# Oregon Department of Transportation Bridge Inspection Report

District :	2B	Structure :	Willamette River, Burnside St	Bridge ID :	00511	
Fac Crossed :	WILLAMETTE RIVER		(Burnside)	Fac Carried :	BURNSIDE BRIDGE	
Suff Rating :	47.5	Owner :	County Hwy Agency	Mile Point :	0.00 mi	
AC Depth :	0.00	County :	Multnomah	Insp Date :	04/26/2021	
Bridge Length :	856.00 ft	Record Type :	1	Inspector 1 :	Andrew Packard	
		Insp Freg : 24			(C0054)	
		Bridge Width :	86.00 ft	Inspector 2 :	Ryan Sievers (C0095)	

Signature: \_\_\_\_\_

# Element Condition States (New AASHTO report)

Element	Structure Unit	Environment	Quantity	Units	CS 1	CS 2	CS 3	CS 4	Temp
12-Re Concrete Deck	1	3	73616	(SF)	61395	9954	2267	0	
1080- Delamination/Spall/Patched Area	1	3	100	(SF)	0	100	0	0	
1090-Exposed Rebar	1	3	81	(SF)	0	41	40	0	
1120-Efflorescence/Rust Staining	1	3	4416	(SF)	0	3681	735	0	
1130-Cracking (RC and Other)	1	3	60	(SF)	0	60	0	0	
1131-Soffit Cracking (RC, PSC)	1	3	2944	(SF)	0	1472	1472	0	
1190-Abrasion(PSC/RC)	1	3	4620	(SF)	0	4600	20	0	
513-Rigid Wearing Surface	1	3	59920	(SF)	59737	113	70	0	
107-Steel Opn Girder/Beam	1	3	13252	(LF)	6626	6626	0	0	
1000-Corrosion	1	3	6626	(LF)	0	6626	0	0	
518-Steel Paint	1	3	109130	(SF)	0	76391	32739	0	
113-Steel Stringer	1	3	16032	(LF)	10008	5640	384	0	
1000-Corrosion	1	3	6023	(LF)	0	5639	384	0	
1020-Connection	1	3	1	(LF)	0	1	0	0	
518-Steel Paint	1	3	77896	(SF)	22396	33500	20000	2000	
116-Re Conc Stringer	1	3	1180	(LF)	1050	100	30	0	

1080- Delamination/Spall/Patched Area	1	3	120	(LF)	0	100	20	0	
1090-Exposed Rebar	1	3	10	(LF)	0	0	10	0	
120-Steel Truss	1	3	1686	(LF)	1236	200	250	0	
1000-Corrosion	1	3	400	(LF)	0	200	200	0	
1020-Connection	1	3	50	(LF)	0	0	50	0	
7000-Damage	1	3	2	(LF)	0	2	0	0	
518-Steel Paint	1	3	177523	(SF)	97523	50000	20000	10000	
152-Steel Floor Beam	1	3	4128	(LF)	1314	2460	354	0	
1000-Corrosion	1	3	2814	(LF)	0	2460	354	0	
518-Steel Paint	1	3	83592	(SF)	5882	15294	56038	6378	
155-Re Conc Floor Beam	1	3	160	(LF)	40	20	100	0	
1090-Exposed Rebar	1	3	100	(LF)	0	0	100	0	
1120-Efflorescence/Rust Staining	1	3	20	(LF)	0	20	0	0	
162-Stl Gus Plate	1	3	176	(EA)	88	44	44	0	
1000-Corrosion	1	3	88	(EA)	0	44	44	0	
518-Steel Paint	1	3	8448	(SF)	7248	1000	200	0	
205-Re Conc Column	1	1	4	(EA)	0	1	3	0	
1080- Delamination/Spall/Patched Area	1	1	2	(EA)	0	1	1	0	
1090-Exposed Rebar	1	1	2	(EA)	0	0	2	0	
210-Re Conc Pier Wall	1	3	652	(LF)	84	273	295	0	
1080- Delamination/Spall/Patched Area	1	3	150	(LF)	0	75	75	0	
1090-Exposed Rebar	1	3	225	(LF)	0	50	175	0	
1120-Efflorescence/Rust Staining	1	3	125	(LF)	0	125	0	0	
1130-Cracking (RC and Other)	1	3	60	(LF)	0	15	45	0	
1190-Abrasion(PSC/RC)	1	3	8	(LF)	0	8	0	0	
220-Re Conc Pile Cap/Ftg	1	3	792	(LF)	150	642	0	0	
6000-Scour	1	3	642	(LF)	0	642	0	0	
234-Re Conc Pier Cap	1	3	80	(LF)	55	0	25	0	
1090-Exposed Rebar	1	3	25	(LF)	0	0	25	0	
301-Pourable Joint Seal	1	3	172	(LF)	172	0	0	0	
302-Compressn Joint Seal	1	3	140	(LF)	135	5	0	0	

2310-Leakage	1	3	5	(LF)	0	5	0	0	
304-Open Expansion Joint	1	3	258	(LF)	46	40	172	0	
2350-Debris Impaction	1	3	40	(LF)	0	40	0	0	
2370-Metal Deterioration or Damage	1	3	172	(LF)	0	0	172	0	
305-Assem Jnt Wthut Seal	1	3	32	(LF)	32	0	0	0	
311-Moveable Bearing	1	3	8	(EA)	0	8	0	0	
1000-Corrosion	1	3	6	(EA)	0	6	0	0	
2210-Movement	1	3	2	(EA)	0	2	0	0	
518-Steel Paint	1	3	32	(SF)	0	0	32	0	
313-Fixed Bearing	1	3	8	(EA)	0	8	0	0	
1000-Corrosion	1	3	8	(EA)	0	8	0	0	
518-Steel Paint	1	3	64	(SF)	0	0	64	0	
330-Metal Bridge Railing	1	3	432	(LF)	432	0	0	0	
518-Steel Paint	1	3	1728	(SF)	1728	0	0	0	
331-Re Conc Bridge Railing	1	3	1328	(LF)	1318	10	0	0	
1080- Delamination/Spall/Patched Area	1	3	10	(LF)	0	10	0	0	
390-Ptd Bridge Element	1	3	456685	(SF)	133049	176185	129073	18378	
960-Drawbr Elect./Mech.	1	3	2	(EA)	0	2	0	0	
971-Ladders/Catwalks	1	3	1000	(LF)	350	200	450	0	
980-Approach Roadway Embank	1	2	1	(EA)	1	0	0	0	
990-Miscellaneous Elements	1	3	1	(EA)	1	0	0	0	
992-Timber Fender System	1	3	2	(EA)	1	0	1	0	
1140-Decay/Section Loss	1	3	1	(EA)	0	0	1	0	
999-Roadway Impact	1	3	1	(EA)	0	1	0	0	

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Appraisal	NBI #	Rating
Scour	113	3 SC - Unstable
Bridge Rail	36A	0 Substandard
Transitions	36B	0 Substandard
Approach Rail	36C	0 Substandard
Rail Ends	36D	0 Substandard
Structural	67	3 Intolerable - Correct

# **NBI Category**

Category	NBI #	Rating
Deck Condition	58	6 Satisfactory
Superstructure	59	5 Fair
Substructure	60	5 Fair
Channel	61	5 Bank Prot Eroded
Culvert/Retaining Walls	62	N N/A (NBI)

Appraisal	NBI #	Rating
Deck	68	5 Above Tolerable
Clearance	69	N Not applicable (NBI)
Waterway	71	8 Equal Desirable
Approach Alignment	72	8 Equal Desirable Crit

# **Remarks**

## 12-Re Concrete Deck SU 1 ENV 3

CONCRETE DECK WITH A RIGID OVERLAY IN SPANS 1 AND 3... BARE CONCRETE DECK IN SPANS 2A AND 2B ...

#### 1080-Delamination/Spall/Patched Area

US SPAN 3 NEAR PIER 4: 2' LONG SPALL ALONG DECK EDGE WITH EXPOSED REBAR. HEAVY CORROSION ON REBAR WITH MILD SECTION LOSS.

#### 1090-Exposed Rebar

SPAN 1 & 3 SOFFITS: SEVERAL LENGTHS OF EXPOSED CORRODED, BOTTOM MATT REBAR WITH MNR SECTION LOSS....PIER 2 TOWER SIDEWALK SOFFIT: 14" DIAMETER SPALL WITH XPOSED MATT REINFORCEMENT, WITH SURFACE CORROSION, JUST E OF TOWER.

**1120-Efflorescence/Rust Staining** SPANS 1 & 3: SCATTERED AREAS W/ MNR SOFFIT CRACKING AND EFFLO THROUGHOUT - A FEW WITH LIGHT RUST STAINING.

# 1130-Cracking (RC and Other)

SPAN 1: A FEW MINOR TRANS CRACKS SCATTERED THROUGHOUT ... 12-FT LONG WIDE TRANS CRACK IN W. BOUND LANE 15-FT FROM BRIDGE END... 45 DEGREE CRACKING RADIATING OUT OF LIFT SPAN CUT OUTS IN DECK

SPAN 2: H.L. MAP CRACKING IN WHEEL LINES OF W. BOUND LANES OF WEST LEAF ... PIER 2: 45 DEGREE CRACK IN E. BOUND LANE ... 10-FT LONG WIDE TRANSVERSE CRACK IN W. BOUND LANE NEAR PIER 3...

E. BOUND LANE TRANS CRACK RADIATING OUT OF LIFT SPAN CUT OUT ...

SPAN 3 EAST BOUND LANES: 12' LONG WIDE TRANS CRACK NEAR BRIDGE END...

# 1131-Soffit Cracking (RC, PSC)

MINOR SOFFIT CRACKING SCATTERED THROUGHOUT SOFFIT.

### 1190-Abrasion(PSC/RC)

SPAN 2: WHEEL LINES WORN TO LARGE AGGREGATE WITH POPOUTS IN THE EAST BOUND LANES NEAR MIDSPAN OF SPAN 2B ...

## 513-Rigid Wearing Surface

SCATTERED AREAS OF TRANSVERSE AND DIAGONAL CRACKING IN SPANS 1 & 3.

## 107-Steel Opn Girder/Beam SU 1 ENV 3

SPAN 2: BOXED TRUSS ENDS FROM L0 TO L2 OF 2A AND 2B.

## 1000-Corrosion

FRECKLE RUSTING IS SPREADING INSIDE OF THE CENTER LOCK AREAS.

## 518-Steel Paint

THE PAINT IS PEELING AND FLAKING INSIDE OF THE BOXED TRUSS ENDS AT THE CENTER LOCK AREAS.

## 113-Steel Stringer SU 1 ENV 3

## 1000-Corrosion

SURFACE CORROSION AND PAINT FAILURE ALONG OUTER STRINGERS AND @ PENETRATIONS INTO PIERS 1 THRU 4..

THE STRINGERS OUTSIDE OF THE TRUSSES HAVE HEAVY TOP COAT LOSS AND SURFACE RUSTING .. THE STRINGERS OUTSIDE OF THE TRUSS IN SPANS 1 AND 3, IN THE BAYS ADJACENT TO THE BASCULE PIERS. BARE ON STEEL PLATES THAT ARE EMBEDDED IN THE CONCRETE BASCULE WALL. AT SEVERAL OF THE BARE POINTS, THE CONCRETE SURROUNDING THE STRINGER IS DELAMINATING AND THE BOTTOM FLANGE OF THE STRINGER IS CORRODING ..

SPAN 1: US & DS STRINGER END BEARING REPAIRS IN PLACE ...

THE MOST SIGNIFICANT DELAMINATION OF CONCRETE IS AROUND THE SPAN 3, STRINGER 2, 12 AND 13... SPAN 3, STRINGER 1, BAYS 1 & 2 LAMINAR RUSTING ALONG THE TOP FLANGE - UP TO 1/8" LOSS TO

THICKNESS.

## 1020-Connection

SPAN 3, STRNGR 2: BOLTS SHEARED AT THE E. FACE OF ATTACHMENT TO FLOORBEAM 15.

#### 518-Steel Paint

PAINT FAILURE MOST SIGNIFICANT ALONG EXTERIOR STRINGERS AT EMBEDDMENTS INTO PIERS 1 THRU 4.

# 116-Re Conc Stringer SU 1 ENV 3

CONCRETE STRINGER BELOW THE SIDEWALK.

#### 1080-Delamination/Spall/Patched Area

VOIDS/SPALLING IN THE U.S. FACE OF THE SPAN 1 U.S. STRNGER.

## 1090-Exposed Rebar

SPAN 1 U.S. STRNGER, SPALLING WITH XPSD REBAR WITH SURFACE RUSTING....SPALLING WITH EXPOSED REBAR IN THE BOTTOM FACE OF THE U.S. STRINGER AS IT ENTERS THE SPAN 1 SIDE OF THE BASCULE PIER... EXTERIOR CONCRETE SIDEWALK STRINGERS BEAR ON STACKED STEEL PLATES ON TOP OF FLOORBEAM TOP FLANGES. PLATES HAVE HEAVY SURFACE CORROSION.

# 120-Steel Truss SU 1 ENV 3

SPANS 1, 2A, 2B, AND 3 LOWER CHORDS HAVE BEEN CLEANED AND REPAINTED... A SHORT LENGTH OF THE BOTTOM END OF THE DIAGONALS AND VERTICALS HAVE ALSO BEEN CLEANED AND REPAINTED... AREAS OF MINOR SECTION LOSS AND GAPS ALONG MEMBER SEAMS REMAIN... IN MANY CASES THE GAPS HAVE BEEN SEALED WITH CAULKING...THE REMAINING TRUSS AREAS AND FLOOR SYSTEM HAVE NOT BEEN CLEAN AND REPAINTED AND ACTIVE CORROSION REMAINS... SIGNIFICANT CORROSION REMAINS IN SPANS 2A AND 2B AT PANEL POINTS L7 AND L9, THE CHORD LENGTH, SWAY BRACING, AND SECONDARY MEMBERS IN BETWEEN... EACH EXHIBIT FAILED PAINT, ACTIVE SURFACE, SEAM, PACK RUST AND SECTION LOSS.

#### 1000-Corrosion

SPANS 2A AND 2B PANEL POINTS L7 THRU L9: ACTIVE SURFACE, SEAM, AND PACK RUST WITH SECTION LOSS IN THE GUSSET PLATES, THE CHORD LENGTH, SWAY BRACING AND SECONDARY MEMBERS IN BETWEEN... PACK RUST IS HEAVIEST ALONG MEMBER SEAMS AND SWAY BRACING CONNECTIONS AT THE PANEL POINTS, UP TO 1" DEFORMATIONS... SECTION LOSS IS HEAVIEST ALONG THE CHORD FLANGES, WEB PLATES, AND AT WIND BRACING CONNECTIONS, UP TO ½ DEEP PITTING.

SPANS 2A AND 2B: L7 SWAY BRACING: ACTIVE CORROSION AND PACK RUST WITH HEAVY SECTION LOSS AND DEFORMATION IN THE LARGE TRUSS CROSS BRACING CONNECTION ANGLES AND PL'S, AT CONNECTIONS TO THE TRUSS.

#### TOWER NOTES:

PIER 2:

THE PAINT SYSTEM ON ONE OF THE DS TOWER REAR FACING ANCHORS AND ADJACENT CHAIR STIFFENERS IS FAILING AND SURFACE CORROSION IS STARTING AGAIN.

TOWER FORWARD LATERAL SWAY BRACING: THE 7/16" THICK ANGLE BOTTOM CHORD AND ADJACENT 3/8" THICK TIE PLATES EXHIBIT ACTIVE CORROSION AND SECTION LOSS UP TO 1/4" DEEP.

#### PIERS 2 AND 3:

TOWER BASE ANCHOR RODS: EXHIBIT UP TO 3/16" DEEP SECTION LOSS AROUND THEIR PERIMETER AT THE UPPER ANCHOR NUTS PL'S AND AT THE ROD BASES REMAINS, BUT HAS BEEN CLEANED AND RE-PAINTED.

THE US AND DS TOWER REAR LEG BASES ARE FILLING WITH WATER AND CANNOT DRAIN.

EACH END OF THE LATERAL SWAY BRACES BETWEEN THE FORWARD TOWER LEGS HAVE BEEN ENCASED IN CONCRETE, AND THE LOWER HALF OF THE BRACING AND TOWER LEGS HAVE BEEN CLEANED AND PAINTED, ALONG WITH THE END 36" OF FORWARD LATERAL SWAY BRACING... THE PAINT SYSTEM ALONG THE REMAINDER OF THE FORWARD LATERAL SWAY BRACING CONTINUES TO FLAKE OFF, LEAVING PATCHES OF EXPOSED AND SURFACE CORRODED STEEL... SEVERAL LOCATIONS WITH UP TO 1/2" OF PACK RUST BETWEEN BRACE GUSSET PLATES AND BRACE MEMBERS... CORRODED SURFACES HAVE UP TO 1/4" DEEP PITTING.

THE FLOOR BEAM ABOVE THE FORWARD LATERAL SWAY BRACE THAT SUPPORTS THE WALKWAY IN FRONT OF THE MECHANICAL/MOTOR ROOM HAS SIGNIFICANT PAINT FAILURE AND ACTIVE SURFACE CORROSION ALONG ITS STREAM SIDE SURFACES.

#### PIER 3:

US AND DS: THE INBOARD TRUNNION TOWER LEG BASES LOCATED BETWEEN LIVE LOAD SHOE TOWER BASE AND THE CONTROL ROOM JUST ABOVE THE CONCRETE ENCASEMENT HAVE SIGNIFICANT PAINT FAILURE ALONG THEIR INTERIOR MEMBER SURFACES, AND EXHIBIT HEAVY CORROSION AND SECTION LOSS IN THEIR WEB PLATES AND MEMBER ANGLES... THE BASE CEILING PLATES HERE HAVE HEAVY DEBRIS BUILD-UP ON THE TOP SURFACE THAT IS LIKELY COVERING CORROSION AND SECTION LOSS.

#### 1020-Connection

MISSING RIVETS THROUGHOUT... TYPICALLY ONE MISSING AT ANY ONE CONNECTION... SEVERAL TRUSS LOWER CHORD PANEL POINTS WITH SEVERAL RIVETS PER CONNECTION WITH UP TO 75% HEAD LOSS.

SPANS 2A AND 2B: NEAR L7 U.S. AND D.S.; RACK GEAR; BEARING ANCHOR RODS HAVE HEAVY LAMINAR CORROSION AND EXHIBIT SECTION LOSS TO THEIR DIAMETER... THE RODS ARE COVERED WITH DIRT AND DEBRIS.

# 7000-Damage

SPAN 2B, U.S. L0: (2) 4" TEARS AND 6" BEND IN THE BOTTOM FLANGE BELOW THE CENTER LOCK.

## 518-Steel Paint

SPANS 1, 2A, 2B AND 3 HAVE HAD THEIR LOWER CHORDS CLEANED AND RE-PAINTED... THE PAINT SYSTEM IN THE REMAINING AREAS IS IN FAIR CONDITION WITH LOCALIZED AREAS OF BRITTLENESS, FLAKING, SURFACE AND PIN POINT CORROSION...

PIER 2 AND 3 BASCULE PIT TRUNNION BEARING TOWERS: MOST SURFACES OF THE TOWERS FROM THE BASE ELEVATION UP TO APPROX 6' HAVE BEEN CLEANED AND RE-PAINTED... THE REMAINING PAINT IS BRITTLE AND FLAKING OFF, WITH AREAS OF BARE SURFACE AND THICK SURFACE CORROSION AND PACK RUST BETWEEN MEMBERS.

## 152-Steel Floor Beam SU 1 ENV 3

GENERALLY THE FLOOR BEAMS HAVE AREAS OF PEELING PAINT AND RUST BLOOMS, HEAVIEST IN THE SPAN 2 FLOOR BEAMS

#### 1000-Corrosion

SPAN 1, D.S. END OF FLOOR BEAM 7: HEAVY BUILD UP OF PIGEON GUANO ON THE BOTTOM FLANGE... SPAN 1, U.S. END OF FLOORBEAM 16: THE TOP FLANGE PENETRATES INTO THE CONCRETE HAUNCH... AT THE PENETRATION THE TOP FLANGES IS CORRODING WITH UP TO 1/16" LOSS TO THICKNESS... SPANS 2A AND 2B NEAR FB0, BELOW THE TRANSVERSE DECK EDGE, STEEL DIAPHRAGMS BETWEEN THE STRINGER SUPPORT DECK EDGE, PAINT FAILED AT SEVERAL DIAPHRAGM CLIP ANGLE CONNECTIONS TO THE STRINGERS. UP TO 1/8" DEEP PITTING AND ACTIVE CORROSION IN THE CONNECTIONS.

#### 518-Steel Paint

LOCALIZED AREAS OF PEELING PAINT, FRECKLE RUSTING AND CORROSION ALONG TOP AND BOTTOM FLANGES OVER TRUSS.

## 155-Re Conc Floor Beam SU 1 ENV 3

FLOOR BEAMS AT TOWER PIERS 2 AND 3...

CANTILEVERED FLOOR BEAMS SUPPORT THE EXTERIOR DECK AREA

#### 1090-Exposed Rebar

PIER TOWERS 2 AND 3: SPALLS WITH EXPOSED SHEAR AND BOTTOM FLANGE STEEL THROUGHOUT....HEAVY SURFACE CORRSION ON ALL EXPOSED SURFACES.

# 1120-Efflorescence/Rust Staining

RANDOM H.L. CRACKING WITH LEACHING EFFLO.

## 162-Stl Gus Plate SU 1 ENV 3

SPANS 1, 2A, 2B AND 3 HAVE HAD THEIR LOWER CHORDS CLEANED AND RE-PAINTED ....

AREAS OF EXISITING RELATIVELY MINOR SECTION LOSS AND SMALL DEFORMATIONS FROM PACK RUST REMAIN

# 1000-Corrosion

SPANS 1 THRU 3: PAINTED OVER MINOR PITTING TYPE SECTION LOSS ON MANY PLATES, TYPICALLY ALONG THE SEAM BETWEEN THE PLATE AND THE MEMBER TOP FLANGE... SEVERAL GUSSET PLATES HAVE SOME MINOR DEFORMATION FROM PREVIOUS PACK RUST BETWEEN THE PLATE AND MEMBERS...

MANY OF THESE DEFORMED SEAMS HAVE BEEN FILLED WITH CAULK OVER THE NEW PAINT SYSTEM.

#### 518-Steel Paint

SPANS 1, 2A, 2B AND 3 HAVE HAD THEIR LOWER CHORDS CLEANED AND RE-PAINTED... THE PAINT SYSTEM IN THE REMAINING AREAS IS IN FAIR CONDITION WITH A FEW LOCALIZED AREAS OF BRITTLENESS, FLAKING, AND MINOR SURFACE PIN POINT CORROSION.

#### 205-Re Conc Column SU 1 ENV 1 COLUMNS AT BENTS 1 AND 4

# 1080-Delamination/Spall/Patched Area

PER UW REPORT COL 1AT PIER 4 HAD A CS2 SPALL, COLUMN 2 AT PIER 4 HAS A CS3 SPALL.

#### 1090-Exposed Rebar

PIER 1: COLUMN BASE ABOVE US CORNER OF PIER/SEAWALL EXHIBITS HEAVY CORNER SPALLING WITH SEVERAL #10 EXPOSED REBAR IN LENGTHS UP TO 48"... PER UW REPORT BOTH COLUMNS AT PIER 1 EXHIBIT CS2 ABRASION AND

PIERS 2 AND 3: PIER WALL QUANTITIES ARE INVENTORIED USING PERMITTER TOWER MEASUREMENTS AS

#### THERE ARE (4) WALLS TO EACH TOWER.

#### 1080-Delamination/Spall/Patched Area

PIER TOWERS 2 AND 3: THERE IS CRACKING AND DELAMINATION IN THE EXTERIOR PIER WALL CONCRETE DIRECTLY BELOW THE BEARINGS; APPROXIMATELY 12 SF BELOW THE SPAN 1, US L16 BEARING; APPROX 10 SF BELOW SPAN 1, DS L16 BEARING...

SPAN 3 US: APPROX 6 SF SPALL BELOW L0 BEARING ...

LARGE SPALLS W/ XPSD REBAR NEAR STRINGERS 2 & 3 BEARINGS @ PIER 4...

PIER 3 TOWER WALL: NEAR THE DS U7 PANEL POINT OF THE TRUSS; LARGE LOOSE SPALL IN THE TOP CORNER OF THE ADJACENT INTERIOR TOWER WALL, JUST THROUGH THE CRAWL HOLE OF THE LEAD PAINT ROOM THAT LEADS TO THE LANDING SUPPORTING THE ROADWAY RUNOFF CATCH BASIN... PER UW REPORT BOTH CONCRETE PIER WALLS HAVE CS2 AND CS3 SPALLS AND RAVELING ALONG THE CONSTRUCTION JOINTS.

#### 1090-Exposed Rebar

PIER TOWERS 2 AND 3: NUMEROUS LOCATION ALONG EXTERIOR WALLS EXHIBIT SHALLOW SPALLING WITH EXPOSED HORIZONTAL AND VERTICAL REINFORCING; SPALLING GENERALLY UP TO 4 SF WITH EXPOSED REBAR GENERALLY UP TO 48" IN LENGTH EXHIBITING SURFACE CORROSION... PIER 2: SOME SPALLING WITH XPSD VERTICAL REBARS UNDER THE SDWKS.

#### 1120-Efflorescence/Rust Staining

PIER 2; INTERIOR TOWER WALL SURFACES: VERT, DIAG, AND HORIZ CRACKING WITH EFFLO ALONG THE BOTTOM 20' AROUND THE INTERIOR PERMITTER...

MOST CRACKING IS H.L. TO NARROW AND HAS LEACHING EFFLO ...

MUCH OF THE VERTICAL CRACKING EXTENDS UP TO THE HORIZONTAL COLD JOINT ...

PIER 3: INTERIOR TOWER WALL SURFACES: SIMILAR CRACKING AS AT PIER 2 TOWER...

TOWER FLOOR: THE WIDE CRACK DOWN THE CENTERLINE OF THE FLOOR CONTINUES TO SEEP RIVER WATER INTO THE TOWER. DRAINS AND SUMP PUMPS DRAIN SEEPAGE. CONTINUE TO MONITOR...

#### 1130-Cracking (RC and Other)

PIER 1: A LARGE STEEL PLATE REPAIR HAS BEEN BOLTED TO THE FACE OF THE PIER IN AN EFFORT TO MITIGATE THE EFFECTS OF THE CRACKING DESCRIBED HEREAFTER (2021): THERE IS SIGNIFICANT VERTICAL CRACKING AND DELAMINATION IN THE UPSTREAM COLUMN OF THE PIERWALL... THE CRACKING IS BOTH ABOVE AND BELOW THE WATER LINE AND IS AS WIDE AS 0.375" IN SOME LOCATIONS...

THERE IS ALSO WIDE VERTICAL CRACKING RUNNING DOWN THE COLUMN NEAR ITS INTERSECTION WITH THE SEA WALL, LOCATED ON THE UPSTREAM FACE OF THE COLUMN AND THE WEST FACE OF THE SEA WALL.

#### 1190-Abrasion(PSC/RC)

PER THE UNDERWATER REPORT, ALL PIERS ARE MODERATELY ABRADED.

#### 220-Re Conc Pile Cap/Ftg SU 1 ENV 3

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#### 6000-Scour

PER UNDERWATER REPORT, THE FOOTINGS ARE EXPOSED FULL LENGTH AT PIER 2, AND AT THE DOWNSTREAM COLUMN AT PIER 3.

#### 234-Re Conc Pier Cap SU 1 ENV 3

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## 1090-Exposed Rebar

PIER 1 US AND DS CANTILEVERED PIER CAPS OFF OF PIER COLUMNS: 10 TO 15 LOCATION WITH VERTICAL BARS CAST CLOSE TO SURFACE HAVE SPALLED, EXPOSING REINFORCEMENT WITH SURFACE CORROSION.

**301-Pourable Joint Seal SU 1 ENV 3** IN SPANS 1 & 3 @ PW 2 & PW 3.

# 302-Compressn Joint Seal SU 1 ENV 3

# AT PIERS 1 & 4.

2310-Leakage

PIER 1: 5' OF SEAL PULLING AWAY FROM HEADER AT CENTERLINE.

# 304-Open Expansion Joint SU 1 ENV 3

IN SPÁN 2 AT PIERS 2 & 3 AND AT MIDSPAN OF SPAN 2... MEASURED FROM S CURB, PIER 2, MIDSPAN, AND PIER 3 RESPECTIVELY: 7/8", 3", 1" (53 DEG, 2019), 1", 3", 1" (65 DEG, 2021).

# 2370-Metal Deterioration or Damage

THERE IS STEEL PLATING FASTENED TO THE DECK SOFFIT ALONG THE PIER 2 AND 3 JOINTS. THE PLATING EXTENDS OUT AND BELOW THE OPEN JOINTS. THICK MUD AND DEBRIS IS BUILT UP ALONG THE TOP SURFACE OF THE PLATING, CAUSING IT TO CORRODE

305-Assem Jnt Wthut Seal SU 1 ENV 3 SLIDING PLATE JOINTS IN SIDEWALKS AT P1 & P4.

**311-Moveable Bearing SU 1 ENV 3** SPAN 1, US, L0; FRONT EDGE OF SOLE PLATE IS FLUSH WITH FACE OF ROCKERS, BACK EDGE OF PLATE PROTRUDES 7-3/4" BEYOND BACK FACE OF ROCKERS. 80 DEG, 2019, SAME 2021 60 DEG... SPAN 1 L0 US AND DS, 3 DEG TILT TO EAST, 80 DEG, 2019, SAME 2021 60 DEG...

SPAN 3, US, L16: BACK EDGE OF SOLE PLATE MEASURES 6-1/2" FROM BACK WALL, 73 DEG, 2019, 7" AT 70 DEG 2021..

SPAN 3, DS, L16: BACK EDGE OF SOLE PLATE MEASURES 6" FROM BACK WALL, 73 DEG, 2019, 6-1/2" AT 70 DEG 2021.

#### 1000-Corrosion

SURFACE CORROSION ON ALL BEARINGS.

#### 2210-Movement

PIER 1 US AND DS: FILLED WITH DEBRIS BETWEEN ROCKERS. EXHIBIT LITTLE SIGNS OF CHANGE ON ORIENTATION AND TILT, APPEAR CONSISTENT WITH VARYING TEMPERATURE.

518-Steel Paint

RUST BLOOMS, EDGE CORROSION, AND SURFACE PAINT FAILURE.

#### 313-Fixed Bearing SU 1 ENV 3

#### 1000-Corrosion

SURFACE CORROSION ON ALL BEARINGS.

#### 518-Steel Paint

RUST BLOOMS, EDGE CORROSION, AND SURFACE PAINT FAILURE.

### 330-Metal Bridge Railing SU 1 ENV 3

EXISTING METAL RAIL IS LOCATED ALONG SIDEWALKS IN SPANS 2A & 2B, BOTH SIDES... RAIL HAS NEW PAINT SYSTEM 2021.

331-Re Conc Bridge Railing SU 1 ENV 3 EXISTING CONCRETE RAIL IS LOCATED ALONG SIDEWALKS IN SPANS 1 & 3, BOTH SIDES... OB DS SIDE IS COVERED WITH MOSS ALONG ENTIRE LENGTH.

## 1080-Delamination/Spall/Patched Area

SPAN 1 US: SEVERAL POSTS EXHIBIT SHALLOW DELAMS WITH SOUND PATCHING ALONG TOPS. EXPOSED HOOP REBAR DUE TO POOR COVER SCATTERED THROUGHOUT SPAN.

#### 390-Ptd Bridge Element SU 1 ENV 3

THE PAINT SYSTEM ALONG THE TRUSS LOWER CHORDS IS IN GOOD CONDITION. THE PAINT SYSTEM IN THE REMAINING AREAS HAS LOST MUCH OF ITS ELASTICITY AND IS EASILY FLAKED OFF.. PATCHES OF PAINT FAILURE AND SURFACE CORROSION ARE SCATTERED THROUGHOUT THE REMAINING TRUSS AREAS. FLOOR SYSTEM AND TRUNNION TOWERS INSIDE OF PIERS 2 AND 3.. THE PAINT SYSTEM IS FAILED AT STRINGER TERMINATION INTO PIER WALLS AND SEVERAL STEEL PIER TOWER TRUNNION BEARING MEMBERS. EACH EXHIBIT SECTION LOSS FROM CORROSION.

## 960-Drawbr Elect./Mech. SU 1 ENV 3

ELEMENT USED FOR MOVEABLE STRUCTURE RELATED COMPONENTS.

### COUNTER WEIGHTS: THERE ARE CONCRETE ECOLOGY BLOCKS CONNECTED TO THE BOTTOM OF THE MAIN COUNTER WEIGHTS VIA STEEL BOLTS/RODS. THE CONNECTION BOLTS/RODS EXHIBIT SURFACE CORROSION.

971-Ladders/Catwalks SU 1 ENV 3 LADDERS, STAIRS, & CATWALKS WITHIN BOTH TOWERS.

CATWALK IN SPAN 1, ALONG BASCULE WALL, US HALF: 1" OF PACK RUST ALONG SEAM BETWEEN PLATE DECKING AND ANGLE SUPPORTS. MINOR SECTION LOSS, BUT CONNECTING RIVETS ARE STRESSED. SIMILAR AT DS HALF, BUT WITH 1/2" OF PACK RUST.

PIER TOWERS 2 AND 3: TOWER STAIRS LEADING FROM TOWER BASES UP TO THE NEXT LEVEL HAVE UP TO 1/2" OF PACK RUST BETWEEN TREADS AND TREAD SUPPORTS.

PIER 3 TOWER UPPER CATWALK: SEVERAL LENGTHS OF 1" PACK RUST ALONG THE SEAM BETWEEN THE PLATE DECKING AND CHANNEL BEAM SUPPORT RAILS.

980-Approach Roadway Embank SU 1 ENV 2

# 990-Miscellaneous Elements SU 1 ENV 3

SEISMIC RETROFITS AT THE SPAN 1 U0 AND THE SPAN 3 U16 PANEL POINTS.... (15)LUMINAIRES.... (2) SIGN BRIDGES.... VARIOUS UTILITIES ALONG THE STRUCTURE.

#### 992-Timber Fender System SU 1 ENV 3

TIMBER PILE FENDER SYSTEM AT THE U.S. ENDS OF TOWER PIERS (P2 AND P3)....ACCESS HATCHES ARE LOCATED IN THE CONCRETE DECK OVER FENDER SYSTEMS.

#### 1140-Decay/Section Loss

SEVERAL OF THE TIMBER PILES ALONG THE PERIMETER OF THE FENDERS HAVE HEAVY CENTER DECAY IN THE TOP 2'-3' OF THE PILES... A IN-DEPTH INSPECTION OF THE PERIMETER PILING WOULD BE A PRUDENT MEASURE... AMOUNT OF CENTER DECAY COULD BECOME RELEVANT SOON... MODERATE CHECKING IN THE INTERIOR SQUARE TIMBERS SUPPORTING THE CONCRETE FENDER DECK SURFACE.

**999-Roadway Impact SU 1 ENV 3** BRIDGE SITS A BIT UNEVEN AT OPEN JOINT BETWEEN LEAF SPAN 2A AND 2B.

## Notes

# **Inspection Notes**

Orientation is from West to East, Upstream right. Approach structures at both ends are load posted. 23T for 4 axels, 24T for 5-6 axels and 25T for 7 axels.

# **Bridge Notes**

Detour map added and length changed by Erick Cain 05/14/2012.

## **Bridge Hydraulics Notes**

# Maintenance Recommendations As of: 8/16/2021

Priority	Crew	Wrk Cnd	Notes	Est.cost	Status	Rec Date
Routine/Schedule	Local Agency	12 RC Deck Protect Exposed Rebar	CLEAN AND SEAL XPSD REBAR IN SPAN 1 & 3 SOFFITS.		Unknown	03/31/2015
Routine/Schedule	Local Agency	12 RC Deck Seal Concrete	SEAL CRACKING IN DECK AND RIGID OVERLAY.		Unknown	03/31/2015
Routine/Schedule	Local Agency	113 Steel Stringer (Stringer/Floorbeam System) Strengthen	REPAIR REMAINING DETERIORATED STRINGERS AND SURROUNDING CONCRETE IN SPANS 1 AND 3 THAT PENETRATE INTO PIERS 1 THRU 4.		Unknown	03/31/2015
Urgent	Local Agency	113 Steel Stringer (Stringer/Floorbeam System) Strengthen	REPAIR SHEARED STRINGER CLIP ANGLE RIVETS AT SPAN 3, BAY 15, FB 15, STRINGER 2.		Unknown	03/31/2015
Routine/Schedule	Local Agency	116 RC Stringer Wash/Clean	CLEAN SURFACE CORRODED BEARING PLATES BELOW EXTERIOR SIDEWALK STRINGERS.		Unknown	05/01/2019

Priority	Crew	Wrk Cnd	Notes	Est.cost	Status	Rec Date
Routine/Schedule	Local Agency	116 RC Stringer Patch Concrete	REPAIR SPAN 1 U.S. STRINGER SPALLING/ DELAM AND COAT XPSD BARS.		Unknown	03/31/2015
Routine/Schedule	Local Agency	120 Steel Truss (incl Entire Truss) Other	TRUSS LOWER CHORD: FINISH CAULKING ALL REMAINING DEFORMATION GAPS BETWEEN MEMBERS AND GUSSET/WEB PLATES.		Unknown	05/11/2019
Routine/Schedule	Local Agency	120 Steel Truss (incl Entire Truss) Wash/Clean	CREATE PERIODIC MAINTENANCE FLUSH ROUTINE FOR TRUSS.		Unknown	05/01/2019
Routine/Schedule	Local Agency	120 Steel Truss (incl Entire Truss) Other	PIERS 2 & 3: US AND DS TOWER, REAR BASES: PROVIDE DRAINAGE FOR 6" DEEP WATER ACCUMULATION.		Unknown	05/01/2019
Urgent	Local Agency	120 Steel Truss (incl Entire Truss) Wash/Clean	CLEAN/FLUSH OUT DEBRIS UP TO 6" THICK ALONG INTERIOR OF ALL L9 PANEL POINTS IN SPANS 2A AND 2B.		Unknown	05/01/2019
Routine/Schedule	Local Agency	120 Steel Truss (incl Entire Truss) Wash/Clean	PIER 3 TRUNNION TOWER BASES ABOVE CONCRETE ENCASEMENT, US AND DS: CLEAN OUT HEAVY CORROSION, ASSESS, REPAIR AND REPAINT AS NEEDED.		Unknown	05/01/2019
Urgent	Local Agency	120 Steel Truss (incl Entire Truss) Paint Steel	LIFT SPAN RACK GEAR DRIVE BEARINGS: CLEAN AND PAINT CORRODING BEARING ANCHORS INSIDE OF TRUSS MEMBER THEY ARE MOUNTED TO. SEE PHOTOS IM00511_J4 AND J5.		Unknown	05/02/2017
Routine/Schedule	Local Agency	120 Steel Truss (incl Entire Truss) Paint Steel	PIER 2 AND PIER 3: FORWARD LATERAL BRACE CONNECTION GUSSET PLATES. CLEAN, ASSESS AND REPAINT AS NEEDED.		Unknown	05/01/2019
Routine/Schedule	Local Agency	120 Steel Truss (incl Entire Truss) Strengthen	REPAIR IMPACT STEEL.	25000	Unknown	10/21/2004
Routine/Schedule	Local Agency	152 Steel Floorbeam Strengthen	SPAN 1, U.S. END OF FLOORBEAM 16: CHIP OUT CONCRETE AROUND THE TOP FLANGE PENETRATION INTO THE HAUNCH. ASSESS TOP FLANGE LOSS, CLEAN AND REPAIR AS NECESSARY.		Approved	03/29/2011

Priority	Crew	Wrk Cnd	Notes	Est.cost	Status	Rec Date
Routine/Medium	Local Agency	155 RC Floorbeam Patch Concrete	PIER TOWERS 2 AND 3: CLEAN AND EPOXY COAT EXPOSED REBAR IN EXTERIOR CANTILEVERED FLOOR BEAM SUPPORTING TOWERS AND SIDEWALKS.		Unknown	05/02/2017
Routine/Schedule	Local Agency	205 RC Column Patch Concrete	PIER 1 US COLUMN BASE: CLEAN AND EPOXY COAT EXPOSED VERTICAL REINFORCING BARS.	0	Unknown	04/26/2021
Routine/Schedule	Local Agency	210 RC Pier Wall Strengthen	REPAIR THE CRACKED AND DELAMINATED CONCRETE BELOW THE SPAN 1 AND 3 BEARINGS AT TOWER PIER WALLS.		Approved	03/29/2011
Monitor	Local Agency	210 RC Pier Wall Crack Injection	PIER TOWER PIT WALLS: EVALUATE MONITOR, AND REPAIR AS NECESSARY CRACKING IN WALLS.		Unknown	05/02/2017
Routine/High	Local Agency	210 RC Pier Wall Patch Concrete	PATCH SPALLING CONCRETEASAP, REMOVE LOOSE SPALL IN PIER 3 INTERIOR TOWER WALL NEAR DS LEAD PAINT ROOM.		Unknown	05/02/2017
Routine/High	Local Agency	210 RC Pier Wall Other	CLEAN AND EPOXY COAT XPSD REBAR.		Unknown	05/02/2017
Routine/Medium	Local Agency	210 RC Pier Wall Other	PIER 3 TOWER FLOOR CL CRACK: CONSIDER METHODS TO INSPECT/ASSESS SURROUNDING CONCRETE; IN AN EFFORT TO DETERMINE IF CONSTANT WATER FLOW HAS IMPACTD INTEGRITY OF THE FLOOR.		Unknown	05/02/2017
Routine/High	Local Agency	220 RC Pile Cap/Footing Place Riprap	Place riprap around seal on Plan Pier 3 as per dive report.	5000	Unknown	09/20/2016
Routine/Schedule	Local Agency	234 RC Cap Wash/Clean	PIER 1: CLEAN AND EPOXY COAT ALL EXPOSED REINFORCING BARS.	0	Unknown	04/26/2021
Routine/High	Local Agency	304 Joints Open Joint Clean Joint	PERIODICALLY CLEAN HEAVY BUILD UP ALONG STEEL PLATING BELOW PIERS 2 AND 3 OPEN JOINTSBUILD UP IS BEST VIEWED FROM THE PIT.		Unknown	05/02/2017
Routine/Schedule	Local Agency	311 Bearings Moveable Bearings Clean Bearings	PIER 1 CLEAN OUT DEBRIS FROM INBETWEEN ROCKERS. PIER 4: MONITOR, CLEAN OUT AS NECESSARY.	0	Unknown	04/26/2021

Priority	Crew	Wrk Cnd	Notes	Est.cost	Status	Rec Date
Routine/Medium	Local Agency	960 Misc Drawbridge Elec/Mech Other	CLEAN AND EPOXY COAT COUNTERWEIGHT ADDITIONAL BLOCK BOLT/ROD CONNECTIONS TO MAIN COUNTERWEIGHT.		Unknown	05/02/2017
Routine/Medium	Local Agency	971 Catwalk/Ladder Repair	PULL CATWALK DECKING AND STAIR TREADS AT SPAN 1, PIER 2, AND PIER TOWERS 2 AND 3 AND CLEAN PACK RUST. REPLACE DECKING, AND STRENGTHEN SUPPORTS AS NECESSARY.		Unknown	03/31/2015
Routine/Schedule	Local Agency	992 Timber Fender Other	PERFORM A IN-DEPTH INSPECTION OF THE FENDER PERIMETER TIMBER PILES.		Unknown	05/02/2017

\*Completed items not included on default search

Load Rating				
Rating Date :	08/25/2020	Posting Req :	3 10.0-19.9%below	
Design Load :	8 Railroad	Posting Status :	P Posted for load	
Operating Load :	20.1 ton	OR Method :	8 LRFR RF HL93	
Inventory Rating :	15.5 ton	IR Method :	8 LRFR RF HL93	

Truck	Rating Factor	% Below	Posting Required	Controlling Member	Actual Posting	Posting Date
Туре 3	1.00	5 At/Above Legal Loads	No	INTSTL_F-RD1, span 1 of 13 +M at 0.5L		
Type 3S-2	1.00	5 At/Above Legal Loads	No	INTSTL_F-RD1, span 1 of 13 +M at 0.5L		
Туре 3- 3	1.19	5 At/Above Legal Loads	No	INTSTL_F-RD1, span 1 of 13 +M at 0.5L		
SU4	0.85	3 10.0- 19.9%below	Yes	INTSTL_F-RD1, span 1 of 13 +M at 0.5L		
SU5	0.85	3 10.0- 19.9%below	Yes	INTSTL_F-RD1, span 1 of 13 +M at 0.5L		
SU6	0.84	3 10.0- 19.9%below	Yes	INTSTL_F-RD1, span 1 of 13 +M at 0.5L		
SU7	0.84	3 10.0- 19.9%below	Yes	INTSTL_F-RD1, span 1 of 13 +M at 0.5L		
EV2	0.84	3 10.0- 19.9%below	Yes	INTSTL_F-RD2, span 1 of 13 +M at 0.5L		
EV3	0.60	1 30.0- 39.9%below	Yes	INTSTL_F-RD, span 1 of 13 +M at 0.5L		

# Load Rating Notes

# Load Rating Condition Comparison Chart

Category	NBI #	Rating Condition	Current Condition
Traffic Impact		CS2 Condition State 2	CS2
Deck Condition	58	6	6
Superstructure	59	5	5
Substructure	60	5	5
Temporary Repairs	103		
Wearing Surface Thickness		0.00	0.00

# Inspection Schedule

Activity	Conducted On	Frequency	Next Inspection
Routine Inspection	04/26/2021	24	04/01/2023
Underwater	09/28/2020	60	09/28/2025
X-Channel	01/21/2020	48	01/21/2024
Fracture Critical	06/07/2021	24	06/07/2023
Bridge Clearance	11/24/2010	120	11/01/2020
Fatigue Prone	04/26/2021	72	04/01/2027

# Oregon Department of Transportation Structure Inventory and Appraisal Report

Suff Rating: 47.5					Bridge NO: 00511 Insp Date: 04/26/2021	
(2) Highway District	District 2B	(42A) Type Service On	5	(76) Improvement Length	856.30 ft	
(3) County	Multnomah	(42B) Type Service Under	5			
(4) City	59000	(43) Struct Main	3 Steel 16 Movable- Bascule	(90) Inspection Date	04/26/2021	
(5) Inventory Route	156093260	(44) Struct Appr	3 Steel 09 Truss-Deck	(91) Inspection Frequency	24	
(6) Feature INT	WILLAMETTE RIVER	(45) Number Main Spans	1	(92) Critical Feat Insp (A) Fracture Critical (B) Underwater Insp	Y 24 06/07/2021 Y 60 09/28/2020	
(7) Facility Carried	BURNSIDE BRIDGE	(46) Number Appr Spans	2	(94) Cost of Improvement	2740999	
(8) Structure Number	00511 000000000	(47) Horizontal Clearance	68.00 ft	(95) Roadway Improvement	274100	
(9) Location	WILLAMETTE RIVER MP 12.4	(48) Maximum Span Length	266.00 ft	(96) Project Improvement	4385598	
(10) Vert Clearance	99.99 ft	(49) Structure Length	856.00 ft	(97) Year of Improvement	2011	
(11) Mile Post	0.00 mi	(50A) Sidewalk Width LT	8.00 ft	(98) Border BRST-Code		

(12) Base Highway Network	0	(50B) Sidewalk Width RT	8.00 ft	(100) Defense Highway	0
(13) LRS Inventory Route	00000000000	(51) Bridge Roadway Width	68.00 ft	(101) Parallel Structure	Ν
(16) Latitude	45° 31' 22.93"	(52) Deck Width	86.00 ft	(102) Direction of Traffic	2
(17) Longitude	122° 40' 3.20"	(53) Vert Clear Over Deck	17.25 ft	(103) Temporary Structure	
(19) Bypass Detour	0.46 mi	(54) Vert Clear Under Deck	N 0.00 ft	(104) Highway System	1
(20) TOLL	3 On free road	(55) Min Lat Underclear CD	N 0.00 ft	(105) Federal Lands HWY	0
(21) Custodian	County Highway Agency	(56) Min Lat Underclear	L 0.00 ft	(106) Year Reconstructed	
(22) Owner	County Highway Agency	(58) Deck	6	(107) Deck Structure	1
(26) Func Class	14 Urban Other Princ	(59) SuperStructure	5	(108) Wearing Surface	100
(27) Year Built	1926	(60) SubStructure	5	(109) Truck ADT	10%
(28) Lanes	on: 5 / under: 0	(61) Channel	5	(110) Designated National Network	0
(29) Average Daily Traffic	58125	(62) Culvert	Ν	(111) Pier Protection	2
(30) Year of ADT	2020	(63) Oper Rating Method	8	(112) NBIS Bridge Length	Y
(31) Design Load	8 Railroad	(64) Operating Rating	20.10 ton	(113) Scour Critical Bridge	3
(32) Approach Roadway	68.00 ft	(65) Inv Rating Method	8	(114) Future ADT	87161
(33) Bridge Median	0 No median	(66) Inventory Rating	15.50 ton	(115) Year of Future ADT	2025
(34) Skew	0°	(67) Structure Condition	3	(116) Vert-Lift Clearance	
(35) Structure Flared	0 No flare	(68) Deck Geometry	5	(117) Est Maint Cost	
(36) Traffic Safety Feature	0000	(69) Underclearance	Ν	(118) Culvert Length	
(37) Historical Significance	2	(70) Posting	3	(119) Culvert Inside Height	
(38) Navigation Control	1	(71) Waterway Adequacy	8	(120) Inspector	Andrew Packard (C0054)
(39) Navigation Vert Clear	64.00 ft	(72) APPR RDWY Alignment	8	(122) Highway/CO RD	000000
(40) Navigation Horz Clear	197.00 ft	(75) Type of Work	331	(125) Embankment Erosion	5
(41) Open Status	Р				
Quality Assurance:					
WS Depth	0.00	(51) Bridge Roadway Width	68.00 ft	(70) Posting	3
(28) Lanes	on: 5 / under: 0	(52) Deck Width	86.00 ft	(71) Waterway Adequacy	8

(53) Vert Clear Over Deck 17.25 ft

(58) Deck

(59) SuperStructure

(60) SubStructure

6

5

5

(72) APPR RDWY Alignment

(103) Temporary Structure

(108) Wearing Surface

8

100

(32) Approach Roadway

(36) Traffic Safety

(41) Open Status

(43) Struct Main

Feature

68.00 ft

0000

Ρ

3 Steel

16 Movable-Bascule

(44) Struct Appr	3 Steel 09 Truss-Deck	(61) Channel	5	(113) Scour Critical Bridge	3
(45) Number Main Spans	1	(62) Culvert	Ν		

#### **Bridge Clearance Documents: Not Available**

#### Bridge Detours Maps: 00511.tif

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Bridge Images: IM00511_A0.JPG IM00511_A1.JPG IM00511_A3.JPG IM00511_A4.JPG IM00511_A5.JPG
IM00511 A6.JPG IM00511 A7.JPG IM00511 A8.JPG IM00511 A9.JPG IM00511 B1.JPG IM00511 B2.JPG
IM00511 B3.JPG IM00511 B4.JPG IM00511 B5.JPG IM00511 B6.JPG IM00511 B7.JPG IM00511 B8.JPG
IM00511 B9.JPG IM00511 C1.JPG IM00511 C3.JPG IM00511 C4.JPG IM00511 C5.JPG IM00511 C6.JPG
IM00511 C7.JPG IM00511 C8.JPG IM00511 C9.jpg IM00511 D3.jpg IM00511 D4.jpg IM00511 D5.jpg
IM00511_D6.jpg IM00511_D7.jpg IM00511_D9.jpg IM00511_E3.jpg IM00511_E4.jpg IM00511_E5.jpg
IM00511_E6.jpg IM00511_E8.jpg IM00511_E9.jpg IM00511_F2.JPG IM00511_F3.jpg IM00511_F4.JPG
IM00511_F5.JPG IM00511_F6.JPG IM00511_F7.JPG IM00511_F8.JPG IM00511_F9.JPG IM00511_G3.JPG
IM00511_G4.JPG IM00511_G5.JPG IM00511_G6.JPG IM00511_G7.JPG IM00511_G8.JPG IM00511_G9.JPG
IM00511_J3.JPG IM00511_J4.JPG IM00511_J5.JPG IM00511_J6.JPG IM00511_J7.JPG IM00511_J8.JPG
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IM00511_K8.JPG IM00511_K9.JPG IM00511_L3.JPG IM00511_L4.JPG IM00511_L5.JPG IM00511_L6.JPG
Job Hazard Assessment: Not Available
Cross Channel Documents: XC00511 .pdf
Gusset Plate Documents: Not Available
Fracture Critical Inspection Documents: FC00511.pdf
Fatigue Prone Assessment: FP00511.pdf
Under Water: UW00511 .pdf
Scour Plan Of Action: POA 00511.pdf
Timber Boring: Not Available
Pin Hanger: Not Available
Deck Surveys: Not Available
Draw Bridges: Not Available
Supplemental: Not Available
Critical Findings: Not Available
Tunnel Maps: Not Available
Tunnel Access: Not Available
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