

The National Bridge Inventory contains data submitted by state transportation departments to the Federal Highway Administration in coded format.
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Basic Information

Ohio [39] Preble County [135] Harrison [33992] E. OF YOHE RD 00-00-00 = 0.000000 000-00-00 = - 0.000000

6837255 Highway agency district 8 Owner County Highway Agency [02] Maintenance responsibility County Highway Agency [02]

Route #Num! SONORA RD Toll On free road [3] Features intersected TWIN CREEK

Design - main Steel [3] Design - approach Other [00] Kilometerpoint 0 km = 0.0 mi

1 Truss - Thru [10] 0 Other [00] Year built 1902 Year reconstructed N/A [0000]

Skew angle 0 Structure Flared

Historical significance Bridge is not eligible for the NRHP. [5]

Total length 28.3 m = 92.9 ft Length of maximum span 26.5 m = 86.9 ft Deck width, out-to-out 4.9 m = 16.1 ft Bridge roadway width, curb-to-curb 4.8 m = 15.7 ft

Inventory Route, Total Horizontal Clearance 4.8 m = 15.7 ft Curb or sidewalk width - left 0 m = 0.0 ft Curb or sidewalk width - right 0 m = 0.0 ft

Deck structure type Wood or Timber [8]

Type of wearing surface Wood or Timber [7]

Deck protection

Type of membrane/wearing surface

Weight Limits

Bypass, detour length 0.3 km = 0.2 mi Method to determine inventory rating No rating analysis performed [5] Inventory rating 21.7 metric ton = 23.9 tons

Method to determine operating rating No rating analysis performed [5] Operating rating 29.8 metric ton = 32.8 tons

Bridge posting Design Load M 13.5 / H 15 [2]

Functional Details

Average Daily Traffic	70	Average daily truck traffi	0	%	Year	1969	Future average daily traffic	97	Year	2027	
Road classification	Local (Rural) [09]		Lanes on structure	1		Approach roadway width	7.3 m = 24.0 ft				
Type of service on bridge	Highway [1]		Direction of traffic	One lane bridge for 2 - way traffic [3]		Bridge median					
Parallel structure designation	No parallel structure exists. [N]										
Type of service under bridge	Waterway [5]		Lanes under structure	0		Navigation control	Not applicable, no waterway. [N]				
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	3.05 m = 10.0 ft				
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]										
Minimum lateral underclearance on right	0 = N/A					Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	0 = N/A		Minimum vertical underclearance reference feature	Feature not a highway or railroad [N]							
Appraisal ratings - underclearances	N/A [N]										

Repair and Replacement Plans

Type of work to be performed	Work done by			Work to be done by contract [1]			
Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]	Bridge improvement cost	\$98,000	Roadway improvement cost	\$10,000			
	Length of structure improvement	28.3 m = 92.9 ft		Total project cost	\$112,000		
	Year of improvement cost estimate	2019					
	Border bridge - state				Border bridge - percent responsibility of other state		
	Border bridge - structure number						

Inspection and Sufficiency

Structure status	Posted for load [P]	Appraisal ratings - structural	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - superstructure	Poor [4]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Poor [4]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Poor [4]		
Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]		
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	Equal to present desirable criteria [8]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	38.8
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions			
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends			
Inspection date	July 2010 [0710]	Designated inspection frequency	12 Months
Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	July 2010 [0710]
Other special inspection	Not needed [N]	Other special inspection date	

Unit of Measure: **English**
Structure File Number **6837255**
Sufficiency Rating: **18.7 SD**

Bridge Inventory Information
Inventory Bridge Number: **PRE T0445 0025**
ON TWIN CREEK

Report Date **02/27/2013** **BM-191** Page: 1 of 2
BR. Type STEEL / TRUSS / THRU
Date of Last Inventory Update: **11/09/2012**

District: **08** County **PREBLE** (101) Location: **E. OF YOHE RD** (102) Facility Carried: **SONORA RD**
(2) FIPS Code: **HARRISON TWP** (103) Route On Bridge: **TOWNSHIP** (104) Route Under Bridge: **NON-HIGHWAY**
(9) Direction of Traffic: **ONE LANE FOR 2-WAY TRAFFIC** (10) Temporary: **N** (11) Truck Network: **N** (12) Parallel: **N**
(95) Insp: **COUNTY** (96) Maint: **COUNTY** (97) Routine: **COUNTY** (100) Type Serv: (On): **HIGHWAY** (Under): **WATERWAY**

Inventory Route Data
(3) Route On/Under: **ON** Hwy Sys: **COUNTY/TOWNSHIP HIGHWAY** (63) Main Spans Number: 1 Type: **STEEL / TRUSS / THRU**
Route No.: **T0445** Dir: Des: **MAINLINE** Pref: Approach Spans Number: 0 Type: **NONE / NONE / NONE**
Total Spans: 1 (65) Max Span: **87 Ft** (66) Overall Leng: **93 Ft**

(4) Feature Intersected: **TWIN CREEK** (70) Substructure (71) Foundation and Scour Information
(5) County: **HAR** Mileage: **0025** Special Desig: Abut-Rear Matl: **STONE** Type: **SOLID WALL** Fnd: **SPREAD FOOTING**
(6) Avg. Daily Traffic(ADT): **70** (7) ADT Year: **1969** Abut-Fwd Matl: **STONE** Type: **SOLID WALL** Fnd: **SPREAD FOOTING**
(8) Truck Traf: **2** (14) NHS: **NO - X** (15) Corridor: **N** Pier-Pred Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**
(16) Functional Class: **LOCAL ROAD-RURAL** (19) Strahnt: **Not Applicable** Pier-Other Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**
Pier-Other Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**

Intersected Route Data
(22) Route On/Under: Hwy Sys: No of Piers Predominate: **NN** Other: **NN** Other: **NN**
Route No.: Dir: Des: Pref: (86) Stream Velocity: **UUU** (74) Scour: **STABLE: SCOUR WITHIN LIMITS OF FOOT/PILE**
(23) Feature Intersected: (189) Dive: **N Freq: 0** Probe: **Y Freq: 12** (75) Chan Prot: **OTHER-GRASS, BUSHES & TREES**
(24) County: Mileage: Special Desig: (189) Date of last Dive Insp: (152) Drainage Area: **UUU Sq Mi**
(25) Avg. Daily Traffic(ADT): **0** (26) ADT Year:
(27) Truck Traf: **0** (28) NHS: - (29) Corridor:
(30) Functional Class: (36) Strahnt: **Not Applicable**

Clearance Under the Bridge
(156) Min. Horiz Under Clear: NC: **0.0 Ft** Card: **0.0 Ft**
(157) Prac Max Vrt Under Clear: **0.0 Ft**
(77) Min Vert Under Clear: NC: **0.0 Ft** Card: **0.0 Ft**
(78) Min Lat Under Clear: NC: **0.0 / 0.0 Ft** Card: **0.0 / 0.0 Ft**

Clearance On the Bridge
(154) Min Hriz on Bridge: NC: **0.0 Ft** Card: **15.8 Ft**
(155) Prac Max Vert On Brg: **10.0 Ft**
(67) Min Vrt Clr On Brg: NC: **0.0 Ft** Card: **10.0 Ft**
(80) Min Latl Clr: NC: **0.0 / 0.0 Ft** Card: **0.0 / 0.0 Ft**
(81) Vrt Clr Lft: **0.0 Ft**

Structure Information
(38) Bypass Length: **02 Miles**
(39) Latitude: **39 Deg 53.3 Min** Longitude: **84 Deg 35.4 Min**
(40) Toll: **ON FREE ROAD**
(41) Date Built: **07/01/1902** (42) Major Rehabilitation:
(43) No. Lanes On: **1** No. Lanes Under: **0**
(44) Horiz Curve: **Deg. Min.** (45) Skew: **0 Deg**
(49) App. Rdw Width: **24 Ft** (50) Brg. Rdw Width: **15.8 Ft**
(51) Deck Width: **16.0 Ft** Deck Area: **1485 Sq. Ft**
(52) Median Type: **NONE / NON BARRIE / NO JOINT**
(53) Bridge Median: **NO MEDIAN**
(54) Sidewalks: (left) **0 Ft** (right) **0 Ft**
(55) Type Curb or Sidewalks:
(Left) Matl: **NONE** Type: **NONE**
(Right) Matl: **NONE** Type: **NONE**
(56) Flared: **N** (57) Composite:

Load Rating Information (88-89) Appraisal
(48) Design Load: **HS/20** (Including calculated Items)
(83) Operating: **33 Ton**
Inventory: **24 Ton**
Ohio Percent of Legal Load **90** (88) Waterway Adequacy **8**
Year of Rating: **2011** (89) Approach Alignment **8**
(84) Analysis: **ALLOWABLE STRESS OR WORKING STRESS** Calc Gen Appraisal: **3**
(85) Rate Soft: **BARS** Analyzed by: **K&K** Calc Deck Geometry: **2**
Analysis on Bars: **NOT ON BARS [DEFAULT]** Calc Underclearance: **N**

Approach Information
(109) Approach Guardrail: **NONE**
(110) Approach Pavement: **BITUMINOUS** (111) Grade: **GOOD**

Culvert Information
(131) Culvert Type: **NONE/NOT APPLICBLE** (127) Length: **0.0 Ft**
(129) Depth of Fill: **0.0 Ft** (130) Headwalls: **NONE**

General Information
(121) Main Member **ROLLED STEEL** (122) Moment Plate: **NONE**
(169) Expansion Joint: **SLIDING METAL PLATE ANGLE**
(124) Bearing Devices: **ROLLERS/NONE**
(126) Navigation: **Control- X** 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: **2012-06-28**
(138) Long Member: **TWO TRUSSES (RIVETED)** (135) Hinges: **PINS AND HANGERS**
(141) Structural Steel Memb: **UNKNOWN** (139) Framing: **NONE**
Railing: **UNKNOWN**
Paint: **OTHER**
Pay Wt: **0 pounds** Prime Loc: **UNKNOWN**
Bridge Dedicated Name:

Unit of Measure: **English**
 Structure File Number **6837255**
 Sufficiency Rating: **18.7 SD**

Bridge Inventory Information
 Inventory Bridge Number: **PRE T0445 0025**
ON TWIN CREEK

Report Date **02/27/2013** BM-191 Page: 2 of 2
 BR. Type **STEEL/TRUSS/THRU**
 Date of Last Inventory Update: **11/09/2012**

General Information (Continued)				Original Plans Information			
(---) Hist Significance: NOT HISTORIC		(69) NBIS: Y		(142) Fabricator:			
(---) Hist Builder: UNKNOWN		Hist Build Year: 1902		(143) Contractor:			
(69) Hist Type: PRATT (PINNED)				(144) Ohio Original Construction Project No.:			
(161) Special Features (see below):				(---) Microfilm Reel:			
(105) Border Bridge State: Resp % (106) SFN:				(151) Standard Drawing:			
Proposed Improvements		Programming Info		Aperture Cards: Orig: N Repair: N Fabr: N			
(90) Type Work: 31 - BRG/STR REPL--SUBSTD LD CAP OR RDW GEOM		PID Number:		Plan Information Available: 1PLAN INFORMATION AVAILABLE			
(90) Length: Ft		PID Status:		(153) Repair Projects			
(90) Bridge Cost (\$1000s): 0		PID Date:		1. / 020		2. / 020	
(90) Roadway Cost (\$1000s): 0				4.		5.	
(90) Total Project Cost (\$1000s): 0		(90) Year:		7.		8.	
(91) Future ADT (On Bridge): 0		(92) Year of Future ADT: 2033		10.		9.	
Inspection Summary		(I-69) Survey Items		Utilities		Special Features	
(I-8) Deck: 3	Railings: 0 DOES NOT MEET CURRENT STANDARDS	(46) Electric: U	(161) Lighting: N	Gas: U		Fencing: N	
(I-32) Superstructure: 3	Transitions: 0 DOES NOT MEET CURRENT STANDARDS	Sanitary Sewer: U	Glare-Screen: N	Sanitary Sewer: U		Splash-Guard: N	
(I-42) Substructure: 5	Guardrail: 0 DOES NOT MEET CURRENT STANDARDS	Telephone: U	Catwalks: N	Telephone: U		Other-Feat: U	
(I-50) Culvert: 8	Rail Ends: 0 DOES NOT MEET CURRENT STANDARDS	TV Cable: U	(184) Signs-on: Y	TV Cable: U		Signs-Under: N	
(I-54) Channel: 8	In Depth: 1 MEETS CURRENT STANDARDS	Water: U	(162) Fence-Ht: 0.0 Ft	Water: U		(163) Noise Barr: N	
(I-60) Approaches: 5	Fracture Critical: 1 MEETS CURRENT STANDARDS	Other: U		Other: U			
(I-66) General Appraisal: 3	Scour Critical: N NONE N/A						
(I-66) Operational Status: P	Critical Findings: N NONE N/A						
Inspection Date: 06/28/2012	Insp. Update Date: 08/22/2012						
(94) Desig Insp Freq: 12 Months							
SFNs Replacing this retired bridge: -				INV Field Bridge Marker: PRE-T0445-0025 -			
SFNs That where replaced by this bridge: -				INT Field Bridge Marker: ---			
This bridge was retired and copied to:							
The bridge was copied from:							

PONTIS CoRe elements and Condition States

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
		0						

(*) Percentages Should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

BR-86 REV 02-95

6	8	3	7	2	5	5
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Bridge Number **PRE T0445 0025**
CO ROUTE UNIT

HARRISON TWP

Date Built **07/01/1902**

District **08** Bridge Type **STEEL/TRUSS/THRU**

Type Service **1 15 TWIN CREEK**

PRE

DECK		Out/Out 16.0	3	THCK = 0.0	
1. Floor	2-LAMINATED TIMBER STRIP	8		2. Wearing Surface	7-TIMBER 41
	N-NONE				W.S. Date =
3. Curbs, Sidewalks, Walkways	N-NONE	9		4. Median	42
5. Railing	0-OTHER	10	3	6. Drainage	1-OVER THE SIDE (W/O DRI) 43
7. Expansion Joints	2-SLIDING METAL PLATE AN	11	1	8. Summary	44
SUPERSTRUCTURE		MAX.SPAN=87	1		
9. Alignment		12		10. Beams/Girders/Slab	1-ROLLED STEEL 45
11. Diaphragms or Crossframes	TOT.LGTH=93	13		12. Joists/Stringers	46
13. Floor Beams		14	3	14. Floor Beam Connections	47
15. Verticals		15	2	16. Diagonals	48
17. End Posts		16	2	18. Top Chord	49
19. Lower Chord		17	1	20. Lower Lateral Bracing	50
21. Top Lateral Bracing		18		22. Sway Bracing	51
23. Portals		19	3	24. Bearing Devices	1-ROLLERS N-NONE 52
25. Arch		20		26. Arch Columns or Hangers	53
27. Spandrel Walls		21		28. Protective Coating System	TYPE = 0-OTHER DATE = 01/01/1960 54
29. Pins/Hangers/Hinges		22	3	30. Fatigue Prone Connections	55
31. Live Load Response		23	S	32. Summary	56
SUBSTRUCTURE		1-STONE	2	PIERS=0	SPANS = 1
33. Abutments	1-STONE	24		34. Abutment Seats	57
35. Piers	TYPE = N-NONE	25		36. Pier Seats	58
37. Backwalls		26	3	38. Wingwalls	ABUTMENT:=SPREAD / SPREAD 59
39. Fenders and Dolphins		27		40. Scour	5-STABLE: SCOUR WITHIN L 60
41. Slope Protection	N-NONE	28		42. Summary	DIVE DT=N/A 62
CULVERTS					
43. General		29		44. Alignment	63
45. Shape		30		46. Seams	64
47. Headwalls or Endwalls		31		48. Scour	65
49.		32		50. Summary	66
CHANNEL				0-OTHER-GRASS, BUSHES & TREES	
51. Alignment		33	1	52. Protection	67
53. Waterway Adequacy		34	1	54. Summary	68
APPROACHES					
55. Pavement	2-BITUMINOUS	35	2	56. Approach Slabs	69
57. Guardrail	N-NONE	36		58. Relief Joints	70
59. Embankment	BRDG.WIDTH=15.8	37	2	60. Summary	PCT.LEGAL=90 71
GENERAL				ROUTINE.RESP: 3-COUNTY	
61. Navigation Lights		38		62. Warning Signs	MAINT.RESP: 3-COUNTY 72
63. Sign Supports	MVC ON=10.0 UND=0000	39	4	64. Utilities	73
65. Vertical Clearance		40	1	66. General Appraisal & Operational Status	74

67. INSPECTED BY

68. REVIEWED BY

SIGNED

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76 PE

R	S
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78 INITIALS

SIGNED

	7	1	2	8	8
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81 PE

R	C
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83 INITIALS

DOT 2852

DECK AREA 1,485

Date 0 6 2 8 1 2
86 91

0 0 0 0 1 1 N N
92 69 Survey 99

Date 0 8 2 2 1 2
100 105

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

BR-86 REV 02-95

6	8	3	7	2	5	5
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1 Structure File Number 7

Bridge Number **PRE T0445 0025**
CO ROUTE UNIT

Date Built 07/01/1902

District **08** Bridge Type **STEEL/TRUSS/THRU**

Type Service **1 15**

TWIN CREEK

00 NO REMARKS FOUND FOR THIS INSPECTION.
