



Structure Inventory and Appraisal

Bridge ID: MORGAN-130581
FHWA No.: 130581

Official	SR: 82.3	SD/FO: Not Deficient or Obsolete
Unofficial	SR: 82.3	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: 085401101
5E Directional Suffix: 0 - NOT APPLICABLE
6 Feature Intersected: BEAVER CREEK
2 District: 0
Garage: 000
98 Border Bridge Code:
% Responsibility: 0
99 Border Bridge No.:

INSPECTION
90 Inspection Date: 05/04/2016
Next Routine Insp Date: 05/04/2018
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: 7 - Wood or Timber
108B Membrane: 0 - None
108C Deck Protection: 0 - None

CONDITION
58 Deck: 7 - Good Condition (some minor problems)
59 Super: 7 - Good Condition (some minor problems)
60 Sub: 7 - Good Condition (some minor problems)
61 Channel/Channel Prot.: 6 - Bank slump, widespread minor damage
62 Culvert: N - Not Applicable

GEOMETRIC DATA
48 Length Max Span: 40 ft.
49 Structure Length: 40 ft.
34 Skew: 0°
Deck Area: 1032.0 sq. ft.
50B Curb/Sdwk Width R: 0 ft.
50A Curb/Sdwk Width L: 0 ft.
51 Width Curb to Curb: 24.2 ft.
52 Width Out to Out: 25.8 ft.
32 Appr. Roadway width: 0 ft.
(w/ Shoulders)
33 Median: 0 - No median
35 Structure Flared: 00 - No flare
10 Vertical Clearance: 99'09"
47 Horiz. Clearance: 24'00"
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: 8 - Bridge Above Approaches
72 Approach Alignment: 8 - Equal to present desirable criteria
38A Bridge Rail: 0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED.
38B Transition: 0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED
38C Approach Rail: 0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED
38D 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: 5 - HS 20
63 Rating Method: 1 - Load Factor (LF) reported in english tons using HS-20 loading.
64 Operating Rating: 28.9 Tons
65 Rating Method: 1 - Load Factor (LF) reported in english tons using HS-20 loading.
66 Inventory Rating: 22.4 Tons
70 Posting: 5 - Equal to or above legal loads
41 Posting Status: A - Open

16 Latitude: 42.19666027
17 Longitude: -95.47234371

AGE AND SERVICE
27 Year Built: 2006
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: 5
30 Year of ADT: 2012
109 Truck ADT: 40 %
19 Detour Length: 4 mi.
Speed Limit: 55

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

CLASSIFICATION
112 NBIS Length: Y
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:



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 Next Routine Insp Date: 04/25/2016
 Inspection Agency: 5 - Consultant
 93A FC Inspection Date:
 92A FC Frequency: 0
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 108C Deck Protection: 0 - None

CONDITION

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 59 Super: 7 - Good Condition (some minor problems)
 60 Sub: 7 - Good Condition (some minor problems)
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 75B Work Done by:

13052,000

Crawford County Day Labor Bridge Construction

Prepared By: Wood Date: _____

Township: Morgan Section: 11 E911 Rd.: B Ave

FHWA No.: 130581 Date Reconstructed: 2005

Describe Work: New Bridge

Bridge Length: <u>40</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>3</u>				
Beam Spacing: <u>39" C-C</u>	Top: <u>3x12</u> Longitudinal	Bolt Size: <u>3/4"</u>				
Beam Depth: <u>24"</u>	Bottom: <u>4x12</u> Transverse	Diaphragm Length: <u>39"</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>5/8"</u></td></tr></table>	Width	Thickness	<u>9</u>	<u>5/8"</u>	Spacing on Bottom: <u>24" C-C</u>	Diaphragm Size: <u>10" channel</u>
Width	Thickness					
<u>9</u>	<u>5/8"</u>					
Web Thickness: <u>1/2"</u>						

Deck X-section With Beam Spacing
I Beams on 39" C-C

X-section With Diaphragm Spacing
Diaphragms @ ends and 1/3 points

Substructure Comments:

Comments:

13058 Paul's Copy

Project Number: LB50-11N		CRAWFORD COUNTY DAY LABOR PROJECT SHEET																									Date: August 24, 2005								
Location: 140505m												Section: 2 & 11													Township: Morgan										
Description of Work:		Replace old I beam bridge with new 40'x24' wide 24" I beam bridge with wings.																									FHWA No: 13058/1								
For the month of:																											Bridge Type:								
May & June																											I beam								
Employee	Hours worked per day																															Total Hours	Hourly Rate	Totals	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Terry Lally	8					8	8						8	8	8	8	8			8	8	8					8					8	104	\$ 36.58	\$3,804.32
Dan Blunk	8					8	8						8	8	8	8	8			8	8	8									8	96	\$ 33.49	\$3,215.04	
Howard Clark						8	8						8	8	8	8	8			8		8									8	80	\$ 28.40	\$2,272.00	
Kyle Schultz						8	8							8	8	8	8				8	8	8								8	88	\$ 25.46	\$2,240.48	
Blake Deiber						8	8							8	8	8	8	8				8	8	8							8	96	\$ 13.48	\$1,294.08	
Joe Blum														8	8	8	8	8				8	8									56	\$ 10.27	\$575.12	
																																	0	\$ -	\$0.00
																																	0	\$ -	\$0.00
																																	0	\$ -	\$0.00
																																	0	\$ -	\$0.00
																																	0	\$ -	\$0.00
																											Labor Cost:		\$13,401.04						
Equipment	Hours worked per day																															Total Hours	Hourly Rate	Totals	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
#83 Cat Excavator	7					5	5						6	3	5	6	6				6	6	6									65	\$ 67.19	\$4,367.35	
#73 Link Belt Crane						5	7						6	6			5	3														32	\$ 98.33	\$3,146.56	
#103 Tele-Crane																																	0	\$ 89.06	\$0.00
#75 IH Dozer																						2	2									4	\$ 42.05	\$168.20	
#59 J. O. Dozer													2			2	2				2	3	3									14	\$ 26.81	\$375.34	
#32 J.D. crawler							1						2								2											5	\$ 28.29	\$141.45	
#97 air comp.																																	0	\$ 10.00	\$0.00
#63 Welder													3		4																		7	\$ 10.00	\$70.00
#18 Tool Truck	2					2	2						2	2	2	2	2				2	2	2									24	\$ 6.94	\$166.56	
																																	0	\$ -	\$0.00
																																	0	\$ -	\$0.00
																																	0	\$ -	\$0.00
																											Equipment Costs:		\$8,435.46						
No. of pieces	Size	Materials List		Sockpile location of purchased from	New/ Used	No. Units	* Units	Unit Cost	Total Costs	Total Labor Costs: \$13,401.04																									
		Description of materials used																																	
8	40'	24" I beams			New/	8	each	\$ 1,210.00	\$ 9,680.00																										
42	3"	plank clips		Frehse Mig.	new/	42	each	\$ 1.10	\$ 46.20	Materials (page 1): \$	12,378.26																								
76	16'	3"x12" plank		stock	used	1216	In. ft.	\$ 1.72	\$ 2,091.52	Materials (page 2): \$	18,088.74																								
13	24'	3"x12" plank		stock	used	312	In. ft.	\$ 1.72	\$ 536.64	Total Material Cost: \$30,467.00																									
10	lbs.	welding rods				10	lb	\$ 2.39	\$ 23.90	Equipment Costs: \$8,435.46																									
						0		\$ -	\$ -	Total Costs: \$52,303.50																									
						0		\$ -	\$ -																										
						0		\$ -	\$ -																										
						0		\$ -	\$ -																										
										Material Costs (page 1): \$ 12,378.26																									

135531000

Crawford County Secondary Roads Material List				Project No.:				
No. Pieces	Size	Description of Materials Used:	Stockpile Location or Direct Purchase From	New or Used	No. Units	Units *(see below)	Unit Cost	Total Cost
112'	12'	felt fabric	Denison		112	lin ft.	\$ 0.72	\$80.64
	12'	mesh fabric	Denison		0	lin.	\$ 2.00	\$0.00
	box	1"x6"x6" fabric staples	Denison		0	each	\$ 21.70	\$0.00
					0			\$0.00
	8d	nails	Denison		0	lb.	\$ 0.80	\$0.00
	16d	nails	Denison		0	lb.	\$ 0.69	\$0.00
	16d	double head nails	Denison		0	lb.	\$ 0.69	\$0.00
40	60d	ringshank spikes	Denison		40	lbs.	\$ 1.35	\$54.00
					0			\$0.00
	3/4"	anchor bolts	Denison		0	each	\$ 2.80	\$0.00
68	1/2"	maellable washers	Denison		68	each	\$ 0.94	\$63.92
	3/4"	maellable washers	Denison		0	each	\$ 0.94	\$0.00
	1/2"	flat washers	Denison		0	each		\$0.00
50	3/4"	flat washers	Denison		50	each	\$ 0.30	\$15.00
					0			\$0.00
14	3/4"	2 1/2" bolts	Denison		14	each	\$ 0.70	\$9.80
	3/4"	3" bolts	Denison		0	each	\$ 0.80	\$0.00
28	1/2"	9" bolts	Denison		28	each	\$ 1.05	\$29.40
12	1/2"	10" bolts	Denison		12	each	\$ 0.98	\$11.76
	1/2"	11" bolts	Denison		0	each	\$ 1.05	\$0.00
	1/2"	12" bolts	Denison		0	each	\$ 1.84	\$0.00
144	7/8"	2 1/2" bolts	Denison		144	each	\$ 0.86	\$123.84
	3/4"	8" bolt	Denison		0	each	\$ 1.10	\$0.00
	3/4"	9" bolt	Denison		0	each	\$2.60	\$0.00
	3/4"	10" bolt	Denison		0	each	\$ 1.25	\$0.00
	3/4"	11'	Denison		0	each	\$ 1.45	\$0.00
	3/4"	12" bolts	Denison		0	each	\$ 1.93	\$0.00
Total Materials (page four) :								\$388.36

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Crawford County Secondary Roads Material List				Project No.:				
No. Pieces	Size	Description of Materials Used:	Stockpile Location or Direct Purchase From	New or Used	No. Units	Units *(see below)	Unit Cost	Total Cost
24	3"x12"	16' Plank	Denison	new	384	In.ft.	\$ 3.44	\$1,320.96
	3"x12"	18' Plank	Denison	new	0	In.ft.	\$ 3.44	\$0.00
	3"x12"	20' Plank	Denison	new	0	In.ft.	\$ 3.44	\$0.00
	3"x12"	22' Plank	Denison	new	0	In.ft.	\$ 3.60	\$0.00
28	3"x12"	24' plank	Denison	new	672	In.ft.	\$ 3.60	\$2,419.20
	4"x12"	16' plank			0	In.ft.	\$ 2.25	\$0.00
20	4"x12"	24' plank			480	In.inft.	\$ 3.99	\$1,915.20
	4"x16"	any length			0	In.ft.	\$ 2.50	\$0.00
					0		\$ -	\$0.00
	10"x10"	Wood Cap			0	In.ft.	\$ 9.17	\$0.00
	12"x12"	Wood Cap			0	In.ft.	\$ 13.20	\$0.00
					0		\$ -	\$0.00
	4"x6"	12' nailer			0	each	\$ 26.05	\$0.00
4	4"x6"	16' nailer			4	each	\$ 29.33	\$117.32
					0		\$ -	\$0.00
	2"x4"	any length			0	In.ft.	\$ 0.28	\$0.00
	2"x6"	any length				In.ft.	\$ 0.39	\$0.00
	1/2"	4'x8' plywood			0	each	\$ 11.05	\$0.00
	3/4"	4'x8' plywood			0	each	\$ -	\$0.00
					0		\$ -	\$0.00
4	25'	wood piling			4	each	\$ 173.91	\$695.64
4	30'	wood piling			4	each	\$ 200.94	\$803.76
	35'	wood piling			0	each	\$ 236.25	\$0.00
	40'	wood piling			0	each	\$ 296.37	\$0.00
					0		\$ -	\$0.00
	8"x8"	40'steel@36lb./ft.			0	In. ft.	\$ 10.61	\$0.00
	8"x8"	50'steel @36lb./ft			0	In. ft.	\$ -	\$0.00
Total Materials (page two) :								\$7,272.08

130581000

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No. Pieces	Size	Description of Materials Used:	Stockpile Location or Direct Purchase From	New or Used	No. Units	Units *(see below)	Unit Cost	Total Cost
	10"x10"	40' Steel H@42 lb./ft.	Denison	new	0	lin. Ft..	\$ 8.50	\$0.00
12	10"x10"	50' Steel H@42 lb/ft	Denison	new	600	lin. Ft..	\$ 11.35	\$6,810.00
	10"	40' channel @15.3 lbs./ft.	Denison	new	0	lin. Ft..	\$ 3.13	\$0.00
	12"	40' channel @15.3 lbs./ft.	Denison	new	0	lin. Ft..	\$ 4.90	\$0.00
	1/2"x14"	10' steel plates	Denison	new	0	lin. Ft..	\$ 6.43	\$0.00
2	25'	Steel Caps			2	each	\$ 565.40	\$1,130.80
	30 1/2"	Diaphragms			0	each	\$ 31.04	\$0.00
42	38 1/2"	Diaphragms			42	each	\$ 37.43	\$1,572.06
14	85lb.	rail posts			14	each	\$ 8.50	\$119.00
	straight 20'	7 ga.sheet piling	Denison	new	0	each	\$ 123.22	\$0.00
	45degree	sheet piling	Denison	new	0	each	\$ 151.40	\$0.00
	90degree	sheet piling	Denison	new	0	each	\$ 139.80	\$0.00
					0			\$0.00
2	13'	gaudrail		used	26	lin. Ft..	\$ 1.00	\$26.00
2	26'	gaudrail			52	lin. Ft..	\$ 1.00	\$52.00
	25'	W-beam gaudrail		new	0	lin. Ft..	\$ 4.95	\$0.00
4	2'	gaudrail terminal ends		new	4	each	\$ 24.95	\$99.80
	1/4"	2 1/2"x2 1/2" angle 20'	Denison	new	0	lin. Ft..	\$ 0.78	\$0.00
	3/8"	3"x3" angle 20'	Denison	new	0	lin. Ft..	\$ 1.35	\$0.00
					0			\$0.00
730'	1/2"	wire cable	Denison	new	730	lin. Ft..	\$ 0.68	\$496.40
64	1/2"	cable clamps	Denison	new	64	each	\$ 1.91	\$122.24
					0			\$0.00
	1/2"	20' rebar	Denison	new	0	lin. Ft..	\$ 0.16	\$0.00
	5/8"	20' rebar	Denison	new	0	lin. Ft..	\$ 0.24	\$0.00
	5/8"	20' rebar with Epoxy	Denison	new	0	each	\$ 0.27	\$0.00
					0			\$0.00

Total Materials (page three) : \$10,428.30