Inspector: Jewell,Todd
Inspection Date: 03/17/2025
Structure Number: 0700541
Facility Carried: SR 7

Ohio Bridge Inspection Summary Report

BEL-00007-1975 (0700541)

B.L.04: District District 1108560
B.CL.02: Major Maint 01 - State Highway Agency /
225 Routine Main A/B 01 - State Highway Agency /
221 Inspection A/B 01 - State Highway Agency /

5A: Inventory Route 1 00007
7: Facility On SR 7
6: Feature Ints US40SR767I70SUB-CREEK&RR
9: Location .9 M E OF BRIDGEPORT
Lat, Lon 40.069439 ,-80.740569

Condition

B.C.01: Deck	**6**
58.01: Wearing Surface	4
B.C.08: Joint	4
B.C.02: Superstructure	**6**
59.01: Paint & PCS	7
B.C.03: Substructure	**5**
B.C.09: Channel	**5**
B.C.11: Scour	**6**
B.C.10: Channel Prot.	**5**
B.C.05: Bridge Railing	**6**
B.C.06: Transitions	**8**
B.C.07: Bearings	**4**
B.C.04: Culverts	**N**
Ohio GA	**5**

Appraisal

B.AP.03: Scour Vul. D - Scour appraisal completed. Bridge is, or may become, unstable for scour. Bridge is scour critical.

Geometric

48: Max Span Length (ft)	115.0
49: Structure Length (ft)	1632.5
52: Deck Width, Out-To-Out (ft)	70.7
424: Deck Area (sf)	115417.75
32: Appr Roadway Width (ft)	58.0
51: Road Width, Curb-Curb (ft)	58.0
50A: Curb/SW Width: Left (ft)	0
50A: Curb/SW Width: Right (ft)	0
34: Skew (deg)	0
33: Bridge Median	1 - Open median
54B: Min Vert Underclearance (ft)	14.42
336A: Min Vert Clrnce IR Cardinal (ft)	15.5
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 07/01/2002
63: Analysis Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Structure Type

43: Bridge Type 4 - Steel continuous
02 - Stringer/Multi-beam or Girder
N- Not Applicable
45: Spans Main / Approach 21 / 0
107: Deck Type 1 - Concrete Cast-in-Place
408: Composite Deck N - Non-composite Construction
414A Joint Type 1 8 - Elastomeric Strip Seal
414B: Joint Type 2 N - None
108A: Wearing Surface 2 - Integral Concrete (separate non-modified layer of concrete added to structural deck)
3 - MicroSilica
422: WS Date 11/23/1998
423: WS Thick (in) 1.8
482: Protective Coating 5 - Paint System OZEU
483: PCS Date 10/01/1999
453: Bearing Type 1 2 - Rockers & Bolsters
455: Bearing Type 2 N - None
528: Foundn: Abut Fwd 8 - Steel H Piles (HP 12 x 53)
533: Foundn: Abut Rear A - Cast-in-Place Reinforced Concrete Piles (12" diameter)
536: Foundn: Pier 1 B - Cast-in-Place Reinforced Concrete Piles (14" diameter)
539: Foundn: Pier 2 1 - Steel H Piles (Other size)

Age and Service

27: Year Built/ 106 Rehab 1968 / 0000
42A: Service On 1 - Highway
42B: Service Under 8 - Highway - waterway - railroad
28A: Lanes on 04
28B: Lanes Under 04
19: Bypass Length 0
29: ADT 24467
109: % Trucks (%) 11

Inspections

		Months
90: Routine Insp.		12
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.	115261	sq. ft.	113653	1525	59	24
	Historical Comments: 05/23/2017 spalls removed over SR 7 NB off ramp at 2nd span, over 40 EB at 13th span, and over NB 7 on ramp at 20th span by Tom Hanson and Jay Bardall with bucket truck. Spalled areas over creek near downspouts on right side with exposed and rusting rebar. General Comments (CS1 condition): Transverse overhang cracks with isolated light efflorescence spaced at 5' to 10' in all spans; tighter spacing in some spans noted below for CS2 condition. Few full depth patches and honeycomb areas. Hairline vertical cracks along deck edges at 3' to 5' spacing extending down from railings. CS2 - General: Shallow spalling (1" to 2" deep) along flanges at various locations scattered throughout deck. Estimated 0.5% of deck area as CS2 for this condition (600 SF). Span 1: 4 SF spall in Bay 4 at Rear Abutment (4 SF). Hairline transverse cracks with efflorescence within 10' of Rear Abutment (150 SF). Hairline cracks with efflorescence and dark areas at midspan in Bays 1-4 and 6-8 (250 SF). Span 2: Hairline transverse cracks spaced at 3' to 5'. Map cracking in Bays 2 and 3 (100 SF). Dark area with rust staining in Bay 7 (10 SF). Span 4: Hairline map cracking in Bays 7 to 9 (75 SF). Large deck patch in Bay 8 (25 SF). Span 8: Two small delaminations in Bay 4, 10 SF total (10 SF). Span 13: Spalls at median joint (5 SF). Span 14: Delamination/scaling at Beam 8 (12 SF). Span 15: Cracks with chlorides in west fascia (16 SF). Span 17: 6 SF deck patches at center above intermediate joint (6 SF). At Beams 1 and 10 spalled/cracked with chlorides (12 SF). Span 19: Transverse cracks with chlorides in Bays 8-9 at Pier 19 (45 SF). Span 20: Transverse cracks with chlorides in Bays 7-9; cracks are wet/damp (210 SF). CS3 - Span 6: 2 SF spall with exposed reinforcement, right fascia at intermediate joint (2 SF). Spall is located over SR 7 northbound exit ramp. Span 8: Large spall in Bay 9 (10 SF). Span 9: West overhang spall with exposed reinforcing (4 SF). span 10: CS3- 6 SF EXPOSED REBAR IN BAY # 5. span 10: CS3- 12 SF EXPOSED BAY # 9. Span 12: Spalls with exposed reinforcement at left and right fascia under intermediate joint (20 SF). Span 17: Spall at center above intermediate joint (2 SF). Span 18: Spall along center joint (1 SF). Span 21: Spall in left forward corner at abutment (2 SF). CS4 - Span 2: 24 SF spall with second row of rebar exposed bay # 5 near p-2-e rear up to 2" deep in right half along center joint with exposed rebar; portion of loose concrete removed by District personnel on 5/23/2024.						
510-Wearing Surfaces		94685	sq. ft.	46151	47343	1107	84

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	CS2- Transverse and longitudinal cracking, varies from hairline to 1/16", spaced at 1' to 3' throughout. Large areas of random cracking and minor delaminations throughout. 50% of deck area CS2. Transverse cracking is common within 10' of expansion joints. The span over the water (Span 10) has more frequent transverse cracks and map cracking. CS3 - Estimated 100 SF of spalled overlay (less than 1" deep) that need to be patched; 80-90% of deficiencies are in the NB (right) half (100SF). Spalled areas with broken up concrete and asphalt patches which are unsound and popping out in both the left and right sides of the wearing surface (Left - 76 SF, Right 537 SF). Pothole at right rear corner near deck joint (4 SF). CS3- (75SF) MAP CR. AND AREAS BREAKING UP IN SB LANES. CS3- (315SF) MAP CR. AND AREAS BREAKING UP IN NB LANES. CS4- (32SF) BROKEN UP CONCRETE WITH SOME SECTION MISSING SB TL. CS4- (8SF) BROKEN UP CONCRETE WITH SOME SECTION MISSING SB PL. CS4- (12SF) BROKEN UP CONCRETE WITH SOME SECTION MISSING SB TL. CS4- (32SF) BROKEN UP CONCRETE WITH SOME SECTION MISSING NB PL.						
107-Steel Open Girder/Beam	3 - Mod.	16320	ft.	15900	400	20	0
	Beams/Girders (LF) Minor collision scrapes to beams over ramp to SR 7 NB. One bolt missing at 2nd splice from rear in Beam 9 bottom flange. Scrapes to bottom flange on Beam 10 (right outside beam) over US 40. CS2 - Moderate surface corrosion within 1' of abutments and adjacent to hinge assemblies. Isolated surface corrosion along beam top flanges (400 LF total). CS3 - Minor painted over section loss, typical up to 1/16" deep, worst at abutments near hinges (40 LF).						
515-Steel Protective Coating		200000	sq. ft.	198800	1000	200	0
	Protective Coating System (LF) CS2 - Minor scrapes in paint on Beam 10 (right outside beam) bottom flange over US 40 and bottom flanges where roadway crosses below the bridge to SR 7 NB onramp. Light surface corrosion at isolated locations throughout. Estimate 0.5% of total area (1000 SF). CS3: Heavy rust within 1' of abutments and at 1st and 2nd intermediate joints (200 SF).						
210-Reinforced Concrete Pier Wall	3 - Mod.	697	ft.	691	4	2	0
	All piers are sealed. Pier 10: East wall exposed to water at low flows (All other piers well outside of normal flow). There is a 3.5' deep scour hole on east end of Pier 10. CS2 - Pier 5W: Minor collision damage, left side has 9" x 9" scraped area (1 LF). Pier 6W: Shallow rebar cover with rust staining on forward face (2 LF). Pier 12E: Rear face has1' diameter delamination with rust stains (1 SF). CS3 - Pier 4E: Horizontal spall with exposed reinforcement near top of right wall at left end (1 LF). Pier 16E: Left end spall with exposed reinforcement (1 LF).						
215-Reinforced Concrete Abutment	3 - Mod.	142	ft.	0	118	23	1

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Joint settling between abutment wall and wingwall: General: Abutments settling, areas of porous backfill are visible. At outside ends of abutments there are narrow horizontal and diagonal cracks with breaking out. At the forward abutment there are 3 1'x1' spalls below beam 1. There are horizontal cracks adjacent to the wingwalls. There is a horizontal crack at beam 3. On the east side there is a 7'x4' spall/delamination with chlorides and map cracking, On the west end there are horizontal cracks at the bottom of the abutment/wingwall. Historical Comments: 2012: Left rear diagonal crack, medium width with seepage. Forward has vertical cracks and a spall at left and right with rebar exposed. Joints between abutments and wingwalls widens the higher it goes, with new measurements marked on wall in 2012. Left rear 7/8" top out in '12. Right rear 1/2" top out in '12. Left forward 2.75" top out in '12. Right forward 1 1/2" top out in '12. 2014 inspection: location of measurements could not be located. Left rear.....3 5/8" at mid, 1 7/8" at bottom, 1 3/8" side to side at top Right rear.....2 1/4" at top, 1 1/2" at bottom, 1 1/4" side to side at top Left forward.....3 5/8" at top, 2" at bottom, 1 1/16" side to side at top Right forward.....4 1/2 at top, 2 1/2" at bottom, 3/16" side to side at top 2015: No changes to rotation measurements in 2015. 2016 inspection: changes in measurements. 2' x 3' spall rear abutment under beam 5. Left rear..... 4 1/2" at top, 1 1/4" side to side at top, 3 3/4" at mid, 1 7/8" at bottom, 1 1/2" side to side at middle right rear.....3 1/4" at top, 5/8" offset to side at top, 2 3/4" at middle, 1 7/16" at bottom, 1 1/8' offset at middle, forward abutment measurements all the same as 2015. 2018 & 2019 inspections: all measurements were the same as 2017. 2021: Measurements of crack taken along bottom. Left Rear: 2”. 4 transverse cracks along bottom. Right Rear: 1 ¾”. 2023 Measurements: Left Forward: 2”, Right Forward: 2 ¼”. 2024 Measurements (taken at bottom unless noted otherwise): At bottom: Left Rear = 2", Right Rear = 1 3/4" Right Forward = 2 1/4" at bottom (4 3/4" at top), Left Forward = 2" CS3 - Rear Abutment: 1/16" diagonal crack between Beams 1 and 2 with efflorescence and light rust staining (4 LF). 2' wide by 3' high delamination with 1 SF shallow spall under Beam 5 (2 LF). Hairline diagonal crack with moderate efflorescence and 2 SF delamination at left rear corner (6 LF). Forward Abutment: Heavy map cracking with efflorescence below Beam 10 right fascia beam (3 LF). At the Forward Abutment there are three 1' wide by 1' high spalls below Beam 1 (3 SF). Spall below left fascia Beam (2 LF). Retaining walls: Left side rear vertical spalls 1" deep with reinforcement exposed due to insufficient concrete cover. Wingwalls: Forward Abutment: Horizontal cracking at groundline and up to 3' above groundline. Right side 7'x 4' spall/delamination with chlorides, map cracking. Rear Abutment : Left wingwall has horizontal cracking near bottom (27 LF) and also a diagonal crack with rust stains near beam seat (3 LF). Right wingwall has 3 horizontal cracks (25 LF) with 1.5' x 1' spall 4' above the groundline and 3' x 2' delamination near the beam seat. REAR CS3- (2LF) HORZ. CRACKS AT CURTAIN WALL AT BOTH LT/RT AT GROUND LEVEL. POROUS BACKFILL ON RT SIDE PILED UP NEXT TO ABUT/REATAINING AREA. FWD CS3- (1LF) HORZ. CRACKS AT CURATIN WALL LT SIDE FWD. CS4- (1LF) AT RT SIDE SPALL 4+- DEEP CURTAIN WALL AT TOP.						
234-Reinforced Concrete Pier Cap	3 - Mod.	1400	ft.	0	1346	54	0

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NOTE: PIER CAPS # 8,11,16 LT /RT HAS PIER CAP STRENGTHENING BY EXTERNAL POST TENSIONING. CS2 - Much hairline vertical cracking in tops (2016 bucket truck inspection). Prior to 2021, several of these hairline cracks were measured, are marked next to the cracks in the field and noted below individually for each pier. Pier 1 W: Crack at west overhang (2 LF) Pier 2 East,(a): Rear center crack .030" pier 2 East,(a): Forward center crack .030" Pier 2 West: Rear left forward crack .005" Pier 3 East: Rear at right side .016" and .010" Pier 3 East: Forward .010" & .013" at right forward. PIER 3 EAST 1 LF CR/DELAM. RT END. Pier 5 West: Rear .005 right rear. Pier 5 East: Rear .020" & .009" Pier 6 East: Rear .007" Pier 7 East: Forward .016" & .025" Pier 7 West: Forward .020" at left & right & .016" at left. with honeycombing Pier 18 West: Rear 1' vertical spall with exposed reinforcement (1 LF). Hairline vertical cracking spaced at less than 1' at Pier 3 and Piers 13-20. Spaced at 1' to 3' at other piers. CS3 - Pier 1 West: 1 SF delamination, 1 SF spall with exposed reinforcement on forward face and on east overhang (2 LF). Pier 1 East: 1 SF spall with exposed reinforcement right of center on rear face (1 LF). Pier 2 West: 1' long spall with exposed reinforcement in east overhang (1 LF). Pier 3 West: 1 SF delamination and spall with exposed reinforcement (1 LF). Pier 4 East: 1 SF shallow spall left rear along bottom (1 LF). Forward Face: 4 LF horizontal spall with rebar exposed (4 LF). Left edge 3 SF spall (3 LF). 6' x 0.5' x 3 inches deep with 1 main vertical reinforcing bar exposed (8 LF). Spall with exposed reinforcement 6" on rear face (6 LF). Pier 4 West: 2' x 0.5' horizontal spall and 2' x 0.5' vertical spall on the rear face (3 LF). Horizontal spall with exposed reinforcement on forward face (1 LF). Pier 5 West: On east overhang 1' vertical spall with exposed reinforcement (1 LF). Pier 6 West: .009" and spall/delamination at left end south face 1 LF with exposed reinforcement (2 LF) Pier 6 East: Spall with vertical exposed reinforcement on rear left (1 LF) Pier 7 West: 2' horizontal spall with exposed reinforcement (2 LF) Pier 8 EAST 4' by 9" by 3" deep spall/delamination with exposed reinforcement (4 LF). Deficiencies noted on previous inspection reports have been patched. Pier 10 East: 2 SF spall rear face left bottom corner (2 LF). West: Spall at east end (1 LF). Pier 11 East and West: forward face cap spall with rust staining (2 LF). Pier 13 WEST Spall with exposed reinforcement (3 LF). Pier 19: Spalls at ends (5 LF). PIER 20: 1LF SPALL RT END CORNER.						
300-Strip Seal Expansion Joint	3 - Mod.	424	ft.	0	0	179	245
CS3 - Strip seal torn at abutments. Armor heavily rusted. Evidence of minor leakage below at abutments. Heavy leakage at intermediate joints resulting in heavy rust at diaphragms below. Intermediate joints 3 and 4: torn gland. Intermediate joint 2: extrusion broken. Intermediate joint 1: full of debris. NOTE: REAR RT. APP SLAB AND JOINT IS 1.75 HIGHER THAN DECK. FWD LT APP SLAB IS 1.5 HIGHER THAN DECK. CS4- (70LF) SEAL TORN AT BOTH LT/RT AT REAR ABUT. CS4- (70LF) SEAL TORN AT BOTH LT/RT AT 3RD JOINT. CS4- (35LF) SEAL TORN AT BOTH LT/RT AT LT 4TH JOINT. CS4- (70LF) SEAL TORN AT BOTH LT/RT AT FWD ABUT.						
311-Movable Bearing	3 - Mod.	185	each	148	0	27	10

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	Bearing Devices (EA). Old section loss on rockers & plates, painted over. CS3 - Beam 1 bearing (left fascia) at Pier 11 has heavy rust (1 EA). Forward rocker bearings tilted forward with heavy rust (6 EA). Rear abutment bearings have moderate rust (5 EA). CS3- (5EA) HAVE EXCESIVE TILT ON PIER # 5 LT. CS4 - Isolated bearings not working as intended and are fully tilted: Beam 3, 4, 7, 8, and 9 bearings at Rear, Beam 3, 4, 6, and 8,9 bearings at Forward (10 EA).						
313-Fixed Bearing	3 - Mod.	40	each	40	0	0	0
321-Reinforced Concrete Approach Slab	3 - Mod.	2900	sq. ft.	2486	410	4	0
	REAR CS2- (300SF) MAP CR/TRANS. CR. AT RT REAR. FWD CS2- (60SF) LONG. CR. LT FWD. CS2- (50SF) LONG. AND TRANS. CR. RT FWD. CS3 - Partial asphalt patched pothole at left rear near deck joint (4SF).						
331-Reinforced Concrete Bridge Railing	3 - Mod.	4896	ft.	3852	1002	42	0
	Minor vertical cracks at 3' to 5' spacing with isolated light efflorescence; closest spacing in span with IR 70 overhead. CS2 - Map cracking in 5' to 10' segments in numerous locations along left, median, and right rails. Estimate 629 LF along left and right rails and 373 LF along median rail (1002 LF). CS3 - Isolated large spalls, worst in right rail and along northbound median (42 LF).						
815-Drainage	3 - Mod.	33	each	0	21	0	12
	Downspouts at Pier 7 have perforations at both left and right T-joints. CS2 - Dirt is typical along railings. Perforations in drainage system as noted on previous inspections. CS4 - 7 scuppers clogged along southbound side, 5 scuppers plugged along northbound side (12 EA).						
820-Steel Seated-Hinge Assembly	3 - Mod.	40	each	24	16	0	0
	Very light rust at most hinge locations along 3rd and 4th intermediate joints (CS1). CS2 - At 1st intermediate joint from rear, hinges on left side have excessive tilting. 1st intermediate joint from rear has bottom bolts missing at Beam 7 (both), Beam 8 (left), and Beam 9 (right). Perforation at 1st intermediate joint crossframe at Beam 10 pin and hanger (4 EA). At 2nd intermediate joint from rear, the left side hinges tilting with heavy rust at all beams (10 EA). At 3rd and 4th intermediate joints, there is moderate surface rust along the Beam 1 hinge locations (2 EA).						
830-Abutment Backwall	3 - Mod.	142	ft.	0	142	0	0
	CS2 - Longitudinal cracking on top and chipping/spalling entire length (142 LF). Rear: 3 LF spall at southeast corner. Full height vertical crack between Beams 7 and 8. Rust staining along majority of length. Full height vertical crack at southwest corner. Forward: Horizontal cracks between Beams 6 through10. Two vertical cracks between Beams 3 and 5. 2' by 1' spall at Beam 10. 1' by 1' spall at cheekwall. Heavy rust staining and hairline diagonal cracks with efflorescence at fascia beams at abutments (3 LF each corner).						

Affected Area : Create Report Section.
Form Id : 152
Section Name : Inspector Comments - All
Section Type : Designer
Detailed Message : The definition of this report is not valid or supported by this version of Reporting Services. The report definition may have been created with a later version of Reporting Services, or contain content that is not well-formed or not valid based on Reporting Services schemas. Details: ' ', hexadecimal value 0x02, is an invalid character. Line 1867, position 7345.