

Ohio Bridge Inspection Summary Report

CUY-00071-02.030 (1810003)

2: District 12 75098 - STRONGSVILLE (CUY county)
 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

5A: Inventory Route 1 00071
 7: Facility On IR 71
 6: Feature Ints Creek
 9: Location just south of SR 82
 Lat, Lon 41.3092253712772 , -81.809786507867

Condition

58: Deck **N - Not Applicable**
 58.01 Wearing Surface N - Not Applicable
 58.02 Joint N- Not Applicable
59: Superstructure **N - Not Applicable**
 59.01 Paint & PCS N - Not Applicable
60: Substructure **N - Not Applicable**
61: Channel **5**
61.01 Scour **5 - Fair or problems noted but they are stable or unchanged scour (Spread: no undermining, Deep: A couple piles may be visible)**
62: Culverts **5 - Moderate to major deterioration**
67.01 GA **5**

Structure Type

43: Bridge Type 3 - Steel
 19 - Culvert (includes frame culverts)
 N- Not Applicable
 45: Spans Main / Approach 1 / 0
 107: Deck Type N - Not Applicable
 408: Composite Deck N - Non-composite Construction
 414A Joint Type 1 N - None
 414B: Joint Type 2 N - None
 108A: Wearing Surface N - NA
 N- Not Applicable

Appraisal

Sufficiency Rating 59.0 SD/FO 0 - ND
 36: Rail, Tr, Gd, Term Std 0 1 1 1
 72: Approach Alignment 8 - Equal to present desirable criteria
 113: Scour Critical 6 - Not yet evaluated for scour
 71: Waterway Adequacy 7 - Slight Chance of Overtopping Bridge

422: WS Date
 423: WS Thick (in) 0
 482: Protective Coating N - None or Not Applicable
 483: PCS Date
 453: Bearing Type 1 N - None
 455: Bearing Type 2 N - None
 528: Foundn: Abut Fwd N - None (Such as most Culverts)
 533: Foundn: Abut Rear N - None (such as most Culverts)
 536: Foundn: Pier 1 N - None (Such as most Culverts)
 539: Foundn: Pier 2 N - None (Such as most Culverts)

Geometric

48: Max Span Length (ft) 8.0
 49: Structure Length (ft) 11.7
 52: Deck Width, Out-To-Out (ft) 0.0
 424: Deck Area (sf) 2340
 32: Appr Roadway Width (ft) 200.0
 51: Road Width, Curb-Curb (ft) 0.0
 50A: Curb/SW Width: Left (ft) 0
 50A: Curb/SW Width: Right (ft) 0
 34: Skew (deg) 47
 33: Bridge Median 0 - No median
 54B: Min Vert Underclearance (ft) 0
 336A: Min Vert Clrnce IR Cardinal (ft) 99
 336B: Min V Clr IR Non-Cardinal (ft) 99
 578: Culvert Length (ft) 564

Age and Service

27: Year Built/ 106 Rehab 1963 / 0000
 42A: Service On 1 - Highway
 42B: Service Under 5 - Waterway
 28A: Lanes on 06
 28B: Lanes Under 00
 19: Bypass Length 9
 29: ADT 65086
 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
 63: Analysis Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Inspections

90: Routine Insp. *Months* 12 08/04/2021
 92A: FCM Insp. N
 92B: Dive Insp. N
 92C: Special Insp. N
 92D: UBIT Insp. N
 92E: Drone Insp.
 Inspector Gerstenslager,Michael

Inspector: Michael Gerstenslager

Structure Number: 1810003

Inspection Date: 08/04/2021

Facility Carried: IR 71

Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
240 - Steel Culvert	3 - Mod.	564	ft.	184	75	250	55
	<p>CMP at outlet has rusted through and failed and is undermined 15' (CS 4). North side of CMP is shoved in at outlet. Rusted through holes to invert between 5:00 and 7:00 mainly near inlet and outlet (CS 4). Through holes near inlet are as wide as 6" in the first 30' of CMP. Several rusted through holes between 8:00 and 11:00 near outlet (CS 4).</p> <p>Rusting layered section loss at invert throughout (CS 3). Approximately 80 bolt holes cracked in the 9:00 seam from 78' to 128' from outlet and 10 bolt holes cracked in the 9:00 seam approximately 140' from inlet (CS 3). 3" tear at 2:00 near mid-point (CS 3).</p> <p>Rusting section loss to CMP and hardware throughout (CS 2). Areas of water infiltration and efflorescence throughout (CS 2). A few areas of deformation throughout, but particularly near inlet and outlet (CS 2).</p>						
835 - Culvert End Treatment	3 - Mod.	2	each	0	1	0	1
	<p>North side of outlet headwall has collapsed (CS 4).</p> <p>Approximately 3 sf of spalls and deterioration to North inlet headwall (CS 2). 1/2" faulted through crack to South inlet headwall. Top half has shifted 3 3/4" to the West (CS 2).</p>						
845 - Roadway Over Structure	3 - Mod.	2	each	2	0	0	0

ODOT District: 12

CUY-00071-02.030_(1810003)

Date Built: 01/01/1963

Major Maint: 01 - State Highway Agency

Facility Carried: IR 71

Traffic On: 1 - Highway

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: Creek

Traffic Under: 5 - Waterway

Insp. 01 - State Highway Agency

FIPS Code: 75098 - STRONGSVILLE (CUY county)

Location: DISTRICT 12

just south of SR 82

Resp A:

Insp

Resp B:

Inspector

Gerstenslager,Michael

Inspection Date 08/04/2021

Reviewer Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Approach

Approach Wearing Surface (EA)

A few
cracks.

Approach Embankment (EA)

Areas of minor erosion
at inlet. Erosion ruts & large slips to outlet embankment that extend 1/2
way up the slope to the highway.

Guardrail (EA)

Impact damage to SB guardrail above inlet.

Inspector Comments - General Appraisal

Superstructure

Substructure

Culvert

Culvert Shape (LF)

A few areas of deformation throughout but particularly near inlet & outlet. North side of CMP is shoved in at outlet.

Culvert Seams (EA)

Missing nut at 9:00, 80' from inlet.

Culvert Scour (EA)

Scour hole 3' deep at outlet , and undermining of the pipe extending 15' from outlet. Piping through corrosion holes and embankment erosion due to collapsed north outlet headwall are main cause of scour.

Inspector Comments - Waterway

Waterway Adequacy

Channel

Channel Alignment (LF)

90° bend approx 60' west of inlet. S-curve at outlet (channel bank is eroding).

Channel Protection (LF)

Rip-rap at outlet has washed away.

Scour Critical

Inspector: Michael Gerstenslager

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Pictures