



Structure Inventory and Appraisal

Bridge ID: SOLDIER-131081
 FHWA No.: 131081

Official	SR: 59	SD/FO:
Unofficial	SR: 75.0	SD/FO: Not Deficient or Obsolete

IDENTIFICATION

7 Facility Carried: LOCAL
 5B Rte. Signing Prefix: 4
 5C Level of Service: 1 - MAINLINE
 5D Inventory Route: 00000
 City: RURAL
 3 County: 024 - Crawford
 9 Location: 085413601
 5E Directional Suffix: 0 - NOT APPLICABLE
 6 Feature Intersected: MIDDLE SOLDIER RIVER
 2 District: 0
 Garage: 000
 98 Border Bridge Code:
 % Responsibility: 0
 99 Border Bridge No.:

INSPECTION

90 Inspection Date: 04/26/2014
 Next Routine Insp Date: 04/26/2016
 Inspection Agency: 5 - Consultant
 93A FC Inspection Date:
 92A FC Frequency: 0
 93B UW Inspection Date:
 92B UW Frequency: 0
 93C SI Date:
 92C SI Frequency: 0
 Other Non-NBI Date:
 Other Non-NBI Freq.:

Inspection Type: N/A
 91 Frequency: 24
 Next Insp Type: Regular
 Inspection Group: Crawford County
 Next FC Insp.: NA
 Next UW Insp.: NA
 Next Spec. Insp.: NA
 Next Other Insp.: NA

STRUCTURE TYPE AND MATERIALS

43A Main Span 3 - Steel
 43B Main Span Design: 02 - Stringer/Multi-beam or Girder
 45 No. Spans Main Unit: 1
 44A Appr. Span 000 - NA
 44B Appr. Span Design: 000 - NA
 46 No. of Appr. Spans: Near 0 Far 0
 107 Deck Type: 8 - Wood or Timber
 108A Wearing Surface: 8 - Gravel
 108B Membrane: 0 - None
 108C Deck Protection: 0 - None

CONDITION

58 Deck: 8 - Very Good Condition (no problems noted)
 59 Super: 7 - Good Condition (some minor problems)
 60 Sub: 8 - Very Good Condition (no problems noted)
 61 Channel/Channel Prot.: 6 - Bank slump. widespread minor damage
 62 Culvert: N - Not Applicable

GEOMETRIC DATA

48 Length Max Span: 50 ft.
 49 Structure Length: 50 ft.
 34 Skew: 0°
 Deck Area: 1255.0 sq. ft.
 50B Curb/Sdwb Width R: 0 ft.
 50A Curb/Sdwb Width L: 0 ft.
 51 Width Curb to Curb: 24.1 ft.
 52 Width Out to Out: 25.1 ft.
 32 Appr. Roadway width: 28 ft.
 (w/ Shoulders)
 33 Median: 0 - No median
 35 Structure Flared: 00 - No flare
 10 Vertical Clearance: 99'99"
 47 Horiz. Clearance: 24"
 53 Min. Vert. Clearance Over: 99'99"
 54B Min. Vert. Underclearance: 00'00"
 55 Min. Lat. Underclearance R: 00'00"
 56 Min. Lat. Underclearance L: 00'00"

APPRAISAL

67 Str. Evaluation: 5 - Somewhat better than minimum adequacy
 68 Deck Geometry: 6 - Equal to present minimum criteria
 69 Underclear Vert & Horiz: N - Not applicable
 71 Waterway Adequacy: 6 - Occasional Overtopping of Approaches
 72 Approach Alignment: 7 - Better than present minimum criteria
 36A Bridge Rail: 0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED.
 36B Transition: 0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED
 36C Approach Rail: 0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED
 36D Approach Rail Ends: 0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED
 113 Scour Critical: 8 - Stable - Excellent Condition

NAVIGATION DATA

38 Navigation Control:
 0 - No navigation control on waterway (bridge permit not required)
 111 Pier Protection:
 39 Vertical Clearance: 00'00"
 40 Horiz. Clearance: 000'00"

LOAD RATING AND POSTING

31 Design Load: 0 - Unknown
 63 Rating Method: 2 - Allowable Stress (AS) reported in english tons using HS-20 loading.
 64 Operating Rating: 31.4 Tons
 65 Rating Method: 2 - Allowable Stress (AS) reported in english tons using HS-20 loading.
 66 Inventory Rating: 20.9 Tons
 70 Posting: 5 - Equal to or above legal loads
 41 Posting Status: A - Open

16 Latitude: 42.13874885 17 Longitude: -95.56020305

AGE AND SERVICE

27 Year Built: 2002 Design No.: 0
 106 Year Reconstructed: 0
 42A Type of Service on: 1 - Highway
 42B Type of Service Under: 5 - Waterway
 28A Lanes on: 2 28B Lanes under: 0
 29 ADT: 15 30 Year of ADT: 2012
 109 Truck ADT: 0% Speed Limit: 55
 19 Detour Length: 4 mi.

FRA No. (if RR Bridge):
 Mile Post:

CLASSIFICATION

112 NBIS Length: N
 26 Functional Class: 09 - Rural - Local
 100 STRAHNET: 0 - Not a defense highway
 101 Parallel Structure: N - No parallel structure
 102 Direction of Traffic: 2 - 2-way traffic
 22 Owner: 02 - County Highway Agency
 21 Custodian: 02 - County Highway Agency
 37 Historical Significance: 5 - Not eligible
 75A Type of Work Proposed:
 75B Work Done by:

Crawford County Day Labor Bridge Construction

Prepared By: Ross WoodDate: 11-12-03Township: Soldier

Section: _____

E911 Rd: _____

FHWA No.: 131081

Date Reconstructed: _____

Describe Work: Replaced wood stringers w/ I-Beams

(Replaced wood stringers with I-Beams)

Bridge Length: <u>50'</u>	Bridge Width: <u>24'</u>	Open Depth:				
Beam Info.	Deck Info.	Diaphragm Info.				
Beam Type: <u>W S</u>	Deck Type: <u>wood</u>	# Bolts per Angle: <u>5</u>				
Beam Spacing: <u>33 1/2" C-C</u>	Top: <u>3x12</u> Longitudinal	Bolt Size:				
Beam Depth: <u>24"</u>	Bottom: <u>4x12</u> Transverse	Diaphragm Length: <u>33 1/2</u>				
Flange: <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Width</td><td>Thickness</td></tr><tr><td><u>9"</u></td><td><u>3/4"</u></td></tr></table>	Width	Thickness	<u>9"</u>	<u>3/4"</u>	Spacing on Bottom: <u>28" C-C</u>	Diaphragm Size: <u>10"</u>
Width	Thickness					
<u>9"</u>	<u>3/4"</u>					
Web Thickness: <u>1/2"</u>		<u>42 Diaphragms</u>				

Deck X-section With Beam Spacing

8-beams

X-section With Diaphragm Spacing

Diaphragms at ends and 4 middle points
(Diaphragms at ends & 4 middle points)

Substructure Comments:

Comments: Lap is 2-10" Channel w/ steel platewelded across top (Lap is 2-10" Channels with steel plate welded across top)