



# RIDOT Bridge Inspection Report

066201  
Ramp CB

Inspected By: WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date: 08/31/2021

Bridge Condition **Poor**

## IDENTIFICATION

**Bridge ID:** 066201  
**NBI Number:** Ramp CB  
**Structure Name:** Ramp CB  
**Location (9):** 0.1 Mi E of JCT RI 10  
**Carries (7):** I-95 RAMP CB  
**Type of Service (42A):** 1 Highway  
**Feature Crossed (6):** WELLINGTON AV & AMTRAK  
**Type of Service (42B):** 4 Highway-railroad  
**Placecode (4):** Cranston  
**County (3):** Providence  
**State (1):** 44 Rhode Island  
**Station:** NBI  
**Region (2):** District 4  
**Latitude (16):** 41.7822937  
**Longitude (17):** -71.4224576  
**Owner (22):** 01 State Highway Agency  
**Custodian (21):** 01 State Highway Agency

<b>Year Built (27):</b> 1965	Border State: Not Applicable (P)
<b>Year Recon (106):</b> 1997	Border Number:
<b>Historical (37):</b> 5 Not eligible for NRHP	% Responsibility:

## INSPECTION

**Date of Routine Inspection (90):** 8/31/2021  
**Frequency (91):** 24  
**Next Inspection:** 8/31/2023

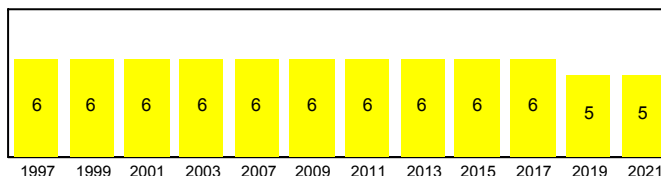
Inspection Type	Freq (92)	Last Insp (93)	Next Insp
Element	12	8/31/2021	8/31/2022
Fracture Critical (A)		1/1/1901	1/1/1901
Underwater (B)		1/1/1901	1/1/1901
Special Insp (C)	12	8/31/2021	8/31/2022

## LOAD RATING AND POSTING

**Posting Status (41):** A Open, no restriction  
**Posting % (70):** 5 At/Above Legal Loads  
**Rating Date:** 12/10/2019  
**Design Load (31):** 5 MS 18 (HS 20)  
**Opr Method (63):** 8 LRFR (HL93)  
**Opr Rating (64):** 43.60 Tons  
**Inv Method (65):** 8 LRFR (HL93)  
**Inv Rating (66):** 33.80 Tons

## DECK GEOMETRY

**Deck Geometry (68):** 6 Equal Min Criteria  
**Deck Area:** 8,305.43  
**Deck Type (107):** 1 Concrete-Cast-in-Place  
**Wearing Surface (108A):** 6 Bituminous  
**Membrane (108B):** 1 Built-up  
**Deck Protection (108C):** None  
**O. to O. Width (52):** 28.54  
**Curb / Sidewalk Width L (50A):** 1.97  
**Curb / Sidewalk Width R (50B):** 1.97  
**Median (33):** 0 No median

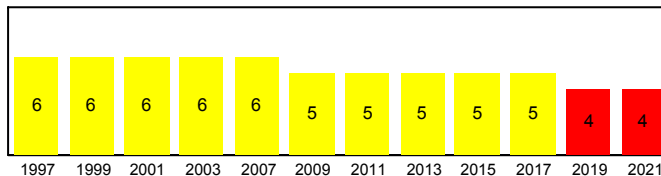


## DECK CONDITION

**Deck Rating (58):** 5 Fair  
**Bridge Rail (36A):** 1 Meets Standards  
**Transition (36B):** 0 Substandard  
**Approach Rail (36C):** 0 Substandard  
**Approach Rail Ends (36D):** 0 Substandard

## SUPERSTRUCTURE GEOMETRY

**# of Main Spans (45):** 3  
**# of Approach Spans (46):** 0  
**Main Material (43 A):** 3 Steel  
**Main Design (43 B):** 02 Stringer/Girder  
**Max Span Length (48):** 157.15  
**Structure Length (49):** 291.01  
**NBIS Length (112):** Long Enough  
**Temp Structure (103):** Not Applicable (P)  
**Skew (34):** 29  
**Structure Flared (35):** 1 Yes, flared  
**Parallel Structure (101):** No || bridge exists  
**Approach Alignment (72):** 5 Above Tolerable



## SUPERSTRUCTURE CONDITION

**Superstructure Rating (59):** 4 Poor  
**Structure Evaluation (67):** 4 Minimum Tolerable



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<b>SUBSTRUCTURE GEOMETRY</b>		
<b>Navigation Control (38):</b>	NA-no waterway	
<b>Nav Vert Clearance (39):</b>	0.00	
<b>Nav Horiz Clearance (40):</b>	0.00	
<b>Pier Protection (111):</b>	Not Applicable (P)	
<b>Lift Bridge Vertical Clearance (116):</b>		<b>SUBSTRUCTURE CONDITION</b>
<b>Scour Rating (113):</b>	N Not Over Waterway	<b>Substructure Rating (60):</b> 5 Fair
<b>Waterway Adequacy (71):</b>	N Not applicable	<b>Channel Rating (61):</b> N N/A (NBI)

<b>ROUTE UNDER STRUCTURE: Wellington Avenue</b>					
<b>ROADWAY LOCATION</b>		<b>ROADWAY CLASSIFICATION</b>		<b>CLEARANCES</b>	
<b>Pos Prefix (5A):</b>	One Route Under	<b>Funct Class (26):</b>	19 Urban Local	<b>Vertical (10):</b>	17.05
<b>Kind of Hwy (5B):</b>	5 City Street	<b>Level Service (5C):</b>	1 Mainline	<b>Min Vert Over (53):</b>	99.99 17.05
<b>Route Num (5D):</b>	00000	<b>NHS (104):</b>	0 Not on NHS	<b>Vert Ref (54A):</b>	H Hwy beneath struct
<b>LRS Route (13A/B):</b>		<b>Defense Hwy (100):</b>	0 Not a STRAHNET hwy	<b>Horizontal (47):</b>	30.00
<b>Milepost (11):</b>		<b>Toll Facility (20):</b>	3 On free road	<b>Min Lat Left (56):</b>	8.33
<b>Suffix (5E):</b>	0 N/A (NBI)	<b>ADT (29):</b>	1,000 Cars/Day	<b>Min Lat Right (55B):</b>	8.00
<b>Lanes Under (28B):</b>	2	<b>Pct Trucks (109):</b>	2.00%	<b>Horiz Ref (55A):</b>	H Hwy beneath struct
<b>Detour Length (19):</b>	1.30 mi (2.09 km)	<b>ADT Year (30):</b>	2008	<b>Underclearance (69):</b>	5 Above Tolerable

<b>ROUTE ON STRUCTURE: Ramp CB</b>					
<b>ROADWAY LOCATION</b>		<b>ROADWAY CLASSIFICATION</b>		<b>CLEARANCES</b>	
<b>Pos Prefix (5A):</b>	Route On Structure	<b>Funct Class (26):</b>	11 Urban Interstate	<b>Vertical (10):</b>	99.99
<b>Kind of Hwy (5B):</b>	1 Interstate Hwy	<b>Level Service (5C):</b>	7 Ramp	<b>Min Vert Over (53):</b>	99.99 17.05
<b>Route Num (5D):</b>	00095	<b>NHS (104):</b>	1 On the NHS	<b>Vert Ref (54A):</b>	H Hwy beneath struct
<b>LRS Route (13A/B):</b>	491030-A/00	<b>Defense Hwy (100):</b>	0 Not a STRAHNET hwy	<b>Horizontal (47):</b>	21.98
<b>Milepost (11):</b>	0.13 mi (0.20 km)	<b>Toll Facility (20):</b>	3 On free road	<b>Min Lat Left (56):</b>	8.33
<b>Suffix (5E):</b>	0 N/A (NBI)	<b>ADT (29):</b>	15,200 Cars/Day	<b>Min Lat Right (55B):</b>	8.00
<b>Lanes On (28A):</b>	1	<b>Pct Trucks (109):</b>	10.00%	<b>Horiz Ref (55A):</b>	H Hwy beneath struct
<b>Detour Length (19):</b>	2.50 mi (4.02 km)	<b>ADT Year (30):</b>	2008	<b>Underclearance (69):</b>	5 Above Tolerable

**BRIDGE NOTES**

**ORIENTATION:** The bridge is logged from west to east and the four (4) steel welded plate girders are labeled from north to south as Girders "A" through "D". There is an additional stub girder in Span 1 labeled Girder "AA".

**EQUIPMENT REQUIRED:** 60' Rail Mounted Truck, Hi-Rail Bucket Truck and underbridge lighting.

**CONTRACTED PERSONNEL:** AMTRAK personnel (Flaggers, A-men, Track Foreman and Supervisor).

**TRAFFIC CONTROL:** Crash truck for rolling topside inspection and traffic control for inspection over Wellington Avenue.

**POLICE DETAIL NEEDED:** Cranston Police.

**INSPECTION RESTRICTIONS:** Underside inspection work over the railroad tracks is to be performed at night. Track work can begin approximately one (1) hour after the last train passes through electrification block.

**ACCESS TO SITE:** Equipment to mount track at Cranston Yard off Elmwood Avenue.

**MISCELLANEOUS INFORMATION:** AMTRAK safety training is required before work begins. Providence office AMTRAK contact Joe Czpaiga (401) 378-0175.



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**INSPECTION NOTES**

WSP

Routine and Special Inspection

The scope of this Special Inspection is to monitor identified locations of advanced deterioration to the steel superstructure.

Team Leader: Zachary Wright, P.E.

Team Member(s): Zach Abbot, Harold Ntiamoah, Brandon Gale, Jeff Tully, P.E. and Matt Greer, P.E.

Inspection Date(s): 06/20/21, 06/21/21 and 06/22/21 (Amtrak nights); 08/31/21 ( day Amtrak); 08/24/21 (Wellington Avenue), 08/29/21 (Topside Inspection)

Weather Conditions: 06/20/21 (Night) - 60 Degrees F, Partly Cloudy; 06/21/21 (Night) - 75 Degrees F, Partly Cloudy; 06/22/21 (Night) - 75 Degrees F, Cloudy; 08/24/21 - 85 Degrees F, Partly Cloudy; 08/29/21 - 65 Degrees F, Cloudy; 08/31/21 80 Degrees F, Cloudy

NBI CONDITION RATING: The bridge is in overall Poor condition. Item 58 - Deck, Item 59 - Superstructure and Item 60 - Substructure are in 5 - Fair, 4 - Poor, and 5 - Fair, respectively; and remain unchanged since the previous inspection.

VIBRATIONS/DEFLECTIONS: No vibration/deflection noted.

VERTICAL CLEARANCES: The minimum vertical clearance in Span 1 (Wellington Ave) is 17.05' measured under girder "AA" at the left shoulder, and there is a vertical clearance posting sign (17'-1") on Girder "AA" North face (Photo 26). The minimum vertical clearance in Span 2 (Amtrak) is 18.60' measured under Track #18 east rail.

Elm/Env	Description	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4
<b>12/3</b>	<b>Re Concrete Deck</b>	<b>8,310.00</b>	<b>0%</b>	<b>0.00</b>	<b>100%</b>	<b>8,280.00</b>	<b>0%</b>	<b>30.00</b>	<b>0%</b>	<b>0.00</b>
510/3	Wearing Surfaces	6,402.00	0%	0.00	100%	6,402.00	0%	0.00	0%	0.00
1080/3	Delamination/Spall/Patched Area	134.00	0%	0.00	50%	67.00	50%	67.00	0%	0.00
1090/3	Exposed Rebar	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
1120/3	Efflorescence/Rust Staining	5.00	0%	0.00	0%	0.00	100%	5.00	0%	0.00
1130/3	Cracking (RC and Other)	50.00	0%	0.00	100%	50.00	0%	0.00	0%	0.00
<b>107/3</b>	<b>Steel Opn Girder/Beam</b>	<b>1,087.00</b>	<b>0%</b>	<b>0.00</b>	<b>100%</b>	<b>1,087.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>
515/3	Steel Protective Coating	4,484.00	0%	0.00	94%	4,232.00	0%	0.00	6%	252.00
3410/3	Chalk(Steel Protect Coatings)	4,148.00	0%	0.00	100%	4,148.00	0%	0.00	0%	0.00
3420/3	Peel/Bub/Crack(Stl Protect Coat)	336.00	0%	0.00	25%	84.00	0%	0.00	75%	252.00
1000/3	Corrosion	61.00	0%	0.00	100%	61.00	0%	0.00	0%	0.00
1900/3	Distortion	2.00	0%	0.00	100%	2.00	0%	0.00	0%	0.00
<b>205/3</b>	<b>Re Conc Column</b>	<b>4.00</b>	<b>0%</b>	<b>0.00</b>	<b>50%</b>	<b>2.00</b>	<b>50%</b>	<b>2.00</b>	<b>0%</b>	<b>0.00</b>
1080/3	Delamination/Spall/Patched Area	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
1090/3	Exposed Rebar	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
1120/3	Efflorescence/Rust Staining	1.00	0%	0.00	0%	0.00	100%	1.00	0%	0.00
1130/3	Cracking (RC and Other)	1.00	0%	0.00	0%	0.00	100%	1.00	0%	0.00
8368/3	Graffiti	50.00	100%	50.00	0%	0.00	0%	0.00	0%	0.00
<b>210/3</b>	<b>Re Conc Pier Wall</b>	<b>76.00</b>	<b>0%</b>	<b>0.00</b>	<b>87%</b>	<b>66.00</b>	<b>13%</b>	<b>10.00</b>	<b>0%</b>	<b>0.00</b>
1080/3	Delamination/Spall/Patched Area	73.00	0%	0.00	86%	63.00	14%	10.00	0%	0.00
1090/3	Exposed Rebar	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
1120/3	Efflorescence/Rust Staining	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
1130/3	Cracking (RC and Other)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00



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Elm/Env	Description	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4
8368/3	Graffiti	1.00	100%	1.00	0%	0.00	0%	0.00	0%	0.00
<b>215/3</b>	<b>Re Conc Abutment</b>	<b>50.00</b>	<b>0%</b>	<b>0.00</b>	<b>62%</b>	<b>31.00</b>	<b>38%</b>	<b>19.00</b>	<b>0%</b>	<b>0.00</b>
1080/3	Delamination/Spall/Patched Area	14.00	0%	0.00	36%	5.00	64%	9.00	0%	0.00
1120/3	Efflorescence/Rust Staining	10.00	0%	0.00	0%	0.00	100%	10.00	0%	0.00
1130/3	Cracking (RC and Other)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
8368/3	Graffiti	1.00	100%	1.00	0%	0.00	0%	0.00	0%	0.00
<b>234/3</b>	<b>Re Conc Pier Cap</b>	<b>54.00</b>	<b>35%</b>	<b>19.00</b>	<b>13%</b>	<b>7.00</b>	<b>52%</b>	<b>28.00</b>	<b>0%</b>	<b>0.00</b>
1080/3	Delamination/Spall/Patched Area	16.00	0%	0.00	0%	0.00	100%	16.00	0%	0.00
1090/3	Exposed Rebar	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
1120/3	Efflorescence/Rust Staining	12.00	0%	0.00	0%	0.00	100%	12.00	0%	0.00
1130/3	Cracking (RC and Other)	6.00	0%	0.00	100%	6.00	0%	0.00	0%	0.00
<b>301/3</b>	<b>Pourable Joint Seal</b>	<b>44.00</b>	<b>0%</b>	<b>0.00</b>	<b>100%</b>	<b>44.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>
2320/3	Seal Adhesion	14.00	0%	0.00	100%	14.00	0%	0.00	0%	0.00
2360/3	Adjacent Deck or Header	30.00	0%	0.00	100%	30.00	0%	0.00	0%	0.00
<b>310/3</b>	<b>Elastomeric Bearing</b>	<b>25.00</b>	<b>0%</b>	<b>0.00</b>	<b>100%</b>	<b>25.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>
515/3	Steel Protective Coating	50.00	0%	0.00	52%	26.00	48%	24.00	0%	0.00
3420/3	Peel/Bub/Crack(Stl Protect Coat)	50.00	0%	0.00	52%	26.00	48%	24.00	0%	0.00
1000/3	Corrosion	12.00	0%	0.00	100%	12.00	0%	0.00	0%	0.00
1020/3	Connection	3.00	0%	0.00	100%	3.00	0%	0.00	0%	0.00
2240/3	Loss of Bearing Area	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
<b>321/3</b>	<b>Re Conc Approach Slab</b>	<b>616.00</b>	<b>0%</b>	<b>0.00</b>	<b>100%</b>	<b>616.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>
510/3	Wearing Surfaces	616.00	0%	0.00	95%	586.00	5%	30.00	0%	0.00
3220/3	Crack (Wearing Surface)	55.00	0%	0.00	45%	25.00	55%	30.00	0%	0.00
<b>8107/3</b>	<b>Steel Opn Girder/Beam ENC</b>	<b>125.00</b>	<b>79%</b>	<b>99.00</b>	<b>8%</b>	<b>10.00</b>	<b>9%</b>	<b>11.00</b>	<b>4%</b>	<b>5.00</b>
515/3	Steel Protective Coating	516.00	0%	0.00	19%	100.00	40%	208.00	40%	208.00
3420/3	Peel/Bub/Crack(Stl Protect Coat)	516.00	0%	0.00	19%	100.00	40%	208.00	40%	208.00
1000/3	Corrosion	26.00	0%	0.00	38%	10.00	42%	11.00	19%	5.00
<b>8213/3</b>	<b>R/C Return Wall</b>	<b>80.00</b>	<b>0%</b>	<b>0.00</b>	<b>99%</b>	<b>79.00</b>	<b>0%</b>	<b>0.00</b>	<b>1%</b>	<b>1.00</b>
1080/3	Delamination/Spall/Patched Area	1.00	0%	0.00	0%	0.00	0%	0.00	100%	1.00
1120/3	Efflorescence/Rust Staining	78.00	0%	0.00	100%	78.00	0%	0.00	0%	0.00
1130/3	Cracking (RC and Other)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
<b>8218/3</b>	<b>Backwall, All Types</b>	<b>50.00</b>	<b>0%</b>	<b>0.00</b>	<b>46%</b>	<b>23.00</b>	<b>54%</b>	<b>27.00</b>	<b>0%</b>	<b>0.00</b>
1080/3	Delamination/Spall/Patched Area	22.00	0%	0.00	0%	0.00	100%	22.00	0%	0.00
1090/3	Exposed Rebar	5.00	0%	0.00	0%	0.00	100%	5.00	0%	0.00
1120/3	Efflorescence/Rust Staining	22.00	0%	0.00	100%	22.00	0%	0.00	0%	0.00
1130/3	Cracking (RC and Other)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
8368/3	Graffiti	1.00	100%	1.00	0%	0.00	0%	0.00	0%	0.00
<b>8305/3</b>	<b>Asphaltic Joint Material</b>	<b>44.00</b>	<b>0%</b>	<b>0.00</b>	<b>50%</b>	<b>22.00</b>	<b>50%</b>	<b>22.00</b>	<b>0%</b>	<b>0.00</b>
2320/3	Seal Adhesion	22.00	0%	0.00	0%	0.00	100%	22.00	0%	0.00
<b>8335/3</b>	<b>Guardrail, Vehicular</b>	<b>682.00</b>	<b>0%</b>	<b>0.00</b>	<b>98%</b>	<b>667.00</b>	<b>2%</b>	<b>15.00</b>	<b>0%</b>	<b>0.00</b>
515/3	Steel Protective Coating	1,365.00	0%	0.00	85%	1,165.00	15%	200.00	0%	0.00
3440/3	Eff (Stl Protect Coat)	200.00	0%	0.00	0%	0.00	100%	200.00	0%	0.00
1000/3	Corrosion	3.00	0%	0.00	0%	0.00	100%	3.00	0%	0.00
7000/3	Damage	13.00	0%	0.00	8%	1.00	92%	12.00	0%	0.00
<b>8336/3</b>	<b>Conc Bridge Parapet</b>	<b>674.00</b>	<b>0%</b>	<b>0.00</b>	<b>100%</b>	<b>674.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>
1080/3	Delamination/Spall/Patched Area	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
1090/3	Exposed Rebar	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
1120/3	Efflorescence/Rust Staining	336.00	0%	0.00	100%	336.00	0%	0.00	0%	0.00



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1130/3	Cracking (RC and Other)	336.00	0%	0.00	100%	336.00	0%	0.00	0%	0.00
<b>8367/3</b>	<b>Slope Blocks</b>	<b>2,000.00</b>	<b>0%</b>	<b>0.00</b>	<b>100%</b>	<b>2,000.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>
<b>8370/3</b>	<b>Steel Diaphragms</b>	<b>64.00</b>	<b>0%</b>	<b>0.00</b>	<b>86%</b>	<b>55.00</b>	<b>13%</b>	<b>8.00</b>	<b>2%</b>	<b>1.00</b>
515/3	Steel Protective Coating	2,000.00	0%	0.00	98%	1,950.00	3%	50.00	0%	0.00
3410/3	Chalk(Steel Protect Coatings)	1,950.00	0%	0.00	100%	1,950.00	0%	0.00	0%	0.00
3420/3	Peel/Bub/Crack(Stl Protect Coat)	50.00	0%	0.00	0%	0.00	100%	50.00	0%	0.00
1000/3	Corrosion	9.00	0%	0.00	0%	0.00	89%	8.00	11%	1.00
1900/3	Distortion	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
<b>8398/3</b>	<b>Curb/sidewalks - Con</b>	<b>674.00</b>	<b>95%</b>	<b>642.00</b>	<b>5%</b>	<b>31.00</b>	<b>0%</b>	<b>1.00</b>	<b>0%</b>	<b>0.00</b>
1080/3	Delamination/Spall/Patched Area	26.00	0%	0.00	96%	25.00	4%	1.00	0%	0.00
4000/3	Settlement	6.00	0%	0.00	100%	6.00	0%	0.00	0%	0.00
<b>8428/3</b>	<b>Pro Screen Barrier</b>	<b>130.00</b>	<b>100%</b>	<b>130.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>
8368/3	Graffiti	100.00	100%	100.00	0%	0.00	0%	0.00	0%	0.00

**ELEMENT NOTES**

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
<b>12</b>	<b>Re Concrete Deck</b>	<b>3</b>	<b>8,310.00</b>	<b>sq.ft</b>	<b>0.00</b>	<b>8,280.00</b>	<b>30.00</b>	<b>0.00</b>

**There is a reinforced concrete deck overlaid with a bituminous wearing surface. The underside of deck between the girders is labeled from Bay "A" through Bay "C" in Spans 2 and 3 and from Bay "A" through Bay "D" in Span 1, from north to south. There are overhangs at the north and south sides of the bridge. The underside of the reinforced concrete deck has numerous hollow areas, spalls with and without exposed rebar, hairline longitudinal cracks and map cracks with efflorescence, isolated hairline transverse cracks with efflorescence, and areas of scaling. Refer to the attached document "Element 12 - Re Conc Deck" for specific conditions.**

510	Wearing Surffiaces	3	6,402.00	sq.ffi	0.00	6,402.00	0.00	0.00
<p>There is a bituminous wearing surface at the bridge and the approaches.</p> <p>The wearing surface has light accumulation of debris along the shoulders of the bridge and approaches (Photos 5, 8 and 13).</p>								
1080	Delaminatton/Spall/Patched Ar3		134.00	sq.ffi	0.00	67.00	67.00	0.00
<p>The underside of the reinforced concrete deck has numerous hollow areas measuring up to 5'-8" long x 3'-8" wide, spalls with and without exposed rebar measuring up to 18" long x up to 2'-0" wide x up to 11" deep and isolated areas of scaling (Photos 30, 32, 34, 36 through 39, 41 through 44 and 87).</p> <p>Refer to the attached document "Element 12 - Re Conc Deck" for specific conditions.</p>								
1090	Exposed Rebar	3	1.00	sq.ffi	0.00	1.00	0.00	0.00
<p>Refer to Defect 1080 - Delamination/Spall/Patch for conditions.</p> <p>Refer to the attached document "Element 12 - Re Conc Deck" for specific conditions.</p>								
1120	Efflorescence/Rustt Sttaining	3	5.00	sq.ffi	0.00	0.00	5.00	0.00
<p>Refer to Defect 1130 - Cracking (RC and Other) for conditions.</p> <p>Refer to the attached document "Element 12 - Re Conc Deck" for specific conditions.</p>								
1130	Cracking (RC and Otther)	3	50.00	sq.ffi	0.00	50.00	0.00	0.00



# RIDOT Bridge Inspection Report

**066201**  
**Ramp CB**

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

**Bridge Condition Poor**

The underside of deck has scattered areas of hairline longitudinal and mapcracks with efflorescence and rust staining, most notably on the overhangs at the piers (Photos 31, 33, 35, 36, 38 through 41 and 44).

Refer to the attached document "Element 12 - Re Conc Deck" for specific conditions.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
<b>107</b>	<b>Steel Opn Girder/Beam</b>	<b>3</b>	<b>1,087.00</b>	<b>ft</b>	<b>0.00</b>	<b>1,087.00</b>	<b>0.00</b>	<b>0.00</b>

There are three (3) simple steel girder spans oriented from west to east. There are four (4) steel welded plate girders labeled Girder "A" through "D" from the north to south. There is an additional stub girder labeled Girder "AA" in Span 1 (Photo 27). In Span 2, the north end of the Girder "A" bottom flange over Track 2 has moderate rust at the ground connections and the underside has a few arc burns (Photo 50).

515	Ssteel Protective Coating	3	4,484.00	sq.ffi	0.00	4,232.00	0.00	252.00
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The girders have a painted steel protective coating throughout.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
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3410	Chalk(Steel Protect Co 3		4,148.00	sq.ft	0.00	4,148.00	0.00	0.00
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The steel protective coating has scattered areas of chalky and faded paint (Photo 39).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
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3420	Peel/Bub/Crack(Stl Prc 3		336.00	sq.ft	0.00	84.00	0.00	252.00
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The steel girders typically have scattered areas of peeling paint with light to moderate rust along the flanges and lower webs throughout Spans 1 through 3 (Photos 31 and 48 through 50).

1000	Corrosion	3	61.00	ffi	0.00	61.00	0.00	0.00
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The steel girders typically have scattered areas of peeling paint with light to moderate rust along the flanges and lower webs throughout Spans 1 through 3 (Photos 31 and 48 through 50).

In Span 1, the south legs of the Girders "A" and "AA" top flanges have heavy rust with isolated areas of up to 1/4" section loss (Photo 49).

1900	Distortton	3	2.00	ffi	0.00	2.00	0.00	0.00
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In Span 1, at midspan, the Girder "AA" bottom flange is bent out-of-plane upwards up to 1/2" x 16" long (Photo 48).

In Span 3, the north face of Girder "A" has minor web distortion for up to full length.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
<b>205</b>	<b>Re Conc Column</b>	<b>3</b>	<b>4.00</b>	<b>each</b>	<b>0.00</b>	<b>2.00</b>	<b>2.00</b>	<b>0.00</b>

There are two (2) reinforced concrete columns at Piers 1 and 2 labeled Column "A" and Column "B" from the north to south (Photos 68 through 71).

1080	Delaminatton/Spall/Patched Ar3		1.00	each	0.00	1.00	0.00	0.00
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# RIDOT Bridge Inspection Report

**066201**  
**Ramp CB**

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

**Bridge Condition Poor**

The reinforced concrete columns typically have scattered hollow areas and isolated spalls, some with exposed rebar. The Pier 2 columns have heavy mapcracking and vertical cracks

Specific deficiencies are as follows:

**PIER 1:**

- Column "A": The west face of the column has a hollow area at the base measuring 15" wide x 21" high and the southwest face has a spall at the top measuring 9" long x 6" high x 1" deep (Photos 79 and 80).

**PIER 2:**

- Column "A": The column has a cracked hollow area with rust staining measuring full height x full width (Photo 74).  
- Column "B": The south face of the column has a spall with exposed and debonded rebar and stirrups, four (4) of which are severed, measuring up to 20" long x full height x up to 3" deep, and the remaining circumference of the column has a full height hollow area with heavy mapcracks, vertical cracks measuring up to 3/4" wide and rust staining (Photo 74).

1090	Exposed Rebar	3	1.00	each	0.00	1.00	0.00	0.00
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Refer to Defect 1080 - Delamination/Spall/Patched Area for conditions.

1120	Efflorescence/Rust Staining	3	1.00	each	0.00	0.00	1.00	0.00
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Refer to Defect 1080 - Delamination/Spall/Patched Area for conditions.

1130	Cracking (RC and Otther)	3	1.00	each	0.00	0.00	1.00	0.00
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Refer to Defect 1080 - Delamination/Spall/Patched Area for conditions.

8368	Graffiti	3	50.00	each	50.00	0.00	0.00	0.00
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The columns have moderate graffiti throughout (Photo 74).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
<b>210</b>	<b>Re Conc Pier Wall</b>	<b>3</b>	<b>76.00</b>	<b>ft</b>	<b>0.00</b>	<b>66.00</b>	<b>10.00</b>	<b>0.00</b>

**There are reinforced concrete crash walls at Piers 1 and 2 (Photos 68 through 71).**

1080	Delaminatton/Spall/Patched Ar3		73.00	ffi	0.00	63.00	10.00	0.00
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# RIDOT Bridge Inspection Report

**066201  
Ramp CB**

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

**Bridge Condition Poor**

The reinforced concrete pier walls have scattered hollow areas and isolated spalls, some with exposed rebar.

Specific deficiencies are noted as below:

**PIER 1:**

- The pier wall has scattered hollow areas throughout the east face.
- The east face of the pier wall at the base has a spall with exposed rebar at the north end measuring 20" wide x 2'-9" high x up to 8" deep (Photo 72).
- The west face of the pier wall at the north end has a spall with exposed rebar measuring 14" wide x 10" high x 7" deep at the top corner (Photo 73).

**PIER 2:**

- Below Bay "B", the west face of the pier wall has a cracked hollow area at the base measuring 7'-0" wide x up to full height.
- The west face of the pier wall has a cracked hollow area at the south end along the top measuring 12'-0" wide x up to 5'-0" high.
- Below the pier cap construction joint, the east face of the pier wall has a hollow area measuring 9" wide x 6-1/4" high with a spall measuring 3" wide x 2" high x 1-1/4" deep (Photo 75).
- Below Bays "A" and "B", the east face of the pier wall has a cracked hollow area at the top measuring 5'-10" wide x 20" high (Photo 75).
- Below Bay "A", the east face of the pier wall has a hollow area measuring 2'-0" wide x 2'-4" high with an adjacent spall at the base measuring 10" wide x up to 5" high x 2" deep (Photo 75).
- Below Bay "C", the east face of the pier wall has two (2) cracked hollow areas at the top measuring 5'-6" wide x up to 2'-6" high and 20" wide x 2'-8" high.
- The north face of the pier wall has minor spalls with hairline mapcracking on the top.

1090	Exposed Rebar	3	1.00	ffi	0.00	1.00	0.00	0.00
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Refer to Defect 1080 - Delamination/Spall/Patched Area for conditions.

1120	Efflorescence/Rust Staining	3	1.00	ffi	0.00	1.00	0.00	0.00
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Refer to Defect 1130 - Cracking (RC and Other) for conditions.

1130	Cracking (RC and Other)	3	1.00	ffi	0.00	1.00	0.00	0.00
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The pier walls have isolated areas of hairline to 3/8" wide horizontal, vertical and map cracking with efflorescence and rust staining throughout (Photos 72 and 75).

Specific deficiencies are noted as below:

**PIER 2:**

- Between Columns "A" and "B", the east face of the pier wall has a horizontal crack measuring 1/8" wide x 4'-1" long and the top face of the pier wall has a horizontal crack measuring up to 3/8" wide x full length between the columns (Photo 75).
- Below Column "B", the east face of the pier wall has a vertical crack measuring up to 1/8" wide x 20" high.

8368	Graffiti	3	1.00	ffi	1.00	0.00	0.00	0.00
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The pier walls have moderate to heavy graffiti throughout (Photos 69, 74 and 75).

The signs on the west face of Pier 2 are painted over (Photo 74).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
215	Re Conc Abutment	3	50.00	ft	0.00	31.00	19.00	0.00



# RIDOT Bridge Inspection Report

**066201**  
**Ramp CB**

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

**Bridge Condition Poor**

**There are two reinforced concrete abutments labeled Abutment 1 at the west end and Abutment 2 at the east end. The Abutment 2 bridge seat has heavy debris throughout (Photos 65 and 84).**

1080	Delaminatton/Spall/Pattched Ar3	14.00	ffi	0.00	5.00	9.00	0.00
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There are scattered hollow areas and spalls at the abutments.

Specific conditions are as follows:

**Abutment 1:**

- Below the north overhang: There is a spall measuring 5" long x 8" wide x up to 2" deep (Photo 30).
- Below Girder "AA": There is a cracked hollow area measuring 4'-0" wide x 2'-0" high with rust staining (Photo 83).
- Below Bay "A": There is a cracked hollow area measuring 16" wide x 2'-6" high with a spall measuring 5" wide x 14" high x 1-1/2" deep (Photo 83).
- Below Bay "B": There is a hollow area measuring 2'-6" wide x 12" high.
- Below Girder "C": There is a hollow area measuring 10" in diameter.
- Below Bay "C": There is a hollow area measuring 3'-4" wide x 3'-0" high.

**Abutment 2:**

- Below Bay "A": There is a cracked hollow area measuring 7'-0" wide x up to 3'-0" high with a spall along the top measuring 3'-4" wide x 8" high x 2" deep (Photo 84).
- Below Bay "B": There is a hollow area measuring 15" wide x 10" high.
- Below Bay "C": There is a cracked hollow area at the top measuring 3'-9" wide x up to 20" high (Photo 85).

1120	Efflorescence/Rustt Sttaining	3	10.00	ffi	0.00	0.00	10.00	0.00
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Refer to Defect 1130 - Cracking (RC and Other) for conditions.

1130	Cracking (RC and Otther)	3	1.00	ffi	0.00	1.00	0.00	0.00
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The abutments have scattered hairline horizontal and vertical cracks throughout, some with light efflorescence and rust staining (Photos 83 through 85).

8368	Graffitt	3	1.00	ffi	1.00	0.00	0.00	0.00
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The Abutment 1 stem has light graffiti throughout (Photo 85).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
234	Re Conc Pier Cap	3	54.00	ft	19.00	7.00	28.00	0.00

**There are two reinforced concrete pier caps at Piers 1 and 2. The pier caps have scattered spalls and cracked hollow areas, some with light to heavy rust staining with light to moderate accumulation of sand and debris (Photos 51, 59 and 62).**

1080	Delaminatton/Spall/Pattched Ar3	16.00	ffi	0.00	0.00	16.00	0.00
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# RIDOT Bridge Inspection Report

066201  
Ramp CB

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

Bridge Condition **Poor**

Pier 1, East Face:

- Below Girder "D": The pier cap has a spall measuring 6" wide x 4" high x 1" deep.

Pier 2, West Face:

- Below Girder "A": The pier cap has a spall at the top measuring 2'-0" wide x 4" high x 1" deep and two (2) cracked hollow areas measuring 2'-0" wide x 1'-6" high and 2'-0" wide x 2'-4" high (Photo 74).

- Below Bay "A": The pier cap has a spall with exposed and debonded rebar at the bottom of the west face measuring 7'-6" wide x 12" high x 4" deep which extends on to the north face measuring full length x 20" wide x 4" deep with exposed and debonded stirrups (Photo 76).

- Below Bay "B": The pier cap has a corner spall with exposed rebar measuring at the bottom of the west face measuring 10'-6" wide x 7" high x 9" long (underside) x up to 4" deep (Photos 74 and 77).

Pier 2, East Face:

- Below Bay "B": The pier cap has a hollow area measuring 18" wide x 2'-4" high (Photo 78).

- Below Bay "C": The pier cap has a hollow area measuring 6" wide x full height (Photo 78).

Pier 2, Underside:

- Below all bays: The underside of the pier cap is hollow for its full length x full width (Photo 77).

1090	Exposed Rebar	3	1.00	ffi	0.00	1.00	0.00	0.00
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Refer to Defect 1080 - Delamination/Spall/Patched Area for conditions.

1120	Efflorescence/Rust Staining	3	12.00	ffi	0.00	0.00	12.00	0.00
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Refer to Defect 1130 - Cracking (RC and Other) for conditions.

1130	Cracking (RC and Other)	3	6.00	ffi	0.00	6.00	0.00	0.00
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The pier caps have scattered hairline horizontal and diagonal cracks and isolated hairline map cracks, some with efflorescence and rust staining (Photos 74, 77 and 78).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
301	Pourable Joint Seal	3	44.00	ft	0.00	44.00	0.00	0.00

There are pourable joint seals at Abutments 1 and 2.

2320	Seal Adhesion	3	14.00	ffi	0.00	14.00	0.00	0.00
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The pourable joint seals have isolated areas of minor seal adhesion separations (Photos 8 and 11).

2360	Adjacent Deck or Header	3	30.00	ffi	0.00	30.00	0.00	0.00
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There are transverse alligator cracks up to 1/16" wide along the approach sides of the joints at Abutments 1 and 2 (Photos 8 and 11).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
310	Elastomeric Bearing	3	25.00	each	0.00	25.00	0.00	0.00



# RIDOT Bridge Inspection Report

**066201**  
**Ramp CB**

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

**Bridge Condition Poor**

**There are elastomeric bearings at Girders "A" through "D" at the beam ends in Spans 1 through 3. There is an additional elastomeric bearing at Girder "AA" at Abutment 1 in Span 1.**

515	Ststeel Protective Coating	3	50.00	sq.ffi	0.00	26.00	24.00	0.00
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The bearings have a painted steel protective coating.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
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3420	Peel/Bub/Crack(Stl Prc 3	3	50.00	sq.ft	0.00	26.00	24.00	0.00
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*The bearings have scattered peeling paint throughout, most notably at the exterior bearings (Photos 30 and 56).*

1000	Corrosion	3	12.00	each	0.00	12.00	0.00	0.00
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The bearings typically have scattered light to moderate rust throughout with moderate to heavy rust and up to 1/8" section loss at the exterior bearings (Photos 30 and 56).

1020	Connectton	3	3.00	each	0.00	3.00	0.00	0.00
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Abutment 1:

- Bearing "B": The north anchor bolt nut is backed off 1/4" (Photo 66).
- Bearing "D": The south anchor bolt is bent to the south (Photo 45).

Pier 1, Span 1:

- Bearing "B": The south anchor bolt is bent to the south.

2240	Loss offi Bearing Area	3	1.00	each	0.00	1.00	0.00	0.00
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At Abutment 1, the Bearing "D" masonry plate overhangs the bridge seat at the southwest corner up to 1-1/2" which appears to be an as-built condition (Photo 45).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
321	Re Conc Approach Slab	3	616.00	sq.ft	0.00	616.00	0.00	0.00

**There are reinforced concrete approach slabs at the east and west approaches which are overlaid with a bituminous wearing surface.**

510	Wearing Surffiaces	3	616.00	sq.ffi	0.00	586.00	30.00	0.00
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The reinforced concrete approach slabs are overlaid with a bituminous wearing surface.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
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3220	Crack (Wearing Surfac 3	3	55.00	sq.ft	0.00	25.00	30.00	0.00
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*The approach wearing surfaces exhibit isolated hairline transverse and longitudinal cracks.*

*There are transverse alligator cracks up to 1/16" wide at the east and west approaches along the abutment joints (Photos 8 and 11).*

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
8107	Steel Opn Girder/Beam ENDS	3	125.00	ft	99.00	10.00	11.00	5.00

**This element is used to quantify and document conditions located within the end 5'-0" of the steel plate girders.**



# RIDOT Bridge Inspection Report

**066201**  
**Ramp CB**

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

**Bridge Condition Poor**

515	Steel Protective Coating	3	516.00	sq.ffi	0.00	100.00	208.00	208.00
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The girder ends have a painted steel protective coating.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
3420	Peel/Bub/Crack(Stl Prc 3		516.00	sq.ft	0.00	100.00	208.00	208.00
<i>The girder ends have failed and peeling paint throughout (Photos 53, 57 and 58).</i>								

1000	Corrosion	3	26.00	ffi	0.00	10.00	11.00	5.00
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The girder webs have heavy corrosion with isolated areas of 100% section loss at the beam ends, typically beyond the bearing stiffeners (Photos 30, 32, 38, 45 through 47, 50 through 56, 58, 59 and 60 through 65). The worst areas of web section loss are typically at the exterior girders and in some locations, beyond the bearings.

The bottom flanges have scattered areas of section loss at the beam ends, with isolated areas of 100% section loss (Photos 59 and 62).

The bearing stiffeners have section loss in the bottom 12" height at numerous locations, with isolated areas of 100% section loss (Photos 46, 51, 55, 56, 60 through 62, 64, 65 and 87).

Refer to the attached document "Element 8107 - Steel Open Girder Ends" for specific conditions.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
8213	R/C Return Wall	3	80.00	(LF)	0.00	79.00	0.00	1.00

**There are reinforced concrete return walls at Abutments 1 and 2 (Photos 91, 93, 94 and 95).**

1080	Delaminaton/Spall/Patched Ar3		1.00	(LF)	0.00	0.00	0.00	1.00
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At the northwest return wall, there is a spall with loss of backfill material at the top of the construction joint measuring 6" long x 2'-0" high x 22" deep (Photos 91 and 92).

At the Abutment 1 backwall, the southwest return wall has a hollow area measuring 6" long x 2'-8" high (Photo 32).

1120	Efflorescence/Rust Staining	3	78.00	(LF)	0.00	78.00	0.00	0.00
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Refer to Defect 1130 - Cracking (RC and Other) for conditions.

1130	Cracking (RC and Otther)	3	1.00	(LF)	0.00	1.00	0.00	0.00
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The reinforced concrete return walls have hairline map cracking with light to moderate efflorescence and leakage staining throughout (Photos 32, 91 and 93).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
8218	Backwall, All Types	3	50.00	(LF)	0.00	23.00	27.00	0.00

**There are reinforced concrete backwalls at Abutments 1 and 2.**

1080	Delaminaton/Spall/Patched Ar3		22.00	(LF)	0.00	0.00	22.00	0.00
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# RIDOT Bridge Inspection Report

**066201**  
**Ramp CB**

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

**Bridge Condition Poor**

**Abutment 1:**

- At the north end: There are two (2) spalls at the top and bottom measuring 2'-0" wide x 2'-0" high x up to 3" deep with exposed rebar and 2'-4" wide x 8" high x 2" deep extending 6" onto the north face (Photo 30).
- Below Bays "A" & "B": There are two (2) spalls with exposed rebar at the top measuring 16" wide x 4" high x 2" deep and 8" wide x 4" high x 2" deep.
- Behind Girder "C": There is a spall with exposed rebar measuring 2'-8" wide x 22" high x 3" deep (Photo 86).
- Below Bay "C": There is heavy scaling, most notably at the top, with heavy efflorescence and leakage staining.
- Below Bay "C" at Girder "D": There is a spall at the top measuring 8" wide x 4" high x 1" deep.
- At the south end: There is an area of heavy scaling/spalling at the top measuring 16" wide x 2'-2" high x 5" deep; daylight was observed from underneath the joint (Photo 32).

**Abutment 2:**

- Below Bay "A": The backwall has a spall with exposed and debonded rebar at the north end that extends into Bay "A" measuring 4'-0" wide x full height x up to 9" deep (Photos 87 and 88).
- Below Bays "B" and "C": The backwall has a spall at the top measuring up to full bay width x up to 12" high x up to 6" deep (Photos 89).
- Below Bay "C": The backwall has a spall with exposed rebar behind Girder "D" measuring up to 2'-8" wide x 3'-8" high x up to 9" deep (Photo 90).
- South end: The backwall has a hollow area measuring 2'-0" wide x full height.

1090	Exposed Rebar	3	5.00	(LF)	0.00	0.00	5.00	0.00
Refer to Defect 1080 - Delamination/Spall/Patched Area for conditions.								
1120	Efflorescence/Rust Staining	3	22.00	(LF)	0.00	22.00	0.00	0.00
Refer to Defect 1130 - Cracking (RC and Other) for conditions.								
1130	Cracking (RC and Other)	3	1.00	(LF)	0.00	1.00	0.00	0.00
The backwalls have scattered hairline map cracking and narrow horizontal cracks, some with light efflorescence and rust staining throughout (Photos 85 and 86).								
8368	Graffiti	3	1.00	(LF)	1.00	0.00	0.00	0.00
The backwall at Abutment 2 has isolated areas of light to moderate graffiti (Photos 84 and 85).								

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
8305	Asphaltic Joint Material	3	44.00	(LF)	0.00	22.00	22.00	0.00

**There are asphaltic joints at Piers 1 and 2. There is light vegetation growth at the shoulders (Photos 9 and 21).**

2320	Seal Adhesion	3	22.00	(LF)	0.00	0.00	22.00	0.00
The asphaltic joints have isolated areas of minor wear and seal adhesion separation at the edges (Photos 9 and 10).								
Below deck, active leakage was observed over a 5'-0" length at Pier 1 in Bay "A" (Photo 36).								

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
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# RIDOT Bridge Inspection Report

**066201**  
**Ramp CB**

Inspected By WSP  
Inspector: ZACHARY WRIGHT  
Inspection Date 08/31/2021

**Bridge Condition Poor**

<b>8335</b>	<b>Guardrail, Vehicular</b>	<b>3</b>	<b>682.00</b>	<b>(LF)</b>	<b>0.00</b>	<b>667.00</b>	<b>15.00</b>	<b>0.00</b>
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There are steel W-beam guardrails attached to the reinforced concrete bridge parapets at the north and south sides of the bridge which continue on to the approaches except at the southeast approach where it transitions to a concrete jersey barrier (Photo 12). The jersey barrier at the southeast approach exhibits hairline cracks along the lower portion (Photos 18 through 20).

515	Steel Protective Coating	3	1,365.00	sq.ffi	0.00	1,165.00	200.00	0.00
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The steel W-beam guardrails have a galvanized protective coating.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
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3440	Eff (Stl Protect Coat)	3	200.00	sq.ft	0.00	0.00	200.00	0.00
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The guardrails exhibit scattered areas where the steel protective coating has limited effectiveness (Photos 14 through 17 and 24).

1000	Corrosion	3	3.00	(LF)	0.00	0.00	3.00	0.00
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At the southeast transition to the jersey barrier, the guardrail has an area of 100% loss (Photos 19 and 20).

7000	Damage	3	13.00	(LF)	0.00	1.00	12.00	0.00
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The guardrails have scattered areas of minor impact scrapes throughout (Photos 8, 18 and 19).

At the west approach, the north guardrail has an area of impact damage measuring 6'-0" long with a detached post block (Photos 24 and 25).

At Pier 2, the north guardrail has an area of impact damage measuring 6'-0" long (Photo 21).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
<b>8336</b>	<b>Conc Bridge Parapeti</b>	<b>3</b>	<b>674.00</b>	<b>(LF)</b>	<b>0.00</b>	<b>674.00</b>	<b>0.00</b>	<b>0.00</b>

There are concrete bridge parapets with a mounted metal top rail at the north and south side of the bridge.

1080	Delaminatton/Spall/Patched Ar3	3	1.00	(LF)	0.00	1.00	0.00	0.00
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At the underside of the west end of the south parapet, there are two (2) shallow rebar spalls measuring up to 4" long x 10" wide x 1" deep (Photo 93).

1090	Exposed Rebar	3	1.00	(LF)	0.00	1.00	0.00	0.00
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See Defect 1080 – Delamination/Spall/Patched Area for comments.

1120	Efflorescence/Rustt Sttaining	3	336.00	(LF)	0.00	336.00	0.00	0.00
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At the joint between the parapets and the deck, there is efflorescence staining (Photos 33 and 48 through 50).

1130	Cracking (RC and Otther)	3	336.00	(LF)	0.00	336.00	0.00	0.00
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The parapets have scattered horizontal cracks up to 1/16" wide (Photo 22).



# RIDOT Bridge Inspection Report

**066201**  
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**Bridge Condition Poor**

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
8367	Slope Blocks	3	2,000.00	sq.ft	0.00	2,000.00	0.00	0.00

There are concrete slope blocks at the embankments of Abutments 1 and 2. The slope blocks have scattered areas of light scaling, light accumulation of debris and light to heavy vegetation growth at the ends measuring 10'-0" wide (Photo 96). At Abutment 2, the slope blocks have heavy accumulation of debris along the Pier 2 crash wall (Photo 70).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
8370	Steel Diaphragms	3	64.00	(EA)	0.00	55.00	8.00	1.00

There are steel diaphragms in Spans 1 through 3. The diaphragms at the piers and abutments are labeled end diaphragms. The intermediate diaphragms are labeled from west to east.

515	Ssteel Protective Coating	3	2,000.00	sq.ft	0.00	1,950.00	50.00	0.00
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The steel diaphragms protective coating has chalky and faded areas with areas of peeling paint with light to moderate rust.

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
3410	Chalk(Steel Protect Co 3		1,950.00	sq.ft	0.00	1,950.00	0.00	0.00

*The diaphragms protective coating has chalky and faded areas.*

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
3420	Peel/Bub/Crack(Stl Prc 3		50.00	sq.ft	0.00	0.00	50.00	0.00

*The diaphragms have scattered areas of peeling paint with light to moderate rust with heavier rusting and some minor section losses to the end diaphragms at the piers.*

1000	Corrosion	3	9.00	(EA)	0.00	0.00	8.00	1.00
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The end diaphragms typically have peeling paint with moderate to heavy rust with isolated areas of minor sections loss throughout (Photo 63).

At Pier 1, the Span 2 lateral bracing member in Bay A at the connection with Girder "A" is being supported by a wire and clamp and has areas of 100% section loss.

Specific deficiencies at this location are as noted below:

- The lateral bracing connection plate: 100% loss x 16" long x 6" wide (Photo 57).
- The vertical leg of the lateral bracing member: 100% loss x 21" long x up to 2" high (Photo 57).
- The horizontal leg of the lateral bracing member: 100% loss x 3'-0" long x full width (Photo 57).

1900	Distortion	3	1.00	(EA)	0.00	1.00	0.00	0.00
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In Bay "B" of Span 2, between Diaphragms 5 and 6, the lateral bracing is bowed slightly downwards (Photo 67).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
8398	Curb/sidewalks - Con	3	674.00	ft	642.00	31.00	1.00	0.00



# RIDOT Bridge Inspection Report

**066201**  
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**Bridge Condition Poor**

There are reinforced concrete safety walks at the north and south sides of the bridge with granite curbs. The previously reported heavy debris and vegetation has been cleared (Photo 21), however, there is light vegetation growth between the curbs and the safety walks (Photos 14, 15 and 23). The curbs have scattered areas of minor edge chipping, impact scrapes and rust staining throughout (Photos 14, 19 and 21 through 23).

1080	Delaminatton/Spall/Patched Ar3	26.00	ffi	0.00	25.00	1.00	0.00
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The safety walks have scattered minor spalls up to 1/2" deep (Photos 15 and 23).

Near Pier 2 in Span 2, the south curb has a spall measuring 12" long x full height x 2" deep (Photo 14).

4000	Settlementt	3	6.00	ffi	0.00	6.00	0.00	0.00
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At the west approach, the north and south curbs are settled up to 3" (Photo 13).

ELEM	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
<b>8428</b>	<b>Pro Screen Barrier</b>	<b>3</b>	<b>130.00</b>	<b>ft</b>	<b>130.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

There are railroad electrification protection barriers along the west half of Span 2.

8368	Graffiti	3	100.00	ffi	100.00	0.00	0.00	0.00
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The interior faces of the electrification barrier have light graffiti (Photos 5, 15 and 16).



# RIDOT Bridge Inspection Report

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Inspection Date 08/31/2021

**Bridge Condition Poor**

<p><b>Equipment</b></p> <ul style="list-style-type: none"> <li>Aerial Lift <input type="checkbox"/></li> <li>Boat <input type="checkbox"/></li> <li>Underbridgeinspvel <input type="checkbox"/></li> <li>Scaffolding <input type="checkbox"/></li> <li>BoesemansChair <input type="checkbox"/></li> <li>Waders <input type="checkbox"/></li> <li>Rail Mount Elliot <input checked="" type="checkbox"/></li> <li>Crash Truck <input checked="" type="checkbox"/></li> <li>Air Monitor <input type="checkbox"/></li> <li>Ladder <input type="checkbox"/></li> <li>Bucket Truck <input type="checkbox"/></li> <li>Rigging <input type="checkbox"/></li> <li>Floats <input type="checkbox"/></li> <li>Climbing <input type="checkbox"/></li> <li>Rail Mount Bucket Truck <input checked="" type="checkbox"/></li> <li>Light Tower <input checked="" type="checkbox"/></li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Poison Ivy <input type="checkbox"/></td> <td style="padding: 2px;">Speed Limit 30.00</td> </tr> <tr> <td style="padding: 2px;">Heavy Vegetation <input type="checkbox"/></td> <td style="padding: 2px;">Prep Time 4</td> </tr> <tr> <td style="padding: 2px;">Hurricane Evac Route ? <input checked="" type="checkbox"/></td> <td style="padding: 2px;">Crew Slize 3</td> </tr> <tr> <td style="padding: 2px;"><b>Cones</b> Yes</td> <td style="padding: 2px;">Under Insp Vehicle Time 0</td> </tr> <tr> <td style="padding: 2px;">Traffic Setup Req Yes</td> <td style="padding: 2px;">Traffic Control Time 3.5</td> </tr> <tr> <td style="padding: 2px;">Police Req Yes</td> <td style="padding: 2px;">Mile Post 0.103</td> </tr> <tr> <td style="padding: 2px;">Night Insp Req Yes</td> <td style="padding: 2px;">Crew Days 3.5</td> </tr> <tr> <td style="padding: 2px;">Signs Yes</td> <td style="padding: 2px;">Time Report Time 39</td> </tr> <tr> <td></td> <td style="padding: 2px;">Bucket Truck Time 3</td> </tr> </table>	Poison Ivy <input type="checkbox"/>	Speed Limit 30.00	Heavy Vegetation <input type="checkbox"/>	Prep Time 4	Hurricane Evac Route ? <input checked="" type="checkbox"/>	Crew Slize 3	<b>Cones</b> Yes	Under Insp Vehicle Time 0	Traffic Setup Req Yes	Traffic Control Time 3.5	Police Req Yes	Mile Post 0.103	Night Insp Req Yes	Crew Days 3.5	Signs Yes	Time Report Time 39		Bucket Truck Time 3																												
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