Inspector:Lentz,StephanieStructure Number:3105733Inspection Date:09/04/2024Facility Carried:INDIANA & OHIO

Ohio Bridge Inspection Summary Report

HAM-00052-2664 (3105733)

Onio Briage inspe	ection Sui	mmary Report		HAIVI-	00032-20	<u> </u>
2: DistrictDistr 15000 - CINCINNATI (HAM county) ict 08		5A: Inventory R	oute 2	00052		
	′ - Railroad	/	7: Facility On	INDIANA 8	CHIO	
	′ - Railroad	,	6: Feature Ints	SORTA	k OI IIO	
	- State Highwa	v Agency /	9: Location	1.3 MI E O	F IR 471	
220: Inv. Location DISTR	_	,,	Lat, Lon	39.116878		,-84.484478
	Condition				ucture Typ	
58: Deck		ory Condition	43: Bridge			
58.01 Wearing Surface	N - Not Applie	-	43. Blidge			orbeam System
58.02 Joint	N- Not Applic				t Applicable	orbeam bystem
59: Superstructure	4 - Poor Con		45: Spans I	Main / Approa		/ 0
59.01 Paint & PCS		(15-20% corr.)	107: Deck		9 - Other	, 0
60: Substructure	3 - Serious C		408: Comp		X - Not App	licable
61: Channel	N		414A Joint		N - None	nous is
61.01 Scour	N - Not Appl	icable	414B: Joint	• •	N - None	
62: Culverts	N - Not Appl			ring Surface	N - NA	
67.01 GA	3			g Garrage	N- Not Appl	icable
	Appraisal		422: WS Da	ite		
0.00		00/50 4 00	423: WS Th		0.0	
Sufficiency Rating	38.0	SD/FO 1 - SD		tive Coating	0 - Other Pa	aint
36: Rail, Tr, Gd, Term Std	N N	N N nimum tolerable limits to	102. DCC L	•	06/01/1960	
72: Approach Alignment	left in place a		453: Bearin	g Type 1	0 - Other	
113: Scour Critical	N - Not over		455: Bearin		N - None	
71: Waterway Adequacy	N - Not Applie	=	528: Found	n: Abut Fwd	U - Unknow	'n
	Geometric		533: Found	n: Abut Rear	U - Unknow	'n
48: Max Span Length (ft)		28.0	536: Found	n: Pier 1	U - Unknow	n
49: Structure Length (ft)		62.0	539: Found	n: Pier 2	N - None (S	Such as most Culverts)
52: Deck Width, Out-To-Ou	t (ft)	100.0		٨ ٥٠٥	and Convi	-
424: Deck Area (sf)		6200			and Servi	
32: Appr Roadway Width (f	t)	0.0		ıilt/ 106 Reha	ıb 1914	/ 0000
51: Road Width, Curb-Curb	(ft)	0.0	42A: Servic		2 - Railroa	
50A: Curb/SW Width: Left (ft)	0	42B: Servic	e Under	1 - Highwa pedestrian	ay, with or w/out
50A: Curb/SW Width: Right	(ft)	0	28A: Lanes	on	00	ı
_	(1.7)	0	28B: Lanes		02	
34: Skew (deg) 33: Bridge Median		0 - No median	19: Bypass		0	
54B: Min Vert Underclearar) (ft)	14.3	29: ADT	_og	9974	
336A: Min Vert Clrnce IR C	` '	14.3	109: % Tru	cks (%)	5	
336B: Min V Clr IR Non-Ca	` ,	14.3				
578: Culvert Length (ft)	idiliai (it)	0		Ins	pections	
	Load Bostin		90: Routine	Inen	Months 12	09/04/2024
	Load Posting	9	92A: FCM I	=	0	00/04/2024
41: Op/Post/Closed	A - Open		92B: Dive I	•	0	
70: Posting			92C: Specia	•	0	
70.01: Date			92D: UBIT	-	0	
70.02: Sign Type	0		92E: Drone	•	0	
734: Percent Legal (%)	0			•	-	
704: Analysis Date	07/01/1900	actuals or avaluation	Inspector	Lentz,Steph	anie	
63: Analysis Method	performed	nalysis or evaluation				

Inspector: Lentz, Stephanie **Structure Number:** 3105733

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3105733

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4	
60-Other Deck	3 - Mod.	992	sq. ft.	0	992	0	0	
	CS2: Moderate	rusting with	areas	of seepage	through edg	es of plates.		
107-Steel Open Girder/Beam	3 - Mod.	114	ft.	0	74	40	0	
	CS2: Moderate dings to bottom top of girder spi small angle ove CS3: North gird lower area of gi complete loss of distorting girder lower webs and	flanges; rusice cover plant forward farer, excession rder. Heavy of section at the sthis inspection of the sthis inspection for the sthis inspection at the sthis inspection at the sthis inspection.	st & del ate ove scia sid e rust/ pack r along l	oris on top ser pier broke de pier. pack rust to ust to many ower flange.	ide of botton in two; 3 ea web/stiffene stiffeners on Pack rust d	n flanges; bo ch rivots bro rs/lower fland OS fascia's oes not appe	th center ke off in ge, 20% of , causing ear to be	
515-Steel Protective Coating		3682	sq. ft.	0	0	2602	1080	
	CS3: 90% +/- ru CS4: Pack rust rusting along ou	layered, at	outside	e girder ends	s at lower we			
152-Steel Floor Beam	3 - Mod.	1488	ft.	0	1440	48	0	
	CS2: Moderate rusting and small areas of loss of section. Efflor. and stalactites visible on beams due to leakage. Several minor scrapes to bottoms at west side of east bound and west bound lanes. CS3: Heavy rust and moderate LOS in some areas to beam ends and supports above abutments.							
202-Steel Column	3 - Mod.	8	each	0	0	6	2	
	barrier, forward columns once e caused concret CS4: Two steel webs at the ste carrying capaci	encased in one to spall of columns had to concre	concrete f; minor ave per te inter	e barrier hav collision da forations and	re heavy LOS mage to cord section los	S & pack rus acrete and st s of the fland	t which eel. ges and	
215-Reinforced Concrete Abutment	3 - Mod.	200	ft.	50	125	25	0	
	3 - Mod. CS2: Both abut with efflorescer CS3: Heavy crafwd. Few spalls	ments have ice; small spacking and c	vertica palls an deterior	I, horizontal d deteriorati	cracking; so	ome seepage	0 e at right	
Abutment	CS2: Both abut with efflorescen CS3: Heavy cra	ments have ice; small spacking and c	vertica palls an deterior	I, horizontal d deteriorati	cracking; so	ome seepage	0 e at right	
Abutment	CS2: Both abut with efflorescer CS3: Heavy cra fwd. Few spalls	ments have ice; small spacking and co >6" in diam 100 has initiate s of pack ru	vertica palls an deterior neter. ft. d on all	I, horizontal d deteriorati ation extend 0 surfaces of distortion. To	cracking; so on. ing into seat 98 steel cap. wo areas on	area at left i	0 at right rear and 0	
Abutment 231-Steel Pier Cap	CS2: Both abut with efflorescer CS3: Heavy crafwd. Few spalls 3 - Mod. CS2: Corrosion CS3: Few areas	ments have ice; small spacking and co >6" in diam 100 has initiate s of pack ru	vertica palls an deterior neter. ft. d on all	I, horizontal d deteriorati ation extend 0 surfaces of distortion. To	cracking; so on. ing into seat 98 steel cap. wo areas on	area at left i	0 at right rear and 0	
Abutment 231-Steel Pier Cap	CS2: Both abut with efflorescer CS3: Heavy crafwd. Few spalls 3 - Mod. CS2: Corrosion CS3: Few areas appear to be m	ments have ice; small specking and colored in diam 100 has initiate is of pack ruoving upwar 64 st with some	vertica palls an deterior neter. ft. d on all st with rd at joi each	I, horizontal d deteriorati ation extend 0 surfaces of distortion. To the in plate and debris and be deteriorated.	cracking; so on. ing into seat 98 steel cap. wo areas on and one area 64 allast around	area at left of the second of	0 e at right rear and 0 f cap e cracked.	
Abutment 231-Steel Pier Cap 316-Other Bearing	CS2: Both abut with efflorescer CS3: Heavy crafwd. Few spalls 3 - Mod. CS2: Corrosion CS3: Few areas appear to be m 3 - Mod. CS2: Heavy rus	ments have ice; small specking and colored in diam 100 has initiate is of pack ruoving upwar 64 st with some	vertica palls an deterior neter. ft. d on all st with rd at joi each	I, horizontal d deteriorati ation extend 0 surfaces of distortion. To the in plate and debris and be deteriorated.	cracking; so on. ing into seat 98 steel cap. wo areas on and one area 64 allast around	area at left of the second of	0 e at right rear and 0 f cap e cracked.	
Abutment 231-Steel Pier Cap 316-Other Bearing	CS2: Both abut with efflorescer CS3: Heavy cra fwd. Few spalls 3 - Mod. CS2: Corrosion CS3: Few area: appear to be m 3 - Mod. CS2: Heavy rus both rear abutm	ments have ice; small spacking and cooking and cooking and cooking and cooking and cooking and cooking upware and cooking upwar	vertical ver	I, horizontal d deterioration extend 0 surfaces of distortion. To the in plate and be red with balling output brace by fence missi	cracking; so on. ing into seat 98 steel cap. wo areas on one area 64 allast around ast/debris. 0 oolt missing. Ong at center	south side of appears to be abuttment be 124 Cracking/del of rear railing area at left in the 124	0 e at right rear and 0 f cap e cracked. 0 earings; 0 am to	
231-Steel Pier Cap 316-Other Bearing 330-Metal Bridge Railing	CS2: Both abut with efflorescer CS3: Heavy crafwd. Few spalls 3 - Mod. CS2: Corrosion CS3: Few area: appear to be m 3 - Mod. CS2: Heavy rus both rear abutm 3 - Mod. CS3: Rusting w concrete base.	ments have ice; small spacking and cooking and cooking and cooking and cooking and cooking and cooking upware and cooking upwar	vertical ver	I, horizontal d deterioration extend 0 surfaces of distortion. To the in plate and be red with balling output brace by fence missi	cracking; so on. ing into seat 98 steel cap. wo areas on one area 64 allast around ast/debris. 0 oolt missing. Ong at center	south side of appears to be abuttment be 124 Cracking/del of rear railing area at left in the 124	0 e at right rear and 0 f cap e cracked. 0 earings; 0 am to	
	CS2: Both abut with efflorescer CS3: Heavy crafwd. Few spalls 3 - Mod. CS2: Corrosion CS3: Few areas appear to be m 3 - Mod. CS2: Heavy rus both rear abutm 3 - Mod. CS3: Rusting w concrete base. with 2 ea. cable	ments have ace; small specking and colors acking	vertical vertical vertical value and vertical value and vertical v	I, horizontal d deterioration extend 0 surfaces of distortion. Tont in plate an debris and bred with balling outpets and bred extended to the fence mission of the control	cracking; so on. ing into seat 98 steel cap. wo areas on one area 64 allast around ast/debris. 0 oolt missing. one of two of two of two of two one one of two one of	south side of appears to be abutment be 124 Cracking/del of rear railing d. rail.	o e at right rear and o f cap he cracked. o hearings; o am to g (replaced	

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09/04/2024 **INDIANA & OHIO Facility Carried: Inspection Date:**

HAM-00052-2664 (3105733)

Date Built:

07/01/1914

Facility Carried: INDIANA & OHIO Major Maint: 27 - Railroad Traffic On: 2 - Railroad Rehab Date: Insp. 01 - State Highway Agency Resp A: Routine Maint: 27 - Railroad Feature Inters: SORTA Traffic Under: 1 - Highway, with or w/out pedestrian

1.3 MI E OF IR 471 FIPS Code: 15000 - CINCINNATI (HAM county) Location: DISTRICT 08 Resp B:

Inspector Lentz, Stephanie Inspection Date 09/04/2024 Reviewer Collett.Brandon

<u>Inspector Comments - Deck and Approach</u>

Deck

Floor/Slab

ODOT District: District 08

Rust to plates in areas of leakage.

Bridge Railing

Rust with LOS, some bracing missing, 2 sections missing in metal rail, replaced with cable. Cracking/delams/spalls in concrete base.

Drainage

Approach

Approach Embankment

Note: Manhole 8' from right forward railing end post has cover missing. Left rear adjacent wing wall catch basin with clogged grate. Area at left rear with embankment and water washing over wall down to pavement. Left catch basin grate under structure is clogged with debris and mud.

Inspector Comments - General Appraisal

<u>Superstructure</u>

Beams/Girders

Rust, corrosion throughout girders with heavier, flaking rust mainly along lower flanges. Few scrapes to bottom flanges with broken splice plates in top of both girders. Several rivets broken or with LOS. Heavy layered rust along top of exterior lower flange, this extends into stiffeners, some areas and bottom of stiffeners with complete loss of section.

Floor Beams

Moderate rust to all floor beams with heavier rust in areas of leakage. Some pack rust between plates of beams with minor distortion visible. Some LOS at ends over abutments.

Bearings Devices

Rust to heavy and pack rust to bearings, debris and ballast has collected around several.

Fatigue

No live load at time of inspection in 2024; only 1 of three original train tracks show sign of use.

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Protective Coating System

Up to 90% of paint on girders, floor beams and steel pier has failed. Corrosion, heavy pack rust and areas of complete loss of section to exterior faces of girders

Substructure

Abutments

Vertical, horizontal and diagonal cracks rear and fwd., heavy efflor. to several. Left rear and fwd. areas have heavier/map cracking with deterioration and staining. Several areas of spalls.

Pier Columns/Bents

Rust and corrosion to columns. All columns have areas of section loss at top of concrete barrier with small areas of complete section loss, thinning of steel. Pack rust has caused upper sections of concrete barrier to spall, exposing column. Some collision damage column flanges. ***Reviewer: Review of 2021 inspection report/photos at least columns are severely deteriorated to the point the load path of the piers is affected. The extent of the deterioration cannot be fully determined at any of the columns due to excessive packrust at the column to concrete interface. Reviewer lowered the pier rating to a 3, serious condition.

Pier Caps

Corrosion throughout cap, with some pack rust between plates on exterior faces, causing some distortion. 2024; South side of pier, 3 areas were noticed where top plate of cap has pack rust and moving plates upward at possible joint, one appears to have crack in top plate.

Backwalls

Cracking and efflors.

Wingwalls

Deterioration/shallow spalls and scaling of concrete, efflor. buildup and random horizontal and vertical cracking.

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

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Scour Critical

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Bridge Inspection Report

Pictures