HistoricBridges.org - National Bridge Inventory Data Sheet

2013 Inventory

The National Bridge Inventory contains data submitted by state transportion departments to the Federal Highway Administration in coded format.
Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

Basic Information

Ohio [39]	Fairfield County [045]	Richland [66684]	.5 M W OF JCT SR 664	39-45-40 = 39.761111	082-26-26 = -82.440556

2300427	Highway agency district	5	Owner	State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]

Route	22	US 22	Toll	On free road [3]	Features intersected	CONRAIL RR & LIT RUSH CR

Design - main	Steel [3]	Design - approach	Steel [3]	Kilometerpoint	3846 km = 2384.5 mi
1	Truss - Deck [09]	2	Stringer/Multi-beam or girder [02]	Year built	1959
				Year reconstructed	N/A [0000]
				Skew angle	0
				Structure Flared	
				Historical significance	Bridge is not eligible for the NRHP. [5]

Total length	157 m = 515.1 ft	Length of maximum span	65.2 m = 213.9 ft	Deck width, out-to-out	11.3 m = 37.1 ft	Bridge roadway width, curb-to-curb	10.3 m = 33.8 ft
Inventory Route, Total Horizontal Clearance	10.3 m = 33.8 ft	Curb or sidewalk width - left	0 m = 0.0 ft	Curb or sidewalk width - right	0 m = 0.0 ft		

Deck structure type	Concrete Cast-in-Place [1]
Type of wearing surface	Other [9]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	19.9 metric ton = 21.9 tons	
0.3 km = 0.2 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	33.3 metric ton = 36.6 tons	
	Bridge posting	Equal to or above legal loads [5]	Design Load	M 18 / H 20 [4]	

Functional Details

Average Daily Traffic	4030	Average daily truck traffi	7 %	Year	2009	Future average daily traffic	5594
Year	2033						
Road classification	Minor Arterial (Rural) [06]	Lanes on structure	2	Approach roadway width	14 m = 45.9 ft		
Type of service on bridge	Highway [1]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designation	No parallel structure exists. [N]						
Type of service under bridge	Railroad-waterway [7]	Lanes under structure	0	Navigation control			
Navigation vertical clearanc	0 = N/A	Navigation horizontal clearance	0 = N/A				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	99.99 m = 328.1 ft				
Minimum lateral underclearance reference feature	Railroad beneath structure [R]						
Minimum lateral underclearance on right	99.9 = Unlimited	Minimum lateral underclearance on left	5.8 m = 19.0 ft				
Minimum Vertical Underclearance	8.53 m = 28.0 ft	Minimum vertical underclearance reference feature	Railroad beneath structure [R]				
Appraisal ratings - underclearances	Superior to present desirable criteria [9]						

Repair and Replacement Plans

Type of work to be performed

Work done by

Bridge improvement cost

Roadway improvement cost

Length of structure improvement

Total project cost

Year of improvement cost estimate

Border bridge - state

Border bridge - percent responsibility of other state

Border bridge - structure number

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructure	Fair [5]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Fair [5]		
Scour	Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]		
Channel and channel protection	Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift. [7]		
Appraisal ratings - water adequacy	Superior to present desirable criteria [9]	Status evaluation	
Pier or abutment protection		Sufficiency rating	63.7
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]		
Traffic safety features - transitions			
Traffic safety features - approach guardrail	Inpected feature meets currently acceptable standards. [1]		
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]		
Inspection date	May 2012 [0512]	Designated inspection frequency	12 Months
Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	May 2012 [0512]
Other special inspection	Not needed [N]	Other special inspection date	

District: 05 | County: FAIRFIELD | (101) Location: .5 M W OF JCT SR 664 | (102) Facility Carried: US 22
(2) FIPS Code: FAI-T-66684-RICHLAND TWP | (103) Route On Bridge: STATE (ODOT) (TOLL FR | (104) Route Under Bridge: NON HIGHWAY TRAFFIC ON BRIDGE
(9) Direction of Traffic: 2-WAY TRAFFIC | (10) Temporary: N | (11) Truck Network: N | (12) Parallel: N
(100) Type Serv: (On): HIGHWAY | (Under): RAILROAD - WATERWAY

Inventory Route Data

(3) Route On/Under: ROUTE CARRIED "ON" THE STR | Hwy Sys: U.S. NUMBERED HIGHWAY
Route No: 00022 | Dir: NOT APPLICABLE | Des: MAINLINE | Pref: N
(4) Feature Intersected: CONRAIL RR & LIT RUSH CR
(5) County: FAI | Mileage: 23890 | Special Desig: N
(6)Avg. Daily Traffic(ADT): 5,330 | (7) ADT Year: 2012
(8) Truck Traf: 320 | (14) NHS: NON-NHS BRG E | (15) Corridor: N
(16) Functional Class: RURAL - MINOR ARTERIAL | (19) Strahnt: NON-STRAHNET BRIDGES

Intersected Route Data

(22) Route On/Under: | Hwy Sys:
Route No: | Dir: | Des: | Pref:
(23) Feature Intersected:
(24) County: | Mileage: 0000 | Special Desig:
(25)Avg. Daily Traffic(ADT): | (26) ADT Year:
(27) Truck Traf: | (28) NHS: - | (29) Corridor: N
(30) Functional Class: | (36) Strahnt:

Clearance On the Bridge

(154) Min. Hriz on Bridge: NC: 0.0 | Card: 33.7 Ft
(155) Prac Max Vert On Brg: 9999.9 Ft
(67) Min Vrt Clr On Brg: NC: 0.0 | Card: 9999.9 Ft
(80) Min Latl Clr: NC: 0.0/0.0 Ft | Card: 4.1/5.1 Ft
(81) Vrt Clr Lft: 0.0 Ft

Structure Information

(38) Bypass Length: 02 Miles
(39) Latitude: 39 Deg 45 Min 40.88 Sec | Longitude: 82 Deg 26 Min 26.62 Sec
(40) Toll: ON FREE ROAD, THE STRUCTU
(41) Date Built: 7/1/1959 | (42) Major Rehabilitation:
(43) No. Lanes On: 2 | No. Lanes Under: 0
(44) Horiz Curve: | (45) Skew: 0 Deg
(49) App. Rdw Width: 46 Ft | (50) Brg. Rdw Width: 33.8 Ft
(51) Deck Width: 37.2 Ft | Deck Area: 19160 Sq. Ft
(52) Median Type: NONE/NON BARRIER/NO JOINT
(53) Bridge Median: NO MEDIAN
(54) Sidewalks: | (left) 0.0 Ft | (right) 0.0 Ft
(55) Type Curb or Sidewalks:
(Left) Matl: NONE | Type: NONE OR N/A (RR, PEDESTRIAN, ETC.)
(Right) Matl: NONE | Type: NONE OR N/A (RR, PEDESTRIAN, ETC.)
(56) Flared: N | (57) Composite: U - NOT APPLICABLE
(58) Railing: REINFORCED CONCRETE PARAPET
(59) Deck Drainage: SCUPPERS AND DOWNSPOUTS
(60) Deck Type: REINFORCED CONCRETE
(61) Deck Protection: External: NONE OR NOT APPLICABLE
Internal: NONE OR NOT APPLICABLE
(62) Wearing Surface: SUPER-PLASTICIZED DENSE CONCRETE (SDC) -
Thickness: 2.5 in | (119) Date of Wearing Surface: 1/1/1985
Slope Protection: STONE (NO. 1 AGGREGATE)

(63) Main Spans Number: 1 | Type: STEEL/TRUSS/DECK
Approach Spans Number: 2 | Type: STEEL/BEAM/SIMPLE
Total Spans: 3 | (65) Max Span: 214 Ft | (66) Overall Leng: 515 Ft

(70) Substructure		(71) Foundation and Scour Information	
Abut-Rear	Matl: CONCRETE	Type: GRAVITY	Fnd: SPREAD FOOTING
Abut-Fwd	Matl: CONCRETE	Type: PEDESTAL	Fnd: SPREAD FOOTING
Pier-Pred	Matl: CONCRETE	Type: OPEN COLUMN	Fnd: STEEL H PILES (OTHER SIZE)
Pier-Other	Matl: NONE	Type: NONE	Fnd: SPREAD FOOTING
Pier-Other	Matl: NONE	Type: NONE	Fnd: NONE (SUCH AS MOST CULVERTS)
No of Piers Predominate:		Other:	Other:

(86) Stream Velocity: 00000 | (74) Scour: BRIDGE FOUNDATIONS DETERMINED TO BE STAB
(189) Dive: N Freq: 0 | Probe: Y Freq: 0 | (75) Chan Prot: NONE
(189) Date of last Dive Insp: | (152) Drainage Area: UUU Sq Mi

Clearance Under the Bridge

(156) Min. Horiz Under Clear: NC: 0.0 Ft | Card: 0.0 Ft
(157) Prac Max Vrt Under Clear: 28.0 Ft
(77) Min Vert Under Clear: NC: 0.0 Ft | Card: 28.0 Ft
(78) Min Lat Under Clear: NC: 0.0/0.0 Ft | Card: 19.0/9999.9 Ft

Load Rating Information

(48) Design Load: H20
Opr Rat Fact: 1.027 LD: HS20 LOADING
Inv Rat Fact: 0.615 LD: HS20 LOADING
(83) Ohio Percent of Legal Load: 120
Year of Rating: 2012
(84) Analysis: LOAD FACTOR RATING (LFR)
(85) Rate Soft: COMBINATION
Analysis on Bars: NOT ON BARS [DEFAULT]
PE#: 57465 OMAR ABU-HAJAR

(88-89) Appraisal

(Including calculated Items)
(88) Waterway Adequacy: 9
(89) Approach Alignment: 6
Calc Gen Appraisal: 5
Calc Deck Geometry: 4
Calc Underclearance: 9

Approach Information

(109) Approach Guardrail: STEEL BEAM
(110) Approach Pavement: BITUMINOUS | (111) Grade: GOOD

Culvert Information

(131) Culvert Type: NOT A CULVERT OR RIGID FRAME | (127) Length: 0.0 Ft
(129) Depth of Fill: 0.0 Ft | (130) Headwalls: NONE OR NOT APPLICABLE (NOT A CU

General Information

(121) Main Member: RIVETED BUILT-UP STEEL | (122) Moment Plate: NO MOMENT PLATES
(169) Expansion Joint: METAL FINGER
(124) Bearing Devices: ROLLERS
(126) Navigation: Control-N | Vert Clr: 0.0 Ft | Horiz Clear: 0.0 Ft
(193) Spec Insp: N | Freq: 0 | Date:
(188) Fracture Critical Insp: Y | Freq: 24 | Date: 5/23/2013
(138) Long Member: TWO TRUSSES (RIVETED) | (135) Hinges: SEATED HINGES (ROLLERS, PLATES, POT
(141) Structural Steel Memb: UNKNOWN | (139) Framing: NONE OR NOT APPLICABLE
Railing: U
Pay Wt: 0 pounds | Prime Loc: FIELD | Paint: PAINT SYSTEM OZEU
Bridge Dedicated Name:

General Information (Continued)

(---) Hist Significance: NOT ELIGIBLE
(69) NBIS: Y
(---) Hist Builder: OHIO STATE HIGHWAY DEPARTMENT
Hist Build Year: 1959
(69) Hist Type: CANITLEVER
(161) Special Features (see below):
(105) Border Bridge State: Resp: %(106) SFN:

Proposed Improvements

(90) Type Work: -
(90) Length: Ft
(90) Bridge Cost ($1000s):
(90) Roadway Cost ($1000s):
(90) Total Project Cost ($1000s):
(90) Year:
(91) Future ADT (On Bridge): 5594
(92) Year of Future ADT: 2033

Programming Info

PID Number: 13840
PID Status: PROGRAM
PID Date: 7/15/1997

Original Plans Information

(142) Fabricator: R C MAHON
(143) Contractor: C E REPLOGLE
(144) Ohio Original Construction Project No: 032157
(---) Microfilm Reel: FAI006
(151) Standard Drawing:
Aperture Cards: Orig: Y Repair: N Fabr: Y
Plan Information Available: 1 PLAN INFORMATION AVAILABLE FOR LOAD RATI

(153) Repair Projects:

1) 630246 / UUU	2) 8200FA / 044	3) 830210 / 020
4) 850794 / 044	5) / 011	6) /

Inspection Summary

(I-8) Deck:	5
(I-32) Superstructure:	5
(I-42) Substructure:	6
(I-50) Culvert:	N
(I-54) Channel:	7
(I-60) Approaches:	6
(I-66) General Appraisal:	5
(I-66) Operational Status:	A
Inspection Date:	5/23/2013
(94) Desig Insp Freq	12 Months

(I-69) Survey Items

Railings:	
Transitions:	
Guardrail:	
Rail Ends:	
In Depth:	
Fracture Critical:	
Scour Critical	
Critical Findings:	
Insp. Update Date:	5/23/2013

Utilities

(46)	Electric:	N
	Gas:	N
	Sanitary Sewer:	N
	Telephone:	N
	TV Cable:	N
	Water:	N
	Other:	N

Special Features

(161)	Lighting:	N
	Fencing:	N
	Glare-Screen:	N
	Splash-Guard:	N
	Catwalks:	N
	Other-Feat:	N
(184)	Signs-On:	N
	Signs-Under	N
(162)	Fence-Ht	0.0
(163)	Noise Barr	N

SFNs Replacing this retired bridge: -
SFNs That were replaced by this bridge: -
This bridge was retired and copied to:
The bridge was copied from:

INV Field Bridge Marker: FAI - 00022 - 2389 - N
INT Field Bridge Marker: - - 0000 -

(95) Insp: OHIO STATE TRANSPORTATION DEPARTMENT	2nd: NONE	3rd: NONE
(96) Maint: OHIO STATE TRANSPORTATION DEPARTMENT	2nd: NONE	3rd: NONE
(97) Routine: OHIO STATE TRANSPORTATION DEPARTMENT	2nd: NONE	3rd: NONE

PONTIS CoRe elements and Conditions States

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
22	CONCRETE DECK PROTECTED W/RIGID OVERLAY	1		0	1	0	0	0
131	PAINTED STEEL DECK TRUSS	1028		0	1028	0	0	0
215	REINFORCED CONC ABUTMENT	74		0	74	0	0	0
303	ASSEMBLY JOINT/SEAL	74		0	74	0	0	0
321	REINFORCED CONCRETE APPROACH SLAB	2		2	0	0	0	0
331	CONCRETE BRIDGE RAILING	1028		1028	0	0	0	0

(*) Percentages should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

STRUCTURE FILE NUMBER: 2300427 | FAI CO: 00022 Route: 23890 SLM | FIPS: FAI-T-66684-RICHLAND TWP | **DATE BUILT** 07/01/1959

District 05 | STEEL/TRUSSDECK | **Type of Service** 1 17 CONRAIL RR & LIT RUSH CR | N SD | FAI

DECK

1. Floor	Out/Out 37.2 1-REINFORCED CONCRETE	**2**	2. Wearing Surface	THCK= 2.5 A-SUPER-PLASTICIZED DENSE CONCRETE	3
3. Curbs, Sidewalks & Walkways	N-NONE N-NONE	2	4. Median	W.S. Date = 01/01/1985 N-NO MEDIAN	
5. Railing	1-REINFORCED CONCRETE PARAPET	1	6. Drainage	3-SCUPPERS AND DOWNSPOUTS	2
7. Expansion Joints	1-METAL FINGER	2	**8. SUMMARY**	Deck Area: 19,160	5

SUPERSTRUCTURE

9. Alignment of Members	MAX.SPAN.LENGTH = 214	1	10. Beams/Girders/Slab	2-RIVETED BUILT-UP STEEL	**2**
11. Diaphragms or Cross Frames	TOT.LGTH = 515	2	12. Joist/Stringers		**2**
13. Floorbeams		**1**	14. Floorbeam Connections		
15. Verticals		**2**	16. Diagonals		**2**
17. End posts			18. Upper Chord		**2**
19. Lower Chord		**2**	20. Gusset Plates		**2**
21. Lateral Bracing		2	22. Sway Bracing		2
23. Portals			24. Bearing Devices	1-ROLLERS 2-ROCKERS & BOLSTERS	2
25. Arch			26. Arch Columns or Hangers		
27. Spandrel Walls			**28. Protective Coating System (PCS)**	TYPE: 5PAINT SYSTEM OZEU DATE = 08/01/1998	2
29. Pins/Hangers/Hinges	ADT: 5,330 TRUCK: 320 YEAR: 2012	**2**	30. Fatigue Prone Detail (E & E')		**1**
31. Live Load Response (E or S)		S	**32. SUMMARY**		5

SUBSTRUCTURE

33. Abutments	2-CONCRETE 2-CONCRETE	**2**	34. Abutment Seats	PIERS= # OF SPANS=3	**1**
35. Piers	TYPE = 2-CONCRETE	**1**	36. Pier Seats		**1**
37. Backwalls		2	38. Wingwalls	ABUTMENT:=SPREAD FOOTING/SPREAD FOOTING	1
39. Fenders and Dolphins			40. Scour (Insp Type - 1, 2, 3)	8-BRIDGE FOUNDATIONS DETERMINED TO BE STAB	**1**
41. Slope Protection	2-STONE (NO. 1 AGGREGATE)	1	**42. SUMMARY**	DIVE DT= N/A	6

CULVERTS

43. General			44. Alignment	
45. Shape			46. Seams	
47. Headwalls or Endwalls			48. Scour (Insp Type - 1, 2, 3)	
49. Abutments			**50. SUMMARY**	N

CHANNEL

51. Alignment		1	52. Protection	N-NONE	
53. Hydraulic Opening		1	**54. SUMMARY**		7

APPROACHES

55. Pavement	2-BITUMINOUS	1	56. Approach Slabs		2
57. Guardrail	1-STEEL BEAM	2	58. Relief Joint		
59. Embankment	BRDG.WIDTH=33.8	2	**60. SUMMARY**	PCT.LEGAL= 120	6

GENERAL

61. Navigation Lights			62. Warning Signs	ROUTINE.RESP: 1-OHIO STATE TRANSPORTATION DEPARTMENT MAINT.RESP: 1-OHIO STATE TRANSPORTATION DEPARTME	1
63. Sign Supports	MVC ON=9999 UND=2800		64. Utilities		
65. Vertical Clearance (1, 2-change, N)			66. **General Appraisal** & Operational Status	5	A

67. INSPECTED BY

Print First & Last Name | PE Number | MB Initial

Inspected Date: 5/23/2013

68. REVIEWED BY

Print First & Last Name | 58,440 PE Number | CZ Initial

Reviewed Date: 1/1/0001

69. Survey (1, 0, N)