



# Bridge Inspection Report

056B00191N

Inspector: Daniel Coulter

Entered by: DCOULTER

12/09/2024

Standard (24 months)

<u>IDENTIFICATION</u>			
Structure Num (8):	056B00191N		
NBI Number	056B00191N		
Structure Name:			
Location (9):	0.5 MI S OF US 31E		
Carries (7):	I-65		
Type of Service (42A):	1 Highway		
Feature Crossed (6):	JACOB, BROADWAY, GRAY ST		
Type of Service (42B):	1 Highway		
Placecode (4):	Not Applicable		
County (3):	Jefferson (056)		
State (1):	21 Kentucky		
Admin Area:	Inventory		
District:	District 5		
Latitude (16):	38° 14' 46"		
Longitude (17):	85° 45' 8"		
Owner (22):	State Highway Agency		
Maint. Resp. (21):	State Highway Agency		
Year Built (27):	1960	Border State (98A):	Not Applicable (P)
Year Recon (106):	1980	Border Number (99):	
		% Responsibility (98B):	

<b>Poor</b>		Heath Index:	87.50
SubStd: No		SubStd Reason:	Not Sub-Standa
Inspection Type	Freq (92)	Last Insp (93)	Next Insp
Routine	24	12/9/2024	12/9/2026
Element	24	12/9/2024	12/9/2026
Fracture Critical (A)		1/1/1901	1/1/1901
Underwater (B)		1/1/1901	1/1/1901
Special Insp (C)		12/26/2018	1/1/1901
<u>LOAD RATING AND POSTING</u>			
Posting Status(41):		P Posted for load	
Posting (70):		5 At/Above Legal Loads	
Signs Posted Cardinal:		Yes	
Signs Posted Non-Cardinal:		Yes	
Recmd Date: 5/31/2017		Posted Date: 7/26/2017	
<u>Required Postings (Tons.)</u>		<u>Field Postings (Tons.)</u>	
Gross:		Gross:	
Truck Type 1:		Truck Type 1:	
Truck Type 2:		Truck Type 2:	
Truck Type 3:		Truck Type 3:	
Truck Type 4:		Truck Type 4:	
SUV 5:	37.00	SUV 5:	37.00
SUV 6:	38.00	SUV 6:	38.00
SUV 7:	39.00	SUV 7:	39.00
EV Single Axle:		EV Single Axle:	
EV Tadem Axle:		EV Tadem Axle:	
EV Gross:		EV Gross:	

<u>DECK GEOMETRY</u>	
Deck Geometry (68):	9 Above Desirable Crit
Deck Area:	127,444.00 ft²
Deck Type (107):	1 Concrete-Cast-in-Place
Wearing Surface (108A):	6 Bituminous
Membrane (108B):	0 None
Deck Protection (108C):	1 Epoxy Coated Reinforci
Approach Roadway width (32):	99.50 ft.
Width Curb to Curb (51):	99.50 ft.
O. to O. Width (52):	105.50 ft.
Curb / Sidewalk Width L (50A):	0.00 ft.
Curb / Sidewalk Width R (50B):	0.00 ft.
Median (33):	3 Closed Med w/Barriers

Year	Condition
2007	5
2009	5
2010	5
2012	6
2014	6
2016	6
2017	6
2018	6
2020	6
2022	6
2024	6

DECK CONDITION

Deck Rating (58):	6 Satisfactory
Bridge Rail (36A):	0 Substandard
Transition (36B):	0 Substandard
Approach Rail (36C):	0 Substandard
Approach Rail Ends (36D):	0 Substandard



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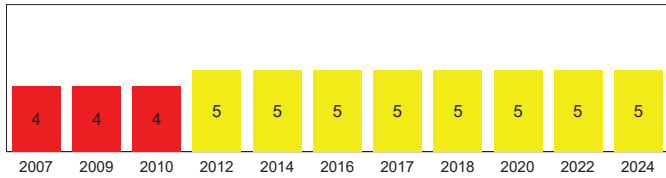
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## SUPERSTRUCTURE GEOMETRY

# of Main Spans (45): 21  
# of Approach Spans (46): 0  
Main Material (43 A): 4 Steel Continuous  
Main Design (43 B): 02 Stringer/Girder  
Max Span Length (48): 123.50 ft.  
Structure Length (49): 1,208.00 ft.  
NBIS Length (37): Long Enough  
Temp Structure (103): Not Applicable (P)  
Skew (34): 8°  
Structure Flared (35): 1 Yes, flared  
Parallel Structure (101): No || bridge exists  
Approach Alignment (72): 8 Equal Desirable Crit

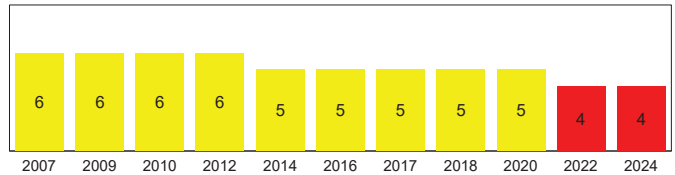


## SUPERSTRUCTURE CONDITION

Superstructure Rating (59): 5 Fair  
Structure Evaluation (67): 4 Minimum Tolerable

## SUBSTRUCTURE GEOMETRY

Navigation Control (38): NA-no waterway  
Nav Vert Clearance (39): 0.00 ft.  
Nav Horiz Clearance (40): 0.00 ft.  
Pier Protection (111): Not Applicable (P)  
Lift Bridge Vertical Clearance (116):  
Scour Rating (113): N Not Over Waterway  
Waterway Adequacy (71): N Not applicable



## SUBSTRUCTURE CONDITION

Substructure Rating (60): 4 Poor  
Channel Rating (61): N N/A (NBI)

## KYTC FIELDS

Overlay:	Yes	Scour Observed:	N/A
Overlay Type:	L T Polymer Asph	Scour Risk :	N/A
Overlay Thickness:	2.25 in.	Scour Analysis/Assessment :	Not Required
Overlay Year:	2012	Scour POA :	Not Required
Cross Section:	Not Required	Scour POA Date :	
Cross Section Date:		Next Cross Section Due Date :	

## 1ST NON-CARD ROUTE ON: I-65 NC

ROADWAY LOCATION		ROADWAY CLASSIFICATION		CLEARANCES	
Pos Prefix (5A):	1st Non-Card Route	Funct Class (26):	11 Urban Interstate	Vertical (10):	99.99 ft.
Kind of Hwy (5B):	1 Interstate Hwy	Level Service (5C):	1 Mainline	Min Vert Over (53):	99.99 ft.
Route Num (5D):	00065	NHS (104):	1 On the NHS	Vert Ref (54A):	H Hwy beneath struct
LRS Route (13A/B):	IO0065_000/00	Defense Hwy (100):	1 On Interstate STRAHNET	Undrclearnce (54B):	14.67 ft.
Milepost (11):	135.27 mi	Toll Facility (20):	3 On free road	Horizontal (47):	49.75 ft.
Suffix (5E):	0 N/A (NBI)	ADT (29):	84,001 Cars/Day	Min Lat Left (56):	8.00 ft.
Lanes Under (28B):	6	Pct Trucks (109):	16.00%	Min Lat Right (55B):	8.00 ft.
Detour Length (19):	8.00 mi	ADT Year (30):	2012	Horiz Ref (55A):	H Hwy beneath struct
				Underclearance (69):	2 Intolerable - Replace





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## 1ST ROUTE UNDER: E JACOB ST

ROADWAY LOCATION		ROADWAY CLASSIFICATION		CLEARANCES	
Pos Prefix (5A):	1st Route Under	Funct Class (26):	19 Urban Local	Vertical (10):	14.67 ft.
Kind of Hwy (5B):	5 City Street	Level Service (5C):	0 None of the below	Min Vert Over (53):	99.99 ft.
Route Num (5D):	01120	NHS (104):	0 Not on NHS	Vert Ref (54A):	H Hwy beneath struct
LRS Route (13A/B):		Defense Hwy (100):	0 Not a STRAHNET hwy	Undrclearnce (54B):	14.67 ft.
Milepost (11):	0.69 mi	Toll Facility (20):	3 On free road	Horizontal (47):	42.00 ft.
Suffix (5E):	0 N/A (NBI)	ADT (29):	17,762 Cars/Day	Min Lat Left (56):	8.00 ft.
Lanes Under (28B):	1	Pct Trucks (109):	-1.00%	Min Lat Right (55B):	8.00 ft.
Detour Length (19):		ADT Year (30):	2006	Horiz Ref (55A):	H Hwy beneath struct
				Underclearance (69):	2 Intolerable - Replace

## 2ND ROUTE UNDER: E GRAY ST

ROADWAY LOCATION		ROADWAY CLASSIFICATION		CLEARANCES	
Pos Prefix (5A):	2nd Route Under	Funct Class (26):	19 Urban Local	Vertical (10):	15.00 ft.
Kind of Hwy (5B):	5 City Street	Level Service (5C):	0 None of the below	Min Vert Over (53):	99.99 ft.
Route Num (5D):	01127	NHS (104):	0 Not on NHS	Vert Ref (54A):	H Hwy beneath struct
LRS Route (13A/B):		Defense Hwy (100):	0 Not a STRAHNET hwy	Undrclearnce (54B):	14.67 ft.
Milepost (11):	0.05 mi	Toll Facility (20):	3 On free road	Horizontal (47):	42.00 ft.
Suffix (5E):	0 N/A (NBI)	ADT (29):	17,762 Cars/Day	Min Lat Left (56):	8.00 ft.
Lanes Under (28B):	2	Pct Trucks (109):	-1.00%	Min Lat Right (55B):	8.00 ft.
Detour Length (19):		ADT Year (30):	2006	Horiz Ref (55A):	H Hwy beneath struct
				Underclearance (69):	2 Intolerable - Replace

## 3RD ROUTE UNDER: E BROADWAY

ROADWAY LOCATION		ROADWAY CLASSIFICATION		CLEARANCES	
Pos Prefix (5A):	3rd Route Under	Funct Class (26):	14 Urban Other Princ	Vertical (10):	15.17 ft.
Kind of Hwy (5B):	2 U.S. Numbered H	Level Service (5C):	1 Mainline	Min Vert Over (53):	99.99 ft.
Route Num (5D):	00150	NHS (104):	1 On the NHS	Vert Ref (54A):	H Hwy beneath struct
LRS Route (13A/B):	US0150_000/00	Defense Hwy (100):	0 Not a STRAHNET hwy	Undrclearnce (54B):	14.67 ft.
Milepost (11):	2.71 mi	Toll Facility (20):	3 On free road	Horizontal (47):	70.00 ft.
Suffix (5E):	0 N/A (NBI)	ADT (29):	22,473 Cars/Day	Min Lat Left (56):	8.00 ft.
Lanes Under (28B):	6	Pct Trucks (109):	9.00%	Min Lat Right (55B):	8.00 ft.
Detour Length (19):		ADT Year (30):	2024	Horiz Ref (55A):	H Hwy beneath struct
				Underclearance (69):	2 Intolerable - Replace

## ROUTE ON STRUCTURE: I-65

ROADWAY LOCATION		ROADWAY CLASSIFICATION		CLEARANCES	
Pos Prefix (5A):	Route On Structure	Funct Class (26):	11 Urban Interstate	Vertical (10):	99.99 ft.
Kind of Hwy (5B):	1 Interstate Hwy	Level Service (5C):	1 Mainline	Min Vert Over (53):	99.99 ft.
Route Num (5D):	00065	NHS (104):	1 On the NHS	Vert Ref (54A):	H Hwy beneath struct
LRS Route (13A/B):	IO0065_000/00	Defense Hwy (100):	1 On Interstate STRAHNET	Undrclearnce (54B):	14.67 ft.
Milepost (11):	135.27 mi	Toll Facility (20):	3 On free road	Horizontal (47):	49.75 ft.
Suffix (5E):	0 N/A (NBI)	ADT (29):	84,001 Cars/Day	Min Lat Left (56):	8.00 ft.
Lanes On (28A):	6	Pct Trucks (109):	16.00%	Min Lat Right (55B):	8.00 ft.
Detour Length (19):	8.00 mi	ADT Year (30):	2012	Horiz Ref (55A):	H Hwy beneath struct
				Underclearance (69):	2 Intolerable - Replace



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### STRUCTURE NOTES

- BRIDGE IS REQUIRED TO BE POSTED AT THE FOLLOWING WEIGHT LIMITS: SUV 5 – 37 TONS, SUV 6 – 38 TONS, SUV 7+ – 39 TONS.
- Beginning with the 2010 inspection, substructure units and spans are numbered per the bridge plans. A layout plan sheet specifically marked for bridge component numbering has been placed in the district bridge file and the scanned electronic bridge file for quick reference. Girders are numbered left to right looking north.
- Coding guide does NOT allow for accurate coding of Items 43 and 44 for this bridge - it has steel, PCI and RCDG continuous spans. Since no one type is dominant, Item 43 was coded as steel continuous (higher priority for in-depth inspections) and all spans were counted as "main" spans (no approach spans were coded).
- Pier 103 cap plus expansion bearings on Span 104 side and associated quantities are inventoried with 056B00191N (per plans) and are excluded from 056B00192N.
- ACCESS: Custom key is required for access to the fenced in area between Jacob St and Broadway. See Natalie House-Lewis (DBE) for key. MRK 01/25/2024
- In 2022, AECOM used infrared thermography to identify and locate areas of concrete delamination and overlay debonding in the deck, plus they obtained core samples for testing to determine chloride ion levels in the concrete. See Media tab for results.
- 2017 repair contract (Contract ID 174301) included reconstruction of the asphalt plug joints
- 2012 repair contract (Contract ID 121305 Proposal and Plans) included the following: 1. The deck was overlaid with 2.25 inches of an asphalt waterproofing mix (low temp., a product by "Road Science" - not Rosphalt), 2. Asphalt plug joints were installed over most existing joints.
- In 2006, ends of some PCI beams were repaired with CFRP fabric by a contract through the Kentucky Transportation Center. (Project No. I-65-PCG05)
- State forces performed an in-depth inspection of the steel spans in 2001, and a consultant performed one in 2007. See previous reports for details.

### INSPECTION NOTES

- BRIDGE IS POSTED AT THE FOLLOWING WEIGHT LIMITS AT BOTH APPROACHES: SU5 - 37 TONS, SU6 - 38, SU7 - 39 TONS. SDC 12/09/24
- Routine inspection performed by Daniel Coulter and Stephanie Stoops.
- Due to narrow shoulders and heavy traffic, photos were taken on the top side by Jonathan Micka with a drone.

### SCOUR NOTES

### LOAD RATING NOTES

05/10/17 Contract load rating by Michael Baker Intl. The load rating is controlled by Span 102 (Ramp A Girder RB/RC, shear at Pier A5), Span 103 (Ramp A Girder RA, shear at Pier A5; and Ramp B Girder RF, flexure at midspan), Span 113 (Girder N, flexure at 0.6L), and Span 114 (Girder N, flexure at midspan). Note by ALI.

05/31/17 Posting memo for SU5-SU7 at 37, 38, 39 tons. ALI.

### COMPLIANCE NOTES



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ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
12	Re Concrete Deck	3	12/09/2024	114,621.00	sq.ft	113,265.00	1,146.00	210.00	0.00

Top of the deck cannot be inspected due to 2012 asphalt overlay. Soffit has full depth deterioration and/or spalling with exposed rebar below the deck joints in overhangs and at the longitudinal joint, as well as in Bay 4 near Pier B-3. There is one other spall with exposed rebar, roughly 8 SF, in Span 104 at Pier 103W (P103W) in Bay 9. There are concrete patches in Span 102 along Piers A-5 and B-1, Span 103 along Pier A-4, Span 109 along P109W and P109E, Span 110 at P109W (some unsound with cracking and efflorescence), Span 112 at P112W (some unsound), Span 116 at P115, and Span 118 at P118. Soffit also has a few intermittent transverse cracks with efflorescence in Ramp A Spans 105 and 106, Ramp B Span 105, and mainline Spans 108, 111, and 123. Spans 122 through 124 are mostly covered in soot from fires under the structure, with worst areas in Span 124 Bays 2-5 where light pattern cracking and scaling were noted.

813 AC Wearing Surf w/ Membrane 3 12/09/2024 108,591.00 sq.ft 86,586.00 21,718.00 287.00 0.00

Overlay is a low temperature asphalt waterproofing mix. Overlay has minor wearing in wheel paths and shoulders. In Ramp B, overlay has a transverse crack over the paved-over Abutment B joint, longitudinal cracking in Spans 102 and 103, plus an area of map cracking in the left wheel path in Span 104 near Pier B-3. There is a 4-inch diameter spall in NB Span 116 roughly 20 feet south of P115E near the right edge line. SB overlay has some intermittent longitudinal cracks along the cold joints in the right lane and shoulder. Curb lines have dirt and debris accumulation, including some set concrete in the west shoulder of the SB lanes from Span 116 to Span 124.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
16	Re Conc Top Flange	3	12/09/2024	36,370.00	sq.ft	27,535.00	8,835.00	0.00	0.00

Top flange located in Unit 4 (Spans 113 through 115) only. Top side cannot be inspected due to 2012 asphalt overlay. Soffit has intermittent transverse cracking with efflorescence, with heaviest density in Span 114 over Broadway where much is spaced less than 3 feet apart. Bay 13 in Span 113 also has areas of cracking spaced 1-3 feet apart. Cracking in Span 115 is concentrated in the north half.

813 AC Wearing Surf w/ Membrane 3 12/09/2024 33,550.00 sq.ft 26,840.00 6,710.00 0.00 0.00

Overlay is a low temperature asphalt waterproofing mix. Overlay has minor wearing in wheel paths and shoulders.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
107	Steel Opn Girder/Beam	3	12/09/2024	5,723.00	ft	5,248.00	420.00	55.00	0.00



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Steel girders have freckling rust on the flanges, especially below the joints. Corrosion with section loss noted in Ramp A Span 106 at PA-1, Span 104 Girders 1, 3, 8, and 14 at P103, and all girder ends (roughly 2 feet each) in Span 106 at P106. Girder 3 web has slight distortion, measured up to 5/8 inch and extending 15 feet from Abutment C, due to fire damage. Girder 14 has 3 feet of corrosion with section loss along the bottom flange at Abutment C.

515 Steel Protective Coating 3 12/09/2024 43,175.00 sq.ft 0.00 42,256.00 864.00 55.00

Steel protective coating is dulling throughout, with areas of limited effectiveness below the deck joints. Span 123 is covered in soot from fires under the bridge. There is evidence of fire damage in Span 124 at Abutment C in Bays 2-5, 7, and 8. Coating is worst in these locations and is especially dull and has some bubbling and peeling. Coating has failed along 3 feet of the bottom flange on Girder 14 at Abutment C.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
109	Pre Opn Conc Girder/Beam	3	12/09/2024	11,600.00	ft	11,277.00	267.00	56.00	0.00

PCI beams have some moderate to wide longitudinal cracks and/or rust staining, delaminations, and small spalls; most defects are at beam ends and below the deck joints. At Abutment A, end spalling in the bottom flange with exposed strands (ES) was noted on Beam 3 (2 ES) and Beam 4 (1 ES). Ramp A Beam 1 at PA-5 has 2 feet of cracking. In Ramp B, Beams 1, 2, and 3 have cracking and spalling with exposed rebar at Abutment B, Piers B-1 and B-2, and Beam 4 has spalling with exposed rebar at PB-1. In Span 107 at Pier 106, Beams 4, 12, 16, 21, 22, and 24 have wide cracks or spalls with exposed rebar, typically in the bottom flanges. At P109W, Beam 1 has wide cracking and spalling with exposed rebar on both sides of the pier. In Span 119, Beam 16 bottom flange has 3 feet of spalling with exposed stirrups and wide longitudinal cracking at Pier 119W. In Span 120, Beam 16 bottom flange has 10 feet of cracking and spalling with one exposed prestressed strand near midspan.

PCI beam ends have CFRP patches to repair shear cracking (2006 KTC project) in the following spans (mostly in the SB superstructure): 107, 108, 109, 110, 111, 112, 116, 117, 119, and 120. Some patches appear to be incomplete, but all are in good condition.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
110	Re Conc Opn Girder/Beam	3	12/09/2024	4,626.00	ft	3,595.00	925.00	106.00	0.00

RCDGs have patching along the top edges for approximately 20% of the girders. A few girder webs have shallow but wide spalls with exposed stirrups, especially below the longitudinal joint. At Pier 112W, bottom of Girder 8 in Span 113 has delaminated areas with wide cracking and 4 feet of spalling with exposed rebar and section loss. In Span 114 for 72 linear feet over the full width of Broadway, Girder 8 has extensive spalling with up to 3 layers of exposed rebar and section loss (stirrups are completely rusted through). Deepest spalling is near midspan, with advanced concrete section loss affecting roughly 17 feet (there is an elbow in the drainage system at this location). In Span 115, Girder 13 has 5 feet of wide longitudinal cracking in the bottom flange just south of the northern intermediate diaphragm.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
205	Re Conc Column	3	12/09/2024	152.00	each	68.00	40.00	44.00	0.00



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Columns have moderate to wide vertical cracking, delaminated areas, and spalling with exposed rebar and section loss - especially below the drainage system and deck joints. Worst spalling is in the west column (Column 1) of Pier 109E, where the entire south face has spalling exposing the first mat of rebar, which has up to 100% section loss. In the parking lots below Spans 106 through 113, columns typically have shallow spalls, as well. A few columns at Piers 120W, 119E and 119W have sound concrete patches.

Wide and/or closely spaced vertical cracking noted at PA-5, PA-4, PA-2 Column 2, P103W Columns 1 (C1) and C2, P106W-C2, P109W-C1, P109E-C3, P112W-C1 and C2, P110W-C2, P112E-C6, P113W-C7, P113E-C8, P114W-C3, P114E-C1, P115E-C6, P116E-C5, P118W-C1 and C2, P118E-C2 and C3, P119E C2 and C3, P120E-C2, P121W-all three columns, and P121E-C3.

Deep spalls with exposed rebar noted at PB-1 both columns, PB-2 C2, P109E-C1, P112E-C3, P113W-C1, P114W-C4, P114E-C1 and C3, and P115E-C3.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
215	Re Conc Abutment	3	12/09/2024	188.00	ft	108.00	39.00	41.00	0.00

Abutment A has moderate vertical and diagonal cracks, some with efflorescence and/or rust staining at the west end. Abutment B has a few vertical cracks and small delaminations. Abutment C has moderate to wide horizontal cracking, delamination, unsound patches, and several spalls with exposed rebar.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
234	Re Conc Pier Cap	3	12/09/2024	2,446.00	ft	1,774.00	132.00	540.00	0.00

Pier caps below the joints typically have moderate to wide cracking with efflorescence and/or rust staining, delaminated areas, and large spalls with exposed rebar and section loss. Spalling and delaminations are also common in areas below the drainage system. Larger/more extensive areas of spalling with exposed rebar noted on caps for PA-5, PA-4, PA-1, PB-1, PB-2, P106W, 108E, P112W, P112E, P118W (full length), and P121W. Most predominate wide cracking noted on P103W, P106E, P111W, 115E and P121E.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
302	Compressn Joint Seal	3	12/09/2024	140.00	ft	0.00	0.00	40.00	100.00

Compression joint seals over Piers A-5, B-1, and B-2 as well as Abutments A and B were paved over in 2012, but asphalt has generally broken up and original joints are exposed. Visible portion of joint seals have partial to full depth tears and adhesion loss throughout, plus are filled with debris. Abutment B joint is the only joint still fully concealed by overlay, considered as CS4 since joint is full of asphalt which restricts movement.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
306	Other Joint	3	12/09/2024	949.00	ft	0.00	55.00	304.00	590.00

Asphalt plug joints were reconstructed in 2017 and are located along all mainline joints plus at Piers A-4 and A-1. Asphalt joints have deterioration throughout, with varying levels of adhesion loss, cracking, and spalling. Asphalt material has typically failed in all lanes and has limited effectiveness in the shoulders. Joint material is also spalling out over original armored edges at P118E, P103W at Abutment C in SB lanes.



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310	Elastomeric Bearing	3	12/09/2024	346.00	each	344.00	2.00	0.00	0.00

Elastomeric bearing pads are bulging slightly at the west beam at both Abutments A and B. Otherwise, no deficiencies noted.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
311	Moveable Bearing	3	12/09/2024	153.00	each	27.00	55.00	71.00	0.00

Moveable bearings typically have light to heavy corrosion, with the exception of bearings at Piers A-2 and B-4, P105E&W, and P122E&W. Rocker bearings with heavier corrosion and areas with section loss are typical below joints. Some bearings are slightly expanded, inconsistent with temperatures at P122E&W. Debris and asphalt have accumulated on Pier Caps 103E&W, 106E&W, A-1, and 121W below failing joints, restricting movement of some rocker bearings. Previous inspections noted several devices were not in bearing; unable to observe these issues from ground access only.

515 Steel Protective Coating 3 12/09/2024 1,196.00 sq.ft 0.00 211.00 801.00 184.00

Steel protective coating is substantially effective at Piers 122, 105, A-2. Remaining coating has limited to no effectiveness.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
313	Fixed Bearing	3	12/09/2024	51.00	each	9.00	42.00	0.00	0.00

Fixed bearings generally have surface rust beginning to form, especially at Piers 113 and 123. Bearings in the ramps and at P104 hard to see from the ground.

515 Steel Protective Coating 3 12/09/2024 404.00 sq.ft 0.00 71.00 333.00 0.00

Steel protective coating typically has limited effectiveness throughout, with the finish coat peeling in some areas.



# Bridge Inspection Report

056B00191N

Inspector: Daniel Coulter

Entered by: DCOULTER

12/09/2024

Standard (24 months)

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
331	Re Conc Bridge Railing	3	12/09/2024	5,353.00	ft	4,599.00	740.00	14.00	0.00

Concrete railings have moderate vertical cracks and scrapes scattered throughout, along with minor scaling typically affecting roughly 10% of the rails, though present throughout the SB median rail in Spans 113 and 115. East railing has a section of moderate to heavy scaling in Span 123 (over Jacob Street). A few spalls with exposed rebar were noted in the east SB rail in Spans 123 and 114, in the NB median rail at P106W, Span 119, and P121, the NB-Ramp A split behind the crash cushion on the I-65 NB side, and in the Ramp B east railing exterior face near Pier B-2.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
802	Drainage Sys	3	12/09/2024	1.00	each	0.00	0.00	0.00	1.00

Drainage system is rusting, leaking onto the superstructure and substructure, and has several sections missing.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
850	2nd Elem	3	12/09/2024	1.00	each	0.00	0.00	1.00	0.00

Some diaphragms have large spalls with exposed rebar, especially in the RCDG spans. North face of Pier A-5 shear key has spalling deeper than 1 inch. Diaphragms at Pier 112E have cracking with heavy efflorescence build-up along bottom face.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
852	Drains	3	12/09/2024	1.00	each	0.00	0.00	0.00	1.00

Majority of the deck drains are 100% blocked.

ELEM NBR	ELEMENT NAME	ENV	INSP. DATE	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
860	Erosion Ctrl/Prt	1	12/09/2024	1.00	each	0.00	1.00	0.00	0.00

Concrete slope protection along Abutment C is being undermined, especially towards the west end, and is settling/cracking.





## Bridge Inspection Report

**056B00191N**

Inspector: Daniel Coulter

Entered by: DCOULTER

12/09/2024

Standard (24 months)

# 056B00191N Routine Inspection 12/09/24



Looking north along I-65 NB with correct posting in place.



Looking south along I-65 SB with correct posting in place.



# 056B00191N Routine Inspection 12/09/24



West profile



East profile





Joint over Abutment A.



Joint over Pier A-5.





Joint over Pier A-4



Joint over Pier A-1.





Joint over Pier B-1.



Joint over Pier B-2.



# 056B00191N Routine Inspection 12/09/24



Joint over Pier 103.



Joint over Pier 106.



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Joint over Pier 109.



Joint over Pier 112.



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Joint over Pier 115.



Joint over Pier 118.



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Joint over Pier 121.



Joint over Abutment C.





Ramp A: Abutment A



Ramp A: Backwall of Abutment A has cracking with efflorescence and rust staining at the west end.





Ramp A: Typical Abutment A bearing pad.



Beams 3 and 4 at Abutment A have end spalls with exposed strands. Beam 3 shown.





Ramp A: Pier A-5 south face.



South face of Pier A-5 has large spalls with exposed rebar and wide horizontal cracking.





Ramp A: Wide vertical cracking in Pier A-5 column.



Typical Pier A-5 bearing pads.





Ramp A: Pier A-4 north face and Span 103.



Ramp A: Pier A-4 has large spalls with exposed rebar on the west end of the cap.





Ramp A: Pier A-4 column wide vertical cracks.



Ramp A: Pier A-4 typical bearings.





Span 104



Pier A-4 Span 104 bearings.





Ramp A: Pier A-3 north face.



Ramp A east profile.





Ramp A west profile.



Ramp B: Abutment B





Abutment B has a few vertical cracks and small delaminations.



Ramp B Beam 1 has cracking and spalling with exposed rebar at the end.





Ramp B: Pier B-1 north face and Span 102.



Ramp B: Pier B-1 Column 2 has deep spalls with exposed rebar.





Ramp B: Bottom face of Pier B-1 cap has large spalls with exposed rebar.



Ramp B: Pier B-1 Column 1 has large spalls with exposed rebar.





Ramp B Beam 4 at Pier B-1 wide cracking and spalls with exposed rebar.



Ramp B: Pier B-1 typical bearing pad.





Ramp B Pier B-2 south face.



Ramp B: Pier B-2 Column 2 has deep spalls with exposed rebar.





Ramp B: Beam 1 at Pier B-2 spalling with exposed rebar.



Ramp B: Pier B-2 typical rocker bearing in Span 104 with corrosion on the lower part of the bearing and the masonry plate.





Ramp B: Pier B-3 north face.



Ramp B west profile.





Pier 103W south face.



Pier 103E south face.





Several rocker bearings at Pier 103W and 103E are partially buried in asphalt.



Pier 103W wide vertical cracking on Column 1.





Pier 104W and Pier 104E north faces.



Pier A-2 north face.



## 056B00191N Routine Inspection 12/09/24



Pier 105W and Pier 105E north faces.



Pier B-4 north face.





Pier A-1 north face.



Several rocker bearings at Pier A-1 are partially buried in asphalt.





Pier A-1/Column 1 cracking with efflorescence and rust staining.



Pier 106E north face.





Pier 106E north face bearings partially covered with asphalt.



Pier 106W north face.





Typical Pier 106W north face bearings.



Pier 106W Column 2 wide vertical crack.





Pier 106E south face.



Pier 106W south face.





Pier 106W south face large spalls with exposed rebar.



Pier 107E north face.





Pier 107W north face.



Several PCI beam ends in Spans 107 through 112 have sound CFRP patches, most in the SB portion. Span 107 at Pier 107W shown.





Pier 108E north face.



Pier 108W north face.





Pier 109E north face.



Pier 109E-Column 1 has spalling with exposed rebar throughout the south face.





Pier 109W north face.



Beam 1 at Pier 109W in Span 110 has a large spall with exposed rebar in the bottom face. West overhang also has large spalling at the pier joint.





Beam 9 at Pier 109W has a wide crack in the bottom face in Span 109.



Pier 110E south face.





Pier 110W south face.



Pier 111E north face.





Pier 111E cap has a large spall with rebar in the bottom face.



Pier 111W north face.





Pier 112E south face.



Pier 112E south face large spalls with exposed rebar and wide horizontal cracking.





Pier 112W north face.



Pier 112W south face wide horizontal crack.





Beam 8 in Span 113 near Pier 112E has wide cracking and a large spall with exposed rebar.



Span 113 soffit has a few intermittent transverse cracks with efflorescence.





Pier 113 north face.



Pier 113 Column 7 has a large corner spall with exposed rebar.





Beam 8 in Span 114 over Broadway has large spalls with exposed rebar for 72 linear feet.



Spalling in Beam 8 is worst near midspan exposing 3 layers of rebar with section loss.





Pier 114 north face and Span 114.



Wide vertical cracking on Column 4 at Pier 114.





Beam13 in Span 115 has wide longitudinal cracking in the bottom flange.



Pier 115 north face.





Typical Pier 115 bearing. Note spalling in diaphragm.



Spalling with exposed rebar in Pier 115E Column 3.





Pier 116 north face.



Pier 117 north face.





Pier 117E cap has a large delamination on the north face.



Pier 118 north face.





Wide vertical cracking on Column 6 at Pier 118E.



Large spalling in Pier 118W north face and Column 1.





Large spall and wide longitudinal cracking on the bottom face of Beam 16 in Span 119 at Pier 119E.



Pier 119 north face.





Beam 16 bottom flange in Span 120 has cracking and a large spall with exposed rebar mid-span.



Pier 120 north face.





Pier 121 north face.



Bottom face of Pier 121E cap has a large spall with exposed rebar.





Typical Pier 121 bearings partially covered with debris.



Pier 122 north face.





Typical Pier 122 bearings.



Span 123 is covered in soot from fires under the bridge.





Pier 123 north face.



Typical Pier 123 bearings.





Abutment C



Abutment C has moderate to wide horizontal cracking, delamination, unsound patches, and several spalls with exposed rebar.





Abutment C Beam 14.



There is evidence of fire damage in Span 124 at Abutment C in Bays 2-5, 7, and 8; coating is especially dull in this area and has some bubbling/peeling paint.





Close up of peeling paint on Beam 13 at Abutment C.