

Inspector: Miller,Jason
 Inspection Date: 03/28/2023

Structure Number: 1814753
 Facility Carried: IR 480

Ohio Bridge Inspection Summary Report

CUY-0480N-0140WE (1814753)

2: District 80990 - WARRENSVILLE HTS (CUY county)
 District 12

5A: Inventory Route 1 0480N

21: Major Maint A/B 01 - State Highway Agency /
 225 Routine Main A/B 01 - State Highway Agency /
 221 Inspection A/B 01 - State Highway Agency /
 220: Inv. Location DISTRICT 12

7: Facility On IR 480
 6: Feature Ints SR 175 (RICHMOND RD)
 9: Location 0.4 MI. EAST OF JCT I-271
 Lat, Lon 41.429247 ,-81.497872

Condition	Structure Type
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58: Deck **6 - Satisfactory Condition**
 58.01 Wearing Surface 7 - Good (1% distress)
 58.02 Joint N- Not Applicable
59: Superstructure **7 - Good Condition**
 59.01 Paint & PCS 4 - Poor PCS (15-20% corr.)
60: Substructure **6 - Satisfactory Condition**
61: Channel **N**
 61.01 Scour **N - Not Applicable**
62: Culverts **N - Not Applicable**

43: Bridge Type 4 - Steel continuous
 02 - Stringer/Multi-beam or Girder
 N- Not Applicable
 45: Spans Main / Approach 3 / 0
 107: Deck Type 1 - Concrete Cast-in-Place
 408: Composite Deck U - Unknown
 414A Joint Type 1 N - None
 414B: Joint Type 2 N - None
 108A: Wearing Surface 2 - Integral Concrete (separate non-modified layer of concrete added to structural deck)
 2- MicroSilica

67.01 GA 6

Appraisal

Sufficiency Rating 96.0 SD/FO 0 - ND
 36: Rail, Tr, Gd, Term Std 1 1 1 1
 72: Approach Alignment 8 - Equal to present desirable criteria
 113: Scour Critical N - Not over waterway
 71: Waterway Adequacy N - Not Applicable

422: WS Date 07/01/2002
 423: WS Thick (in) 1.2
 482: Protective Coating 6 - Galvanized
 483: PCS Date 01/01/1992
 453: Bearing Type 1 0 - Other
 455: Bearing Type 2 N - None
 528: Foundn: Abut Fwd U - Unknown
 533: Foundn: Abut Rear U - Unknown
 536: Foundn: Pier 1 U - Unknown
 539: Foundn: Pier 2 U - Unknown

Geometric

48: Max Span Length (ft) 70.0
 49: Structure Length (ft) 142.0
 52: Deck Width, Out-To-Out (ft) 43.4
 424: Deck Area (sf) 6162.8
 32: Appr Roadway Width (ft) 24.0
 51: Road Width, Curb-Curb (ft) 39.0
 50A: Curb/SW Width: Left (ft) 0
 50A: Curb/SW Width: Right (ft) 0
 34: Skew (deg) 8
 33: Bridge Median 0 - No median
 54B: Min Vert Underclearance (ft) 16
 336A: Min Vert Clrnce IR Cardinal (ft) 99
 336B: Min V Clr IR Non-Cardinal (ft) 0
 578: Culvert Length (ft) 0

Age and Service

27: Year Built/ 106 Rehab 1971 / 0000
 42A: Service On 1 - Highway
 42B: Service Under 1 - Highway, with or w/out pedestrian
 28A: Lanes on 02
 28B: Lanes Under 02
 19: Bypass Length 0
 29: ADT 6475
 109: % Trucks (%) 3

Load Posting

41: Op/Post/Closed A - Open
 70: Posting 5 - Equal to or above legal loads
 70.01: Date
 70.02: Sign Type
 734: Percent Legal (%) 150
 704: Analysis Date 07/01/1973
 63: Analysis Method 7 - Allowable Stress (AS) rating reported by rating factor (RF) method using MS18 loading.

Inspections

90: Routine Insp.	<i>Months</i>	
	12	03/28/2023
92A: FCM Insp.	N	0
92B: Dive Insp.	N	0
92C: Special Insp.	N	0
92D: UBIT Insp.	N	0
92E: Drone Insp.	N	0

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12-Reinforced Concrete Deck	3 - Mod.	6168	sq. ft.	5403	710	55	0
	CS2- Some transverse cracks, epoxy smeared areas throughout. CS3- Some spalls.						
510-Wearing Surfaces		5538	sq. ft.	4738	800	0	0
	CS2- Cracks, mostly transverse.						
107-Steel Open Girder/Beam	3 - Mod.	710	ft.	450	250	10	0
	CS2- Surface rust, mainly along lower flanges. Scrapes to lower flanges of beams 1 & 4 over NB traffic. CS3- Rusting section loss at some embedded beam ends.						
515-Steel Protective Coating		6890	sq. ft.	2790	3500	550	50
	CS2- Faded areas. Freckled rust. CS3- Surface rust, mainly along lower flanges. Bubbling paint with rust underneath. CS4- Failed PCS						
205-Reinforced Concrete Column	3 - Mod.	6	each	2	1	3	0
	CS2- P1C1- 4 SF delam CS3- P1C2- 30 SF delam P1C3- 20 SF delam P2C1- 21 SF delam						
521-Concrete Protective Coating		1413	sq. ft.	0	0	0	1413
	CS4- Not effective.						
215-Reinforced Concrete Abutment	3 - Mod.	88	ft.	45	26	17	0
	Evidence of water leaking thru construction joints with areas of efflorescence. CS2- Cracks. A few small delams. CS3- Spall that goes into seat in forward bay 4. Rust-stained cracks at forward. Cracks with efflorescence build up at rear.						
521-Concrete Protective Coating		176	sq. ft.	0	0	0	176
	CS4- Not effective.						
234-Reinforced Concrete Pier Cap	3 - Mod.	88	ft.	64	14	10	0
	CS2- Cracks and delams. CS3- Wide cracking delams. Break up to north end of P1. Spall with exposed rebar to south end P2.						
521-Concrete Protective Coating		792	sq. ft.	0	0	0	792
	CS4- Not effective						
310-Elastomeric Bearing	3 - Mod.	10	each	0	10	0	0
	CS2- Surface rust, some bulging elastomeric pads.						
312-Enclosed/Concealed Bearing	3 - Mod.	10	each	9	1	0	0
	CS2- Spall at forward beam 4 slightly exposes bearing pad.						

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
321-Reinforced Concrete Approach Slab	3 - Mod.	1200	sq. ft.	805	250	30	115
	Bounce off bridge. CS2- Cracks. CS3- Broken up area along rear approach wearing surface and wide cracks. Large pothole to forward #2. CS4- Failed asphalt patches with deep pothole at forward in lane 2 causing rough ride off bridge.						
331-Reinforced Concrete Bridge Railing	3 - Mod.	284	ft.	63	213	8	0
	CS2- Some vertical & many horizontal leaching cracks. Small delams. CS3- Spalls along outside rails. Small spalls with exposed rebar and other larger spalls.						
521-Concrete Protective Coating		2272	sq. ft.	0	0	0	2272
	CS4- Not effective.						
815-Drainage	3 - Mod.	3	each	0	1	0	2
	CS2- Partially plugged scupper. CS4- Clogged scupper.						
840-Approach Slab: Termination or Joint	3 - Mod.	48	ft.	0	36	12	0
	CS2- Cracks CS3- Wide cracks, some broken up asphalt areas.						

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Facility Carried: IR 480

ODOT District: District 12

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Date Built: 07/01/1971

Major Maint: 01 - State Highway Agency

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Traffic On: 1 - Highway

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: SR 175 (RICHMOND RD)

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 80990 - WARRENSVILLE HTS (CUY county)

Location: DISTRICT 12

0.4 MI. EAST OF JCT I-271

Insp Resp B:

Inspector

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Inspection Date 03/28/2023

Reviewer Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Approach

Approach Wearing Surface

Cracks, some sealed at rear. A few potholes.

Approach Embankment

Erosion to forward-right (clogged catch basin near east sidewalk).

Approach Guardrail

Both right approach parapets have settled & tip out 2.5". Minor spalls at forward-left & rear-right. Minor collision damage to both rear BTAs.

Inspector Comments - General Appraisal

Superstructure

Diaphragm/X-Frames

Surface rust. Minor cracks in concrete diaphragms. Bent horizontal angles in bays 1 & 4 over SB lane #2.

Fatigue

Welded cover plates at piers.

Substructure

Slope Protection

Cracks. Uneven settlement, 3 1/2" slide & buckling of forward CSP. Rear-right corner beginning to undermine at top. Areas of vegetation growing thru CSP.

Culvert

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Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical

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Pictures