitiated

Span 1 Beam 1 - Far Bearing 1: painted over section loss (up to 1/8 inch deep) with corrosion reinitiated; pack rust

Span 2 Beam 1: at bent 1, lower web, painted over section loss (9/16 inch average remaining x 5.5 feet x up to 10 inches) with corrosion reinitiated

Bent 1 Cap 1: southwest corner, failed patch (full height x 18 inch x up to 2 inches deep) with exposed rusted rebar

Span 2 Beam 2: at bent 1, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 14 inch x 2 inch); lower web (9/16 inch average remaining x 2 feet x 4 inch) with corrosion reinitiated

Span 2 Beam 3: at bent 1, painted over section loss: web adjacent to diaphragm (5/8 inch average remaining x 10 inch x 2 inch); lower web (9/16 inch average remaining x 7 feet x 4 inch) with corrosion reinitiated; bottom flange, rust scale

Span 2 Deck: underside of deck, in all bays and overhangs, areas of map cracks (hairline), some with efflorescence; both overhangs, transverse cracks (up to 1/32 inch x full width) at random

Span 2 Deck: (PAR) both overhangs, delaminations (approximately 1 foot diameter) with cracks (up to 1/8 inch); some areas over travel lanes

Span 2 Deck: left overhang, near bent 2, formwork left in place

Span 2 Deck: throughout underside of deck, areas of poor consolidation (up to 1/2 inch deep) at random

Span 2 Deck: at bent 1, end diaphragms in all bays, and bay 3 diaphragm at bent 2, unsound patches (up to full bay with x 8 inch) with cracks (up to 1/16 inch)

Bent 2 Pile 1: WEST AND EAST FACES, UP TO 1/16 INCH VERTICAL CRACKS AT RANDOM THROUGHOUT.

Bent 2 Pile 2: (PAR) at southeast corner, vertical cracks (up to 1/8 inch x full height) with rust stains and adjacent delaminations (up to 4 feet x 6 inch)

Bent 2 Pile 2: 6 FOOT X UP TO 1/16 INCH VERTICAL CRACK WITH EFFLORESCENCE EAST FACE AT BOTTOM OF CAP. (SIMILAR ON WEST FACE)

Bent 2 Pile 3: (PAR) UP TO 1/8 INCH VERTICAL CRACKS WITH RUST STAINS AT RANDOM THROUGHOUT with adjacent delaminations up to 6 feet x 1 foot

Bent 2 Pile 3: (PAR) UP TO 1/8 INCH VERTICAL CRACKS WITH RUST STAINS AT RANDOM THROUGHOUT with adjacent delaminations up to 6 feet x 1 foot

Bent 2 Cap 1: Northeast corner, failed patch with adjacent delamination, 14 inch x 14 inch, and transverse crack, 1/16 inch x full width, on underside of cap

Bent 2 Cap 1: (PAR) underside of cap, adjacent to column 3, patched area (2 feet x 18 inch) with cracks (up to 1/32 inch) and rust stains

Bent 2 Cap 1: north face, below bay 3, spall (4 inch diameter x 1 inch deep) with exposed rusted rebar

Bent 2 Cap 1: Northeast corner, failed patch with adjacent delamination, 14 inch x 14 inch, and transverse crack, 1/16 inch x full width, on underside of cap

Bent 2 Cap 1: south and north face, areas of map cracks (hairline) at random

Span 2 Beam 4: at bent 2, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 9 inch x 2 inch); lower web (9/16 inch average remaining x 1.5 feet x 3 inches) with corrosion reinitiated

Span 3 Beam 4: at bent 2, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 8 inch x 2 inch); lower web (9/16 inch average remaining x 15 inch x 3 inches); bottom flange (1 inch average remaining x 3 inches) with corrosion reinitiated

Span 2 Beam 3 - Far Bearing 3: painted over section loss (up to 3/16 inch deep) with corrosion reinitiated; pack rust

Span 3 Beam 2: at bent 2, painted over section loss: web adjacent to diaphragm (9/16 inch average remaining x 4 inch x 2 inch); lower web (5/8 inch average remaining x 14 inch x 4 inches); bottom flange (1 inch average remaining x 10 inches) with corrosion reinitiated

Span 3 Beam 1: at bent 2, web adjacent to diaphragm, painted over section loss (9/16 inch average remaining x 8 inch x 3 inch); lower web, painted over pitting (up to 1/8 inch deep x 7 feet x up to 4 inch) with corrosion reinitiated; bottom flange, rust scale

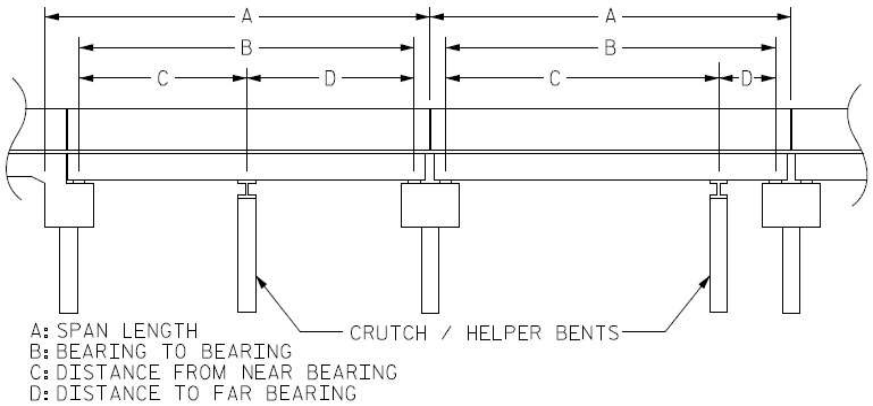
Span 3 Left Bridge Rail: underside of rail, and outriggers, shallow rebars at random

Bent 2 Cap 1: North face over column 2, vertical crack, 1/32 inch x full height, extends up from vertical crack on column 2, with adjacent delamination, 26 inch x 15 inch

# Structure Data Worksheet

## Span Profile

County: **BURKE** Structure Number: **110029**




| Span Number | Span Length | Bearing to Bearing | Crutch/ Helper Bent | Distance to Near Bearing | Distance to Far Bearing |
|---|---|---|---|---|---|
| 1 | 68.000 | 65.000 | | | |
| 2 | 75.000 | 74.333 | | | |
| 3 | 75.000 | 74.333 | | | |
| 4 | 52.000 | 49.500 | | | |

Structure Number: 110029 Span: 2 Route Name: I 40 EBL


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

| | | | | |
|---|---|---|---|---|
| **Route Number:** 11000400 | **Route Name:** I 40 EBL | | | **Reference Feature:** H |
| **Minimum Vertical Clearance** 17.650 feet | **Maximum Minimum Vertical Clearance** 18.790 feet | | | |
| **Total Horizontal Clearance** 41.470 feet | **Lateral Clearances: Left:** 12.950 feet **Right** 9.900 feet | | | |
| ☑ **Base Highway Network** | **LRS Inventory Route, Sub Route Number** 10040 | | | |
| **Milepost:** 107.470 | **Number of Lanes:** 3 | **ADT:** 23000 | **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: 110029 Span: 3 Route Name: I 40 WBL


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

| | | | | |
|---|---|---|---|---|
| **Route Number:** 11000400 | **Route Name:** I 40 WBL | | | **Reference Feature:** H |
| **Minimum Vertical Clearance** 14.450 feet | **Maximum Minimum Vertical Clearance** 15.440 feet | | | |
| **Total Horizontal Clearance** 39.810 feet | **Lateral Clearances: Left:** 13.840 feet **Right** 7.600 feet | | | |
| ☑ **Base Highway Network** | **LRS Inventory Route, Sub Route Number** 10040 | | | |
| **Milepost:** 107.470 | **Number of Lanes:** 3 | **ADT:** 23000 | **Year of ADT:** 2015 | **Percentage of Trucks:** 23 |
| ☑ **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 | 19ft Wide | 2 Paved Lanes | Looking North |
| Left Shoulder | 7.5ft Wide | 0.5ft Paved | 7ft Unpaved |
| Right Shoulder | 6.25ft Wide | 1.25ft Paved | 5ft Unpaved |
| Left Guardrail | | | |
| Right Guardrail | | | |

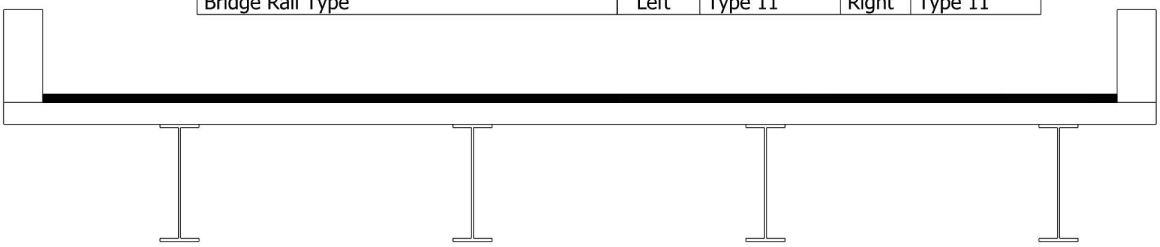
Measurements taken approximately 400 feet from end bent 1

| Title | Description |
|---|---|
| APPROACH ROADWAY | LOOKING NORTH |

| Structure No: | Drawn By: | Date: | Filename: |
|---|---|---|---|
| 110029 | ITChapman | 8/16/2023 | S000918000451.wes |

# Bridge Inspection Field Sketch

| | | | | | |
|---|---|---|---|---|---|
| Deck Width/Out to Out | 31.5ft | Between Rails | | | 29.25ft |
| Clear Roadway | 26ft | Wearing Surface | | | 2.5in |
| Median Width | | Median Height | | | |
| Curb Height | | Left | 8in | Right | 8in |
| Sidewalk Width | | Left | 1.62ft | Right | 1.62ft |
| Clear Roadway (Rail to Median) | | Left | | Right | |
| Guardrail Width | | Left | 11in | Right | 11in |
| Top of Rail to Deck/Wearing Surface | | Left | 2.375ft | Right | 2.375ft |
| Bridge Rail Type | | Left | Type 11 | Right | Type 11 |



| | | | |
|---|---|---|---|
| Measurements for Span # | 1-4 | | |
| Deck Thickness | 6.75in | Left Overhang | 4.5ft |
| Top of Rail to Bottom of Beam (Avg) | 5.937ft | Right Overhang | 4.5ft |

| Beam # | Beam Type | Width | Height | Spacing | From |
|---|---|---|---|---|---|
| 1 | Plate Girder | 12in | 36in | 4.5ft | Left Edge of Deck |
| 2 | Plate Girder | 12in | 36in | 7.5ft | Beam 1 |
| 3 | Plate Girder | 12in | 36in | 7.5ft | Beam 2 |
| 4 | Plate Girder | 12in | 36in | 7.5ft | Beam 3 |

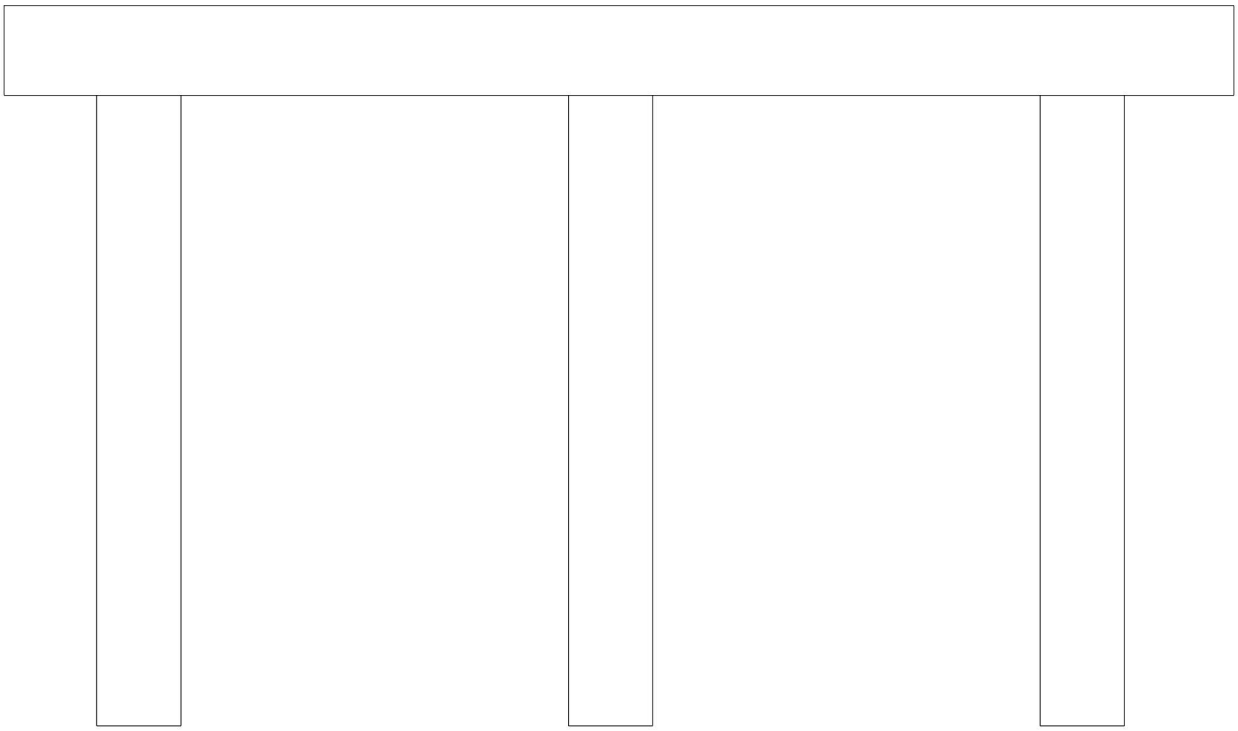
BEAMS:
Span 1 (W36x160): 34" between flanges, 12" x 1" flange, 5/8" web
Spans 2 & 3 (W36x170): 33-7/8" between flanges, 12" x 1-1/8" flange, 11/16" web
Span 4 (W36x150): 34-1/8" between flanges, 12" x 15/16" flange, 5/8" web

COVER PLATES:
Span 1: 34' long x 10-1/2" wide x 1" thick
Spans 2 & 3: 45' long x 10-1/2" wide x 1" thick

| Title | Description |
|---|---|
| TYPICAL SECTION | LOOKING NORTH |

| Structure No: | Drawn By: | Date: | Filename: |
|---|---|---|---|
| 110029 | ITChapman | 8/16/2023 | S000918000452.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 | 36.5ft | 30in | 32in | 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 | |
| 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: 110029 | Drawn By: ITChapman | Date: 8/16/2023 | Filename: S000918000453.wes |
|---|---|---|---|


approximately 0.1 miles east of span 3, along I-40 westbound, vertical clearance signs (14 feet-5 inches)

superstructure underside, span 4

ladder used

bent 3

superstructure underside, span 3 (spans 1 and 2 similar)

typical bottom flange cover plate end

intermediate diaphragm

end diaphragm

bent 2

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

east profile looking west

interior bearing assembly

beams over bent

end bent 2 slope protection

northwest wingwall

end bent 2

end bearing assembly

northeast wingwall


southeast guardrail termination


southeast guardrail

southwest guardrail termination

southwest guardrail

south approach looking north

southwest guardrail attachment

end bent 1 asphalt

left bridge rail

right bridge rail

asphalt wearing surface

southeast guardrail transition

southeast guardrail attachment

bridge ID

bridge plaque

south approach looking south

bent 1 joint

bent 2 joint

roadway looking east

roadway looking west

north approach looking north

bent 3 joint

northwest guardrail attachment

northwest guardrail transition

northwest guardrail


northeast guardrail attachment

northeast guardrail

northwest guardrail termination

northeast guardrail termination

north approach looking south

southeast wingwall

end bent 1

southwest wingwall


west profile looking east

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

end bent 1 slope protection

bent 1