

Inspector: Bishop,Dwayne

Inspection Date: 07/14/2025

Structure Number: 3102246

Facility Carried: US42

Ohio Bridge Inspection Summary Report

HAM-00042-0000 (3102246)

B.L.04: District District 0815000 - CINCINNATI (HAM county)

B.CL.02: Major Maint 01 - State Highway Agency /

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

221 Inspection A/B 01 - State Highway Agency /

5A: Inventory Route 1 00042

7: Facility On US42

6: Feature Ints APP-CLAY WADE BAILEY

9: Location APP-OHIO RIVER BRIDGE

Lat, Lon 39.093261 , -84.5199

Condition

B.C.01: Deck 7

58.01: Wearing Surface 7

B.C.08: Joint 7

B.C.02: Superstructure 6

59.01: Paint & PCS 7

B.C.03: Substructure 7

B.C.09: Channel N

B.C.11: Scour N

B.C.10: Channel Prot. N

B.C.05: Bridge Railing

B.C.06: Transitions

B.C.07: Bearings

B.C.04: Culverts N

Ohio GA 6

Appraisal

B.AP.03: Scour Vul. Not over Waterway

Geometric

48: Max Span Length (ft) 154.0
49: Structure Length (ft) 1420.2
52: Deck Width, Out-To-Out (ft) 76
424: Deck Area (sf) 107935.2
32: Appr Roadway Width (ft) 68
51: Road Width, Curb-Curb (ft) 68
50A: Curb/SW Width: Left (ft) 0
50A: Curb/SW Width: Right (ft) 5
34: Skew (deg) 0
33: Bridge Median 2 - Closed median (no barrier)
54B: Min Vert Underclearance (ft) 19
336A: Min Vert Clrnce IR Cardinal (ft) 18
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 07/01/2011
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
03 - Girder and Floorbeam System
N- Not Applicable

45: Spans Main / Approach 13 / 0

107: Deck Type 1 - Concrete Cast-in-Place

408: Composite Deck U - Unknown

414A Joint Type 1 8 - Elastomeric Strip Seal

414B: Joint Type 2 A - Modular

108A: Wearing Surface 2 - Integral Concrete (separate non-modified layer of concrete added to structural deck)
3 - MicroSilica

422: WS Date 10/01/2004

423: WS Thick (in) 1.5

482: Protective Coating 5 - Paint System OZEU

483: PCS Date 10/01/2004

453: Bearing Type 1 2 - Rockers & Bolsters

455: Bearing Type 2 N - None

528: Foundn: Abut Fwd 4 - Spread Footing (on soil)

533: Foundn: Abut Rear 4 - Spread Footing (on Soil)

536: Foundn: Pier 1 4 - Spread Footing (on soil)

539: Foundn: Pier 2 N - None (Such as most Culverts)

Age and Service

27: Year Built/ 106 Rehab 1974 / 0000

42A: Service On 1 - Highway

42B: Service Under 1 - Highway, with or w/out pedestrian

28A: Lanes on 05

28B: Lanes Under 04

19: Bypass Length 5

29: ADT 15427

109: % Trucks (%) 5

Inspections

		Months	
B.IE.03 Routine Insp.		12	07/14/2025
B.IE.03: NSTM Insp.	Y	24	06/20/2025
B.IE.03: UW Insp.	N		
B.IE.03: Special Insp.			
UBIT Insp.	Y	60	07/12/2021
Drone Insp.	N	0	

Inspector Bishop,Dwayne

Structure Number: 3102246
Facility Carried: US42

[illegible]

Structure Number: 3102246
Facility Carried: US42

[illegible]

Structure Number: 3102246
Facility Carried: US42

[illegible]

Inspector: Bishop,Dwayne
Inspection Date: 07/14/2025

Structure Number: 3102246
Facility Carried: US42

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
830-Abutment Backwall	3 - Mod.	103	ft.	74	27	2	0
	CS2: Unsealed vertical and horizontal cracks, bays 3,5,@ 6 with efflor buildup and stains. Delam rt. and under area where conduit passes thru abut. Sound repair to left top. CS3: Sealed spall in left fwd.						
521-Concrete Protective Coating		412	sq. ft.	412	0	0	0

Inspector: Bishop,Dwayne

Structure Number: 3102246

Inspection Date: 07/14/2025

Facility Carried: US42

ODOT District: District 08

HAM-00042-0000_(3102246)

Date Built: 07/01/1974

Major Maint: 01 - State Highway Agency

Facility Carried: US42

Traffic On: 1 - Highway

Rehab Date:

Routine Maint: 04 - City or Municipal Highway Agency

Feature Inters: APP-CLAY WADE BAILEY

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 15000 - CINCINNATI (HAM county)

Location: DISTRICT 08

APP-OHIO RIVER BRIDGE

Insp Resp B:

Inspector

Bishop,Dwayne

Inspection Date 07/14/2025

Reviewer Collett,Brandon

Inspector Comments - Deck and Approach

Deck, Wearing Surface, Joints, Railing

Deck

Unsealed transverse cracks, spaced 5' to 20' spacing. Discoloration along sides of some of these cracks, a few with efflor. (CS3, Possible delams in mottled area. (53' from pavement to deck.)) Span 2, bay 2 and 4, over parking area for Hill Top Gravel, Concrete. Edge of Floor/Slab, unsealed trans cracks. 2' to 4' spacing. A couple delams along exp jnt armor. Few small spalls with resteel exposed, most along left in rear 4 spans. Span 3, bays @ 4 have a few holes with shallow spalls around bottom of holes and areas of dampness with rust staining. A few 8" haunch spalls. Heavy cracking/rust staining/dampness in span 6 (bay 3) over Bengals training/building and next 2 photos, cracked along haunches, bay 7, bm 8, over bengals grounds maintenance area. 22) Several spalls with resteel exposed through-out floor from delams previously removed. (2021) Several delams in spans over Bengals training/Practice building span 5, bay 3, over entrance drive to bengals. 23) span 5, bay 2, over bengals drive. 24) span 5, over south sidewalk , Mehring way. Bay 1. 25, span 4, bay 1 span 7, over sidewalk, along Smith st. , bay 1. Span 8, bay 3, over sidewalk/curb of Smith St.Span 8 bay 1 over NB Smith St. Span 9 bay 3 over EB Pete Rose way and Span 9 bay 4 over WB Pete Rose way. Span 9, bay 5. Span 10 bays 3,4,@ 5 at pier rear of floor beam over drive into parking lot. Span 12 bay 2 has 2 delams,! at bay 3.Span 13 bay 6 at beam 7 bay 7 at deck end and bay fwd of pier in span 13.(city notified of areas of loose concrete). Shared pier in span 1 has heavy delams above Dumping area/pit of old concrete.

Areas of loose concrete 2022 (submitted to the city for removal 6/21/2022) Few areas appear removed, new areas of loose concrete 2023 (submitted 8/28/2023)

2024-

CS3- All delams/loose concrete are over parking lots, roadway and practice field.

2 sf delam over P 12 in bay 4.

1 sf delam over P 10 @ C2 bay 7 haunch.

2- 1 sf delams over P7 in bays 3 and 4 haunch.

Loose concrete by existing spall span 5 bay 3 over driveway. Span 5 bay 1 over Mehring Way and span 5 bay 3 over Mehring Way.

Curbs/Sidewalk (LF)

Numerous unsealed trans cracks. Two electric boxes with no covers. (New covers on boxes this inspection and parapet at rt rear I/S face missing cover with wires exposed.)

Expansion Joint

Inspector: Bishop,Dwayne

Structure Number: 3102246

Inspection Date: 07/14/2025

Facility Carried: US42

Repairs were made to fwd joint in 2017, steel and backwall repaired, in left lanes. Filled with debris. Tears in gland of modular joint, rear.

2025-New modular joint at rear. It appears that traffic was put on new concrete too soon. There is wheel rutting with longitudinal cracking in the right NB lane on the north side of the joint and transverse cracking across the SB lane on the north side of the joint. This is Kentucky's joint.

Drainage

2022- New lateral drain pipe and hangers installed on west side over Mehring. Small amount of concrete overlay waste in scuppers under grate on left side. Leaking downspout in span 13. Scuppers clogged on left and a couple on rt. Pier 8 scupper drain underneath plugged and eroding back of sand storage area behind fence along Pete rose way, TJ Brewer 513-519-6023. Grounds supervisor. City has been notified of erosion. (2021) Still clogged) (2022 spoke with grounds person again).

Approach

Approach Wearing Surface (EA)

Wide trans crack in fwd concrete pavement. Poor profile grade at forward. Minor impact damage. Spalls and delams at rear of expansion jnt on Kentuckys side.

Approach Relief Joint (LF)

Small areas of asphalt low in joint, causing some impact damage to approach slab.

Inspector Comments - General Appraisal

Superstructure, Bearings

Steel Open Girder/Beam

Crack in longitudinal stiffener in span 12, beam 1 found 12/24/05 has been welded and repainted. A few beam ends with freckled rust. Brush needs removed along west side of beam one at spans 13, 12, 11, 10. Excessive rusting at bm 1, at joint, at truss.

Steel Pin and Pin & Hanger Assembly

A few with minor fretting at nuts and hanger location indicating some rotation. Pier cap 20, G-8, 1/8" depth of section loss, at hanger.

Diaphragm/X-Frames (EA)

Span 4 bay 3 has a loose nut at cross frame. A few with freckled rust at piers and abut end frames. Span 4, pier 4 bay 5 at beam 5 has a crack at end frame.

Inspector: Bishop,Dwayne

Structure Number: 3102246

Inspection Date: 07/14/2025

Facility Carried: US42

Fatigue (LF)

Intersecting welds exist in steel piercaps, but not cracked. Horiz stiffeners on beam webs. FCM inspection (July 2017), pier 20 in "Satisfactory Condition (6)". Pier 19, North side of girder 2, FCM inspection (July 2017) found 1/2" long crack, in the intersecting welds between the seat plate and the web plate. 2019 Fracture critical inspection by Michael Baker International in I drive folder. 2021, FCS inspection. 2023, FCS inspection, Collins Engineers, 6/20/23 at Pier 20 found a crack in the keeper bar plate weld at Girder 8 and crack growth in the pier cap web utility hole reinforcement plates between girder 2 and girder 3 and between girder 1 and girder 2. Pier caps are FC (NSTM) girders and therefore their rating of a 6 controls the superstructure/GA. 2025 NSTM inspection by Gannett Fleming is the in the structures folder.

Utilities (LF)

A few jnts at connections are separated. Two light poles missing inspection cover, exposing wires.Rt rear parapet missing cover and wires exposed.

Substructure

Abutment

Unsealed vertical cracks. Sealed over small shallow spalls. Unsealed horizontal cracks at top of wall and several of raised bearing pedestals. 3'H Spall/delam with resteel exposed rt fwd.

Pier Columns

Few scrapes/shallow spalls to columns where agg stored due to heavy equipment scrapping piers. Few unsealed vertical cracks. Pier columns at Hilltop Agg not completely sealed and aggregate piled (large) next to pier columns at pier 3, City notified, (removed). Columns have gouges from equipment. Delam , P-10, C-2, 1 sf area.

Culvert

Inspector Comments - Waterway

Channel Protection

Channel

Inspector: Bishop,Dwayne
Inspection Date: 07/14/2025

Structure Number: 3102246
Facility Carried: US42

Scour