

Inspector: Ropelewski,Robert

Inspection Date: 08/22/2023

Structure Number: 1804685

Facility Carried: IR 71 N.B.

**Ohio Bridge Inspection Summary Report****CUY-00071-1016R (1804685)**2: District 16000 - CLEVELAND (CUY county)  
ict  
12

5A: Inventory Route 1 00071

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 127: Facility On IR 71 N.B.  
6: Feature Ints NSC RR & RTA91  
9: Location .17 MI. N. OF JCT. I-480  
Lat, Lon 41.421978 , -81.819903

Condition		Structure Type	
<b>58: Deck</b>	<b>7 - Good Condition</b>	43: Bridge Type	4 - Steel continuous
58.01 Wearing Surface	7 - Good (1% distress)		02 - Stringer/Multi-beam or Girder
58.02 Joint	6- Satisfactory (isolated leaking)		N- Not Applicable
<b>59: Superstructure</b>	<b>7 - Good Condition</b>	45: Spans Main / Approach	15 / 0
59.01 Paint & PCS	6 - Satisfactory (5-10% corr.)	107: Deck Type	1 - Concrete Cast-in-Place
<b>60: Substructure</b>	<b>7 - Good Condition</b>	408: Composite Deck	N - Non-composite Construction
<b>61: Channel</b>	<b>N</b>	414A Joint Type 1	8 - Elastomeric Strip Seal
61.01 Scour	<b>N - Not Applicable</b>	414B: Joint Type 2	N - None
<b>62: Culverts</b>	<b>N - Not Applicable</b>	108A: Wearing Surface	1 - Monolithic Concrete (concurrently placed with structural deck)

67.01 GA 7

Appraisal	
Sufficiency Rating	82.5 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	06/30/2000
423: WS Thick (in)	1.0
482: Protective Coating	5 - Paint System OZEU
483: PCS Date	06/30/2000
453: Bearing Type 1	2 - Rockers & Bolsters
455: Bearing Type 2	C - Elastomeric (laminated)
528: Foundn: Abut Fwd	4 - Spread Footing (on soil)
533: Foundn: Abut Rear	4 - Spread Footing (on Soil)
536: Foundn: Pier 1	1 - Steel H Piles (Other size)
539: Foundn: Pier 2	0 - Other

Geometric	
48: Max Span Length (ft)	123.0
49: Structure Length (ft)	1169.0
52: Deck Width, Out-To-Out (ft)	42.7
424: Deck Area (sf)	49916.3
32: Appr Roadway Width (ft)	46.0
51: Road Width, Curb-Curb (ft)	39.3
50A: Curb/SW Width: Left (ft)	0
50A: Curb/SW Width: Right (ft)	0
34: Skew (deg)	0
33: Bridge Median	3 - Closed median with non-mountable barriers
54B: Min Vert Underclearance (ft)	16.57
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	1969 / 2000
42A: Service On	1 - Highway
42B: Service Under	2 - Railroad
28A: Lanes on	02
28B: Lanes Under	00
19: Bypass Length	2
29: ADT	41171
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	6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Inspections	
	Months
90: Routine Insp.	12 08/22/2023
92A: FCM Insp.	Y 12 08/23/2022
92B: Dive Insp.	N 0
92C: Special Insp.	N 0
92D: UBIT Insp.	N 0
92E: Drone Insp.	Y 24

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>12-Reinforced Concrete Deck</b>	3 - Mod.	49878	sq. ft.	46978	2900	0	0
	CS2 - A few transverse cracks. Other cracks.						
805-Wearing Surface - Monolithic Concrete		45884	sq. ft.	42384	3500	0	0
	CS2 - A few cracks.						
<b>107-Steel Open Girder/Beam</b>	3 - Mod.	6337	ft.	6165	150	22	0
	<p>Girder comments:</p> <p>CS2 - Areas of minor rusted &amp; rusting section loss. A few areas of minor scrapes to lower flanges.</p> <p>CS3 - Areas of heavy rusted &amp; rusting section loss, to some beam ends, near hinges, at abutments and fascias.</p> <p>Cross Girder Comments:</p> <p>Weld material has filled cope holes at stiffeners in some places.</p> <p>CS 2: Scattered surface rust throughout. Crack in bottom flange to stiffener weld under beam 1 (South side) at P10 has been retro-fitted. Possible crack in bottom flange to pier cap weld under North side of beam 4 at P10. A few end plates are bowed. Possible crack at P11 to web under beam 2 lower flange on North face. Possible cracks have been marked with no growth detected at 2022 FC inspection.</p> <p>CS 3: Areas of section loss near bases of some stiffeners.</p>						
515-Steel Protective Coating		62029	sq. ft.	58518	3101	375	35
	<p>CS2 - Some top coat peeling. Areas of surface rust.</p> <p>CS3 - Blistered paint with rust underneath.</p> <p>CS4 - Unprotected steel.</p>						
<b>205-Reinforced Concrete Column</b>	3 - Mod.	29	each	23	4	2	0
	<p>CS2 - Cracks in concrete patches.</p> <p>CS 3: Heavy efflorescence staining around concrete patches on inside face of P11C3. P3C2 has 10 sf delamination and spall with rebar exposure.</p>						
<b>210-Reinforced Concrete Pier Wall</b>	3 - Mod.	60	ft.	57	3	0	0
	CS2 - Cracks to some concrete patches. Other cracks.						
<b>215-Reinforced Concrete Abutment</b>	3 - Mod.	86	ft.	10	76	0	0
	CS2 - Cracks, some with rust stains.						
521-Concrete Protective Coating		258	sq. ft.	258	0	0	0
<b>234-Reinforced Concrete Pier Cap</b>	3 - Mod.	412	ft.	379	26	7	0
	<p>CS2 - A few cracks. Delaminated areas to bottoms of some caps.</p> <p>CS3 - 10 SF spall with exposed rebar on P1 cantilever.</p>						
<b>300-Strip Seal Expansion Joint</b>	3 - Mod.	160	ft.	100	54	0	6
	<p>CS2 - Minor gouges to some areas. Dirt &amp; debris in joints. Areas of minor rusting section loss.</p> <p>CS4 - Seal torn at first hinge from rear, in span 4.</p>						

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<b>311-Movable Bearing</b>	3 - Mod.	68	each	58	10	0	0
	CS2 - Surface rust. A few steel pier cap (cross girder) rockers are slightly tipped. Start of pack rust. Bearing on P10 is missing one anchor bolt.						
<b>321-Reinforced Concrete Approach Slab</b>	3 - Mod.	2000	sq. ft.	1935	65	0	0
	CS2 - Some cracks.						
<b>331-Reinforced Concrete Bridge Railing</b>	3 - Mod.	2338	ft.	1798	400	140	0
	CS2 - Many vertical cracks, some leaching. Horizontal cracks 2" - 3" below tops of rails. Cracks to light pole bases. Other cracks. Collision scrapes.  CS3 - Large spalled areas with crumbling concrete, some with exposed rebar. Other delams & spalls.						
<b>521-Concrete Protective Coating</b>		16366	sq. ft.	0	0	0	16366
	CS4- not effective						
<b>815-Drainage</b>	3 - Mod.	2	each	2	0	0	0
<b>820-Steel Seated-Hinge Assembly</b>	3 - Mod.	10	each	0	9	1	0
	CS2 - Surface rust.  CS3 - Areas of rusted & rusting section loss. Possible crack in stiffener to seated hinge flange weld at beam 4 in span 4.						
<b>830-Abutment Backwall</b>	3 - Mod.	86	ft.	59	27	0	0
	CS2 - Cracks, some leaching. Honeycombing.						
<b>521-Concrete Protective Coating</b>		430	sq. ft.	430	0	0	0

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ODOT District: District 12

**CUY-00071-1016R\_(1804685)**

Major Maint: 01 - State Highway Agency

Facility Carried: IR 71 N.B.

Traffic On: 1 - Highway

Date Built: 07/01/1969

Rehab Date: 06/30/2000

Routine Maint: 01 - State Highway Agency

Feature Inters: NSC RR & RTA91

Traffic Under: 2 - Railroad

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 16000 - CLEVELAND (CUY county)

Location: DISTRICT 12

.17 Mi. N. OF JCT. I-480

Insp  
Resp B:

Inspector

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Reviewer Seif,Youssef

## **Inspector Comments - Deck and Approach**

### **Deck**

### **Approach**

#### **Approach Wearing Surface**

Minor cracks. Asphalt at forward slab.

#### **Approach Relief Joint**

Cracks, potholes, some settlement.

#### **Approach Embankment**

Large area of erosion as deep as 64" at forward-right ( partially over-grown ).

## **Inspector Comments - General Appraisal**

### **Superstructure**

#### **Fatigue**

Welded moment plates at some piers. Some areas of intersecting welds at steel pier caps.

#### **Utilities**

Under bridge lighting over railroad tracks swing & the lights are out. Rusting section loss to bridge lighting conduit.

### **Substructure**

#### **Wingwalls**

Diagonal leaching cracks in rear-right wingwall, other cracks. Void area with exposed rebar at base of forward-right checkwall.

### **Culvert**

## **Inspector Comments - Waterway**

### **Waterway Adequacy**

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**Channel**

**Scour Critical**

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### Bridge Inspection Report

### Pictures