

Inspector: Williams,Zachery

Inspection Date: 08/04/2025

Structure Number: 1833936

Facility Carried: STOKES BLVD CR 287

Ohio Bridge Inspection Summary Report**CUY-C0287-00.31 (1833936)**

B.L.04: District District 1216000 - CLEVELAND (CUY county)

B.CL.02: Major Maint 02 - County Highway Agency /

225 Routine Main A/B 02 - County Highway Agency /

221 Inspection A/B 02 - County Highway Agency /

5A: Inventory Route 1 C0287

7: Facility On STOKES BLVD CR 287

6: Feature Ints CSXT & NS RRS AND RTA

9: Location 750' SOUTH OF CEDAR AVE

Lat, Lon 41.497569 , -81.608611

Condition**B.C.01: Deck 6**

58.01: Wearing Surface 7

B.C.08: Joint 6**B.C.02: Superstructure 8**

59.01: Paint & PCS 8

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 N****B.C.07: Bearings****B.C.04: Culverts N****Ohio GA 7****Appraisal**

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

Geometric

48: Max Span Length (ft) 69.3
 49: Structure Length (ft) 190.3
 52: Deck Width, Out-To-Out (ft) 65.3
 424: Deck Area (sf) 12426.59
 32: Appr Roadway Width (ft) 50.0
 51: Road Width, Curb-Curb (ft) 50.0
 50A: Curb/SW Width: Left (ft) 5
 50A: Curb/SW Width: Right (ft) 5
 34: Skew (deg) 10
 33: Bridge Median 0 - No median
 54B: Min Vert Underclearance (ft) 16.25
 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 (%) 209
 704: Analysis Date 03/21/2025
 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 3 / 0

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

408: Composite Deck Y - Composite Construction

414A Joint Type 1 8 - Elastomeric Strip Seal

414B: Joint Type 2 N - None

108A: Wearing Surface 1 - Monolithic Concrete (concurrently placed with structural deck)

N - Not Applicable

422: WS Date 01/01/2003

423: WS Thick (in) 1

482: Protective Coating 2 - Unpainted Weathered Steel

483: PCS Date 01/01/2001

453: Bearing Type 1 C - Elastomeric (laminated)

455: Bearing Type 2 C - Elastomeric (laminated)

528: Foundn: Abut Fwd 3 - Drilled Shafts

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 2003 / 0000

42A: Service On 5 - Highway-pedestrian

42B: Service Under 2 - Railroad

28A: Lanes on 04

28B: Lanes Under 00

19: Bypass Length 1

29: ADT 17943

109: % Trucks (%) 7

Inspections

B.IE.03 Routine Insp. 12 Months 08/04/2025

B.IE.03: NSTM Insp. N 0

B.IE.03: UW Insp. N 0

B.IE.03: Special Insp.

UBIT Insp. N 0

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.	12106	sq. ft.	10770	1336	0	0
	Transverse (Most leach stained) cracks in all bays (Except bay 7 in span 1) in all three (3) spans. LONGL JT in bay 4 is leach stained in all three (3) spans. Span 1: 534 SF CS2. Bay 4: Span 2: 501 SF CS2. Span 3: 301 SF CS2.						
805-Wearing Surface - Monolithic Concrete		9250	sq. ft.	9249	1	0	0
	1 SF chipping along FWD EXP JT in RIGHT lane. (1 SF - CS2)						
107-Steel Open Girder/Beam	3 - Mod.	1482	ft.	1482	0	0	0
515-Steel Protective Coating		11928	sq. ft.	11928	0	0	0
210-Reinforced Concrete Pier Wall	3 - Mod.	82	ft.	66	16	0	0
215-Reinforced Concrete Abutment	3 - Mod.	168	ft.	126	42	0	0
	REAR: Scattered surface scaling/DELAMS in old concrete. Full height patches at the ends and CL are map cracked and DELAM, totaling ~160 SF (Scaling/honeycombed/spall/DELAM: LEFT end (2' - CS2); At CL (2' - CS2); RIGHT end (2' - CS2). Numerous vertical hairline cracks and a HORZL hairline crack ~6 LF above grade. Cap has numerous hairline cracks that extend into BW. FWD: Numerous hairline vertical cracks in breastwall. All extend through the seat into BW (8' - CS2).						
234-Reinforced Concrete Pier Cap	3 - Mod.	126	ft.	116	10	0	0
	Scattered cracks (10' - CS2).						
300-Strip Seal Joint	3 - Mod.	133	ft.	0	133	0	0
	Both are filled with dirt and debris (133' CS2).						
310-Elastomeric Bearing	3 - Mod.	32	each	26	6	0	0
	FWD bearings 1-5 and 8 have from light to heavy corrosion on sole/bearing plate (CS 2).						
321-Reinforced Concrete Approach Slab	3 - Mod.	1750	sq. ft.	1270	471	9	0
	REAR: The entire REAR edge is spalled/chipped up to 8" wide (50 SF - CS2). Numerous short LONGL cracks (10 SF - CS2). Two full length open cracks (40 SF CS2). Total of 9' of spalls up to 3" deep along the BW (9 SF - CS3). FWD: Map cracking in RIGHT lanes (300 SF - CS2). Two (2) full-length LONGL cracks (20' each totaling 40 SF - CS2). Scattered shorth LONGL cracks and one (1) partial-length transverse crack in the center two lanes (20 SF - CS2). Chipping along top of BW (LTV: 11' x up to 15" x 1") (11 SF - CS2).						
331-Reinforced Concrete Bridge Railing	3 - Mod.	370	ft.	347	22	1	0
815-Drainage	3 - Mod.	2	each	2	0	0	0
830-Abutment Backwall	3 - Mod.	158	ft.	144	14	0	0

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Bridge Inspection Report

Executive Summary

REAR = WEST

To inspect the bottom of this structure in-depth, you will need to coordinate clearance from Norfolk Southern, CSX and GCRTA. The bucket truck can be driven down the RR access road to inspect the west face of pier #1.

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ODOT District: District 12

CUY-C0287-00.31 _(1833936)

Date Built: 07/01/2003

Major Maint: 02 - County Highway Agency

Facility Carried: STOKES BLVD CR 287

Traffic On: 5 - Highway-pedestrian

Rehab Date:

Routine Maint: 02 - County Highway Agency

Feature Inters: CSXT & NS RRS AND RTA

Traffic Under: 2 - Railroad

Insp. 02 - County Highway

FIPS Code: 16000 - CLEVELAND (CUY county)

Location: CUY

750' SOUTH OF CEDAR AVE

Resp A: Agency

Inspector

Williams,Zachery

Inspection Date 08/04/2025

Reviewer Kustec,Andrew

Resp B:

Inspector Comments - Deck and Approach

Deck, Wearing Surface, Joints, Railing

Floor/Slab (SF)

Transverse (Most leach stained) cracks in all bays (Except: Span 1 bay 7) in all three (3) spans. LONGGL JT in bay 4 is leach stained in all three (3) spans.

- **Span 1:** (534 SF - CS2).
- **Span 2:** (501 SF - CS2).
- **Span 3:** (301 SF - CS2).

Edge of Floor: Scattered leach stained/water stained cracks.

Bridge Wearing Surface (SF)

Numerous hairline transverse cracks and short hairline LONGGL cracks in LEFT passing lane near the CL. Hairline diagonal cracks at both LEFT corners.

- **LEFT along concrete patch: REAR: FWD:** Spall/DELAM 2 SF.
- **LEFT passing lanes:** Chipped/spalled along FWD EXP JT in two (2) places totaling 13" long x 1" wide (1 SF - CS2).

Bridge Railing (LF)

All four (4) rails (Two (2) parapets and two (2) curb rails) have numerous vertical cracks (22' - CS2). Many are wet and/or leach stained.

- **LEFT:** Curb rail has scattered transverse cracks (Vertical on the inside face) near the top on the inside face. Railing on top of REAR cheek wall is cracked and shifted 1/4" North, open 1-1/4" and settled (Cracked/shifted down) 3/4".
- **RIGHT:** Exterior South corner of railing on REAR cheek wall is cracked/spalled and shifted/rotated West, 2" at the top and 1-1/2" at the bottom (1' - CS3).

Expansion Joint (LF)

Both are filled with dirt and debris (Both 66.5 LF CS2 due to debris in JT).

REAR: Open 1" across the entire joint.

FWD: Open up to 1" across the entire joint.

- **LEFT curb rail EXP JT:** Open 3-1/2".

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- **RIGHT curb rail EXP JT:** Open 2-1/2".

Approach

Approach Wearing Surface (EA)

REAR:

- **LEFT:** Center lane cracked/spalled adjacent to MH totaling 4 SF (Partially patched).
- **RIGHT:** Cracked/patched 2 SF x 2" deep spall near CB. CJ's near MH cutout have scattered spalls totaling 7 SF x ~3-1/2" deep (Mostly patched).
- **FWD:** MH cutout spalled/partially patched 9 SF x up to 2-1/2" deep.

Approach Slab (SF)

- **REAR:** The entire REAR edge is scaled/chipped up to 8" wide (50 SF - CS2). Numerous short LONGL cracks (10 SF - CS2). Two (2) full length LONGL cracks (40 SF - CS2). Total of 9' of spalls up to 3" deep along the BW (9 SF - CS3).
- **FWD:** Map cracking in RIGHT lanes (300 SF - CS2). Two (2) full-length LONGL cracks (20' each totaling 40 SF - CS2). Scattered short LONGL cracks and one (1) partial-length transverse crack in the center two (2) lanes (20 SF - CS2). Chipping along top of BW (LTV: 11' x up to 15" x 1") (11 SF - CS2).

Sidewalks:

- **REAR-LEFT:** 10' long x 1/4" open LONGL crack (Starts over UTIL conduit, only ~1" cover) in line with railing and turns towards parapet, cracking three (3) total panels. Adjacent concrete settled 1/8" along the crack. Small spall along crack (LTV: 2' x 4" x 3/4").

Signs (EA)

Type 3 object markers (Chevrons) are in place at both approaches.

Inspector Comments - General Appraisal

Superstructure, Bearings

Diaphragm/X-Frames (EA)

- **REAR:** End diaphragms in bays 1, 3 and 4 have scattered moderate corrosion.
- **FWD:** End diaphragms in bays 1, 4, 5, and 7 have scattered moderate corrosion.

Bearing Devices (EA)

FWD ABUT: BRGs 1, 4, and 6 - 8 are expanded. BRGs 3 and 5 are vertical. BRGs 1 - 5 and 8 have light corrosion (6 - CS2).

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Protective Coating System (SF)

~10' Ends/BMs painted. Weathering Steel BMs and XFRAMEs are dusty to granular in texture.

- **FWD:** Web of BM 6, at lower angle of bay 5, FWD end XFRAME is leach stained 4" long x entire web height. XFRAME has 4" wide x 3" high area of corrosion at BM 6. The bottom face of top flange of BM 6 has light flaking/corrosion.

Fatigue (LF)

Bolted splices in Spans 1 and 2.

Utilities (LF)

All light pole covers are missing screws and/or aren't tightened down (Typical - Ten (10) screws per cover):

- **CENTER-LEFT box cover:** Seven (7) screws missing and two (2) not tightened down.
- **FWD-LEFT box cover:** Four (4) screws missing, and one (1) not tightened down.
- **CENTER-RIGHT box cover:** Four (4) screws missing, and one (1) not tightened down.
- **FWD-RIGHT box cover:** One (1) missing.

Substructure

Abutment Walls (LF)

Both: ABUTs are covered with graffiti.

- **REAR:** Scattered surface scaling/DELAMs in old concrete. Full height patches at the ends and CL are map cracked and DELAM, totaling ~160 SF (20' - CS2). (Scaling/honeycombed/spall/DELAM: **LEFT End** (2' - CS2); **At CL** (2' - CS2); **RIGHT End** (10' - CS2). Numerous vertical hairline cracks and a HORZL hairline crack ~6' above grade. Cap has numerous hairline cracks that extend into BW.
- **FWD:** Numerous hairline vertical cracks in breastwall. All extend through seat into BW (8' - CS2).

Pier Walls (LF)

Both: Covered with graffiti.

- **P1:** Scattered minor map cracks on both faces (8' - CS2).
- **P2:** Scattered cracks on both faces (8' - CS2).

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Pier Caps (LF)

Top of caps have scattered rust staining from BMs.

- **P1:** Scattered minor map cracks on both faces. RIGHT cantilever has a leach and rust stained diagonal crack on the end face (6' - CS2).
- **P2:** Scattered cracks on both faces (4' - CS2).

Backwalls (LF)

Top: Both have numerous hairline to 1/16" open LONGL cracks (6' - CS2).

- **REAR:** Chipped along APPR slab totaling 8' long x up to 9" wide (8' - CS2).
- **FWD:** Transverse cracks, scattered small spalls.

Vertical Face:

- **REAR:** Hairline cracked at both edges of sidewalk and has numerous additional cracks between end cracks. Cracks extend into ABUT cap/seat.
- **FWD:** Rust stained. Scattered hairline vertical cracks.

Wingwalls (EA)

- **REAR-LEFT:** HORZL up to 1-1/2" open crack near top (~2' above original seat level). Top section shifted to Northeast. 16 SF spall/DELAM along ABUT cap and a 14 SF spall/DELAM, 3" deep, along ABUT.
- **REAR-RIGHT:** Numerous leach stained cracks at top of WW near ABUT. ~48 SF of lower RIGHT end is soft and crumbly. ~10 SF spalled/DELAM along ABUT.

Slope Protection (EA)

- **FWD (Only):** Cribbed wall.

Culvert

Inspector Comments - Waterway

Channel Protection

Channel

Scour

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