

Ohio Bridge Inspection Summary Report

CUY-00422-1390R (1814745)

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

5A: Inventory Route 1 00422

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 USR 422
 6: Feature Ints SR 175 (RICHMOND RD)
 9: Location OVER SR 175
 Lat, Lon 41.429403 , -81.497881

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 **5 - Fair 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 **5**

Appraisal

Sufficiency Rating 68.0 SD/FO 2 - FO
 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 0 - Other Paint
 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) 71.0
 49: Structure Length (ft) 145.0
 52: Deck Width, Out-To-Out (ft) 30.4
 424: Deck Area (sf) 4408
 32: Appr Roadway Width (ft) 16.0
 51: Road Width, Curb-Curb (ft) 26.0
 50A: Curb/SW Width: Left (ft) 0
 50A: Curb/SW Width: Right (ft) 0
 34: Skew (deg) 18
 33: Bridge Median 0 - No median
 54B: Min Vert Underclearance (ft) 16.08
 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 8038
 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

	<i>Months</i>	
90: Routine Insp.	12	03/14/2022
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	
Inspector	Persanyi, Andrea	

Inspector: Andrea Persanyi
 Inspection Date: 03/14/2022

Structure Number: 1814745
 Facility Carried: USR 422

Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	3 - Mod.	4413	sq. ft.	3926	442	45	0
	CS2- Cracks, some leaching. delams CS3- Spalls, mottled areas.						
510 - Wearing Surfaces		3770	sq. ft.	3555	188	15	12
	CS2- Cracks CS4- Asphalt patches.						
107 - Steel Open Girder/Beam	3 - Mod.	580	ft.	278	290	12	0
	CS2- Surface rust, mainly along lower flanges. CS3- Rusting section loss at some embedded beam ends, small gouges/scrapes to right fascia over SB lane #1.						
515 - Steel Protective Coating		5044	sq. ft.	655	4244	130	15
	CS2- Faded & peeling areas. CS3- Surface rust, mainly along lower flanges, some PCS failure. CS4- Spots of bare rusted metal						
205 - Reinforced Concrete Column	3 - Mod.	6	each	0	2	1	3
	CS2- P1C1- 3 SF delam P2C1- 3 SF delam, 3 SF spall CS3- P1C2- 42 SF delam CS4- P1C3- 4 SF delam, 9 SF spalled with 4+ bars of rebar exposed P2C2- 4 SF delam, 18 SF spalled with 4+ bars of rebar exposed P2C3- 4 SF delam, 11 SF spalled with 4+ bars of rebar exposed						
215 - Reinforced Concrete Abutment	3 - Mod.	64	ft.	46	6	12	0
	CS2- Leaching cracks. rust stains, evidence of water leaking thru construction joints with areas of efflorescence. CS3- Spall with 360° rebar exposure at forward-right.						
234 - Reinforced Concrete Pier Cap	3 - Mod.	64	ft.	29	35	0	0
	CS2- Cracks, delams to both sides of P1 cap.						
310 - Elastomeric Bearing	3 - Mod.	8	each	8	0	0	0
312 - Enclosed/Concealed Bearing	3 - Mod.	8	each	8	0	0	0
321 - Reinforced Concrete Approach Slab	3 - Mod.	800	sq. ft.	640	120	0	40
	CS2- Cracks. CS4- Asphalt repairs to rear slab. some concrete breaking up in forward-right berm. Asphalt patches in forward slab.						

Inspector: Andrea Persanyi
 Inspection Date: 03/14/2022

Structure Number: 1814745
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Bridge Inspection Report

Element Inspection

331 - Reinforced Concrete Bridge Railing	3 - Mod.	290	ft.	116	145	29	0
	CS2- Many vertical leached cracks. CS3- Small spall to inside left rail, many spalls along outside edge of left rail, other outside spalls, some with exposed rebar.						
815 - Drainage	3 - Mod.	3	each	3	0	0	0
840 - Approach Slab: Termination or Joint	3 - Mod.	52	ft.	0	26	26	0
	CS2- Cracking CS3- Wide cracks, and breaking up asphalt areas.						

ODOT District: District 12

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Date Built: 07/01/1971

Major Maint: 01 - State Highway Agency

Facility Carried: USR 422

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. 01 - State Highway Agency

FIPS Code: 80990 - WARRENSVILLE HTS (CUY county)

Location: DISTRICT 12

OVER SR 175

Resp A:

Insp

Resp B:

Inspector

Persanyi,Andrea

Inspection Date 03/14/2022

Reviewer Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Approach

Approach Wearing Surface (EA)

Many cracks, asphalt break up, rough asphalt patches and spalls at forward..

Approach Embankment (EA)

5' wide by 2' deep erosion to forward-left embankment (water running down from median of route 422).

Approach Guardrail (EA)

Forward-left & rear-left concrete rails tip out 1".

Signs (EA)

Rear-left bridge end marker missing.

Inspector Comments - General Appraisal

Superstructure

Beams/Girders (LF)

Diaphragm/X-Frames (EA)

Surface rust.

Fatigue (LF)

Welded cover plates at piers.

Utilities (LF)

Damaged conduit on P2C1. Rusting to under bridge conduit. Some broken underdeck light covers.

Substructure

Slope Protection (EA)

Cracks, minor uneven settlement. Forward slope has slid 3" & is undermined as much as 10" at bottom left corner. Areas of vegetation growing thru CSP.

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical