

Inspector: Miller,Jason

Inspection Date: 04/03/2023

Structure Number: 1812939

Facility Carried: TIEDEMAN RD

Ohio Bridge Inspection Summary Report**CUY-00480-1162 (1812939)**2: District 09246 - BROOKLYN (CUY county)
ict
12

5A: Inventory Route 1 C0200

21: Major Maint A/B 01 - State Highway Agency /

7: Facility On TIEDEMAN RD

225 Routine Main A/B 04 - City or Municipal Highway /
Agency

6: Feature Ints IR-480 (TIEDEMAN)

221 Inspection A/B 01 - State Highway Agency /

9: Location 1.93 MI. W. OF JCT. US-42

220: Inv. Location DISTRICT 12

Lat, Lon 41.425657777 , -81.761106918

Condition		Structure Type	
58: Deck	6 - Satisfactory Condition	43: Bridge Type	4 - Steel continuous
58.01 Wearing Surface	6 - Satisfactory (1-10% distress)		02 - Stringer/Multi-beam or Girder
58.02 Joint	6- Satisfactory (isolated leaking)		N- Not Applicable
59: Superstructure	7 - Good Condition	45: Spans Main / Approach	4 / 0
59.01 Paint & PCS	7 - Good (1-5% corr.)	107: Deck Type	1 - Concrete Cast-in-Place
60: Substructure	5 - Fair Condition	408: Composite Deck	N - Non-composite Construction
61: Channel	N	414A Joint Type 1	2 - Sliding Metal Plate Angle
61.01 Scour	N - Not Applicable	414B: Joint Type 2	N - None
62: Culverts	N - Not Applicable	108A: Wearing Surface	3 - Latex Concrete or similar additive
			N- Not Applicable
67.01 GA	5		

Appraisal	
Sufficiency Rating	74.3 SD/FO 2 - FO
36: Rail, Tr, Gd, Term Std	1 1 1 0
72: Approach Alignment	8 - Equal to present desirable criteria
113: Scour Critical	N - Not over waterway
71: Waterway Adequacy	N - Not Applicable

Geometric	
48: Max Span Length (ft)	81.0
49: Structure Length (ft)	280.0
52: Deck Width, Out-To-Out (ft)	82.3
424: Deck Area (sf)	23044
32: Appr Roadway Width (ft)	82.0
51: Road Width, Curb-Curb (ft)	70.0
50A: Curb/SW Width: Left (ft)	5
50A: Curb/SW Width: Right (ft)	5
34: Skew (deg)	18
33: Bridge Median	2 - Closed median (no barrier)
54B: Min Vert Underclearance (ft)	16.49
336A: Min Vert Clrnce IR Cardinal (ft)	99
336B: Min V Clr IR Non-Cardinal (ft)	0
578: Culvert Length (ft)	0

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	07/01/1986
63: Analysis Method	7 - Allowable Stress (AS) rating reported by rating factor (RF) method using MS18 loading.

422: WS Date	07/01/1985
423: WS Thick (in)	2.0
482: Protective Coating	5 - Paint System OZEU
483: PCS Date	05/01/2012
453: Bearing Type 1	2 - Rockers & Bolsters
455: Bearing Type 2	N - None
528: Foundn: Abut Fwd	1 - Steel H Piles (Other size)
533: Foundn: Abut Rear	4 - Spread Footing (on Soil)
536: Foundn: Pier 1	4 - Spread Footing (on soil)
539: Foundn: Pier 2	0 - Other

Age and Service	
27: Year Built/ 106 Rehab	1985 / 0000
42A: Service On	1 - Highway
42B: Service Under	1 - Highway, with or w/out pedestrian
28A: Lanes on	04
28B: Lanes Under	08
19: Bypass Length	3
29: ADT	18558
109: % Trucks (%)	7

Inspections	
	Months
90: Routine Insp.	12 04/03/2023
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.	22960	sq. ft.	17198	5500	250	12
	CS2 - Transverse cracks, a few leaching, some mottled areas.						
	CS3 - Spalls and delams. Spalls to all corner deck edges.						
	CS4- Spalls with 4+ bars of exposed rebar in span 3.						
510-Wearing Surfaces		18480	sq. ft.	15960	2500	20	0
	CS2 - Cracks throughout.						
	CS3- Wide diagonal cracks at deck ends. Deep pop outs/ scaling in SB lane 2.						
107-Steel Open Girder/Beam	3 - Mod.	2800	ft.	2774	25	1	0
	CS2 - A few spots of surface rust. Areas of arrested section loss.						
	CS3- One fastener missing on splice plate 6 over EB lane #4.						
515-Steel Protective Coating		25200	sq. ft.	25130	70	0	0
	CS2- Small isolated areas of rust initiating.						
205-Reinforced Concrete Column	3 - Mod.	18	each	12	4	2	0
	15 of 18 columns fiber wrapped.						
	CS2- P1C1- ~3 SF delam.						
	P1C3- Cracked fiber wrap and rust stains.						
	P2C5- Cracked fiber wrap at base.						
	P3C2- Cracked fiber wrap at base.						
	CS3- P1C6- ~35 SF delam.						
	P3C5- ~25 SF delam.						
521-Concrete Protective Coating		2205	sq. ft.	2205	0	0	0
215-Reinforced Concrete Abutment	3 - Mod.	174	ft.	97	10	65	2
	CS2 - Cracks.						
	CS3 - Spalls and delams, rear is worse. Wide transverse cracking. Rust stained cracks, mostly to rear.						
	CS4- Rear right has spall with 2nd mat of rebar exposed.						
521-Concrete Protective Coating		348	sq. ft.	278	0	0	70
	CS4- Not effective.						
234-Reinforced Concrete Pier Cap	3 - Mod.	233	ft.	203	11	19	0
	CS2- A few cracks.						
	CS3- Delams to all 3 caps.						
521-Concrete Protective Coating		2097	sq. ft.	2097	0	0	0
305-Assembly Joint without Seal	3 - Mod.	174	ft.	149	25	0	0
	Rated "6"- Open joint.						
	CS2- Gouges to rear riser bar. Some areas of minor rusted section loss. Areas of dirt in forward joint. Cracks to headers.						

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311-Movable Bearing	3 - Mod.	40	each	15	20	5	0
	CS2 - Start of rust and arrested section loss to abutment bearings. Forward bearing #8 tipped in inconsistent for temperature. CS3- A few abutment rockers have pack rust starting.						
313-Fixed Bearing	3 - Mod.	10	each	2	8	0	0
	CS2- Start of rust.						
321-Reinforced Concrete Approach Slab	3 - Mod.	3300	sq. ft.	2975	175	150	0
	CS2- Longitudinal cracks. Minor spalls along exjt header at rear. CS3- Full length, wide cracks to both.						
331-Reinforced Concrete Bridge Railing	3 - Mod.	560	ft.	459	95	0	6
	Many rust severed lower rail to post connections (lower rail wire tied to fence fabric). A few areas of torn/damaged fence fabric. CS2 - Cracks and delams, mostly at post bases. Minor spalls. CS4 - Spall to outside of left rail has 4+ bars of rebar exposed.						
521-Concrete Protective Coating		2800	sq. ft.	2800	0	0	0
815-Drainage	3 - Mod.	16	each	12	4	0	0
	CS2 - Partially plugged scupper throughs.						
830-Abutment Backwall	3 - Mod.	174	ft.	56	90	28	0
	CS2 - Cracks. Top of backwalls patched in bays 1-5 at forward and rear. CS3 - Heavy concrete deterioration and wide cracks near bay 9 at rear. Several spalls and delams, some with exposed rebar. Wide crack in bay 1 at rear.						
521-Concrete Protective Coating		696	sq. ft.	636	0	0	60
	CS4- Not effective.						

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Traffic On: 1 - Highway

Rehab Date:

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Insp. Resp A: 01 - State Highway Agency

FIPS Code: 09246 - BROOKLYN (CUY county)

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Insp
Resp B:

Inspector

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Reviewer Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Floor/Slab

Spalls forming over traffic:

WB- Bay 1 over lane 1 and 2, Bay 2 over lane 2, 3 and 4, Bay 3 over lane 1 and 4, Bay 5 over lane 2.

EB- Bay 1 over lane 3. Bay 2 over lane 3. Bay 8 over lane 2, bay 9 over lane 2 and 3.

Curbs/Sidewalk

Cracks. Scaling. A few pop-outs.

Approach

Approach Wearing Surface

Crack.

Approach Embankment

Erosion slip in forward-left embankment.

Approach Guardrail

Minor damage at rear-right post #1. Forward left rail has collision damage and some post rot.

Relief Joint

A few cracks. Areas of scaling to asphalt.

Signs

No bridge end markers.

Inspector Comments - General Appraisal

Superstructure

Diaphragm/X-Frames

Endframe rusted section loss with a few small rusted thru holes in rear bays 8,9 and forward bay 9.

Fatigue

Welded cover plates at piers.

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Utilities

Areas of sagging conduit in bay 8 over both slopes.

Substructure

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical