

Bridge Inspection Report

03050
U.S. 412 Benton 2
over
OVER KCS RR



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: 03050

Inspection Date:

Facility Carried: U.S. 412 Benton 2

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION	
(1) STATE CODE	056 - Arkansas
(8) STRUCTURE NUMBER	03050
(5) INV. ROUTE (ON/UNDER)	1 2 1 412 0
(2) HIGHWAY AGENCY	09 (3) COUNTY CODE 007
(4) PLACE CODE	62180
(6) FEATURES INTERSECTED	OVER KCS RR
(7) FACILITY CARRIED	U.S. 412 Benton 2
(9) LOCATION	1.78 MI E OF OKLAHOMA LI
(11) MILEPOINT 1.780	(12) BASE HIGHWAY NETWORK 1
(13A) LRS INVENTORY ROUTE	0000412010 (13B) SUBROUTE NUMBER 00
(16) LATITUDE 36.	(17) LONGITUDE -94.53419637152888 17229942979924
(98A) BORDER BRIDGE CODE	
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT

STRUCTURE TYPE AND MATERIAL		
(43) STRUCTURE TYPE, MAIN		
A) KIND OF MATERIAL/DESIGN:	3 - Steel	
B) TYPE OF DESIGN/CONSTR:	02 - Stringer/Multi-beam or Girder	
(44) STRUCTURE TYPE, APPROACH SPANS		
A) KIND OF MATERIAL/DESIGN:	0 - Other	
B) TYPE OF DESIGN/CONSTR:	00 - Other	
(45) NUMBER OF SPANS IN MAIN	5 (46) NUMBER OF APPROACH	0
(107) DECK STRUCTURE TYPE	1 (108A) WEARING SURFACE	1
(108B) DECK MEMBRANE	0 (108C) DECK PROTECTION	0

AGE OF SERVICE		
(27) YEAR BUILT	1960 (106) YEAR RECONSTRUCTED	1981
(42) TYPE OF SERVICE	ON 1 UNDER	2
(28) LANES	ON 04 UNDER	00
(29) AVERAGE DAILY TRAFFIC	24000 (19) BYPASS DETOUR LENGTH	3
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014	
(109) AVERAGE DAILY TRUCK TRAFFIC	1	

GEOMETRIC DATA		
(48) LENGTH OF MAX SPAN (ft.)	55 (49) STRUCTURE LENGTH (ft.)	225
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 0	RIGHT 0
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	64.0	
(52) DECK WIDTH, OUT-TO-OUT (ft.)	67.5	
(32) APPROACH ROADWAY WIDTH (ft.)	67.9	
(33) BRIDGE MEDIAN	0 (34) SKEW (DEG.)	30
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	99.99
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	65.0	
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	
(54) VERTICAL UNDER CLEARANCE (ft.)	R	22.58
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	R	10
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	

PROPOSED IMPROVEMENTS		
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	0	
(94) BRIDGE IMPROVEMENT COST (\$)	0	
(95) ROADWAY IMPROVEMENT COST (\$)	0	
(96) TOTAL PROJECT COST	0	
(97) YEAR OF IMPROVEMENT COST ESTIMATE		
(114) FUTURE ADT	36668 (115) YEAR OF FUTURE ADT	2028

INSPECTIONS	
(90) INSPECTION DATE	02/22/2016
(91) DESIGNATED INSPECTION FREQUENCY	24
(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
A. FRACTURE CRITICAL DETAIL	N
B. UNDERWATER INSPECTION	N
C. OTHER SPECIAL	N

CONDITION		
(58) DECK	6	
(59) SUPERSTRUCTURE	7 (60) SUBSTRUCTURE	6
(61) CHANNEL & CHANNEL PROTECTION	N (62) CULVERT	N

LOAD RATING AND POSTING	
(31) DESIGN LOAD	5
(63) METHOD USED TO DETERMINE OPERATING RATING	1
(64) OPERATING RATING	60.0
(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(66) INVENTORY RATING	36.0
(70) BRIDGE POSTING	5
(41) STRUCTURE OPEN/POSTED/CLOSED	A

APPRAISAL		
(67) STRUCTURAL EVALUATION	6	
(68) DECK GEOMETRY	7	
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	4	
(71) WATERWAY ADEQUACY	N	
(72) APPROACH ROADWAY ALIGNMENT	8	
(36) TRAFFIC SAFETY FEATURE		
36A) BRIDGE RAILINGS:	1	
36B) TRANSITIONS:	0	
36C) APPROACH GUARDRAIL:	0	
36D) APPROACH GUARDRAIL ENDS:	0	
(113) SCOUR CRITICAL BRIDGES	N	
SUFFICIENCY RATING	0 STATUS	84.9

CLASSIFICATION	
(112) NBIS BRIDGE LENGTH	Y
(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	14
(100) STRAHNET HIGHWAY DESIGNATION	0
(101) PARALLEL STRUCTURE DESIGNATION	N
(102) DIRECTION OF TRAFFIC	2
(103) TEMP STRUCTURE	
(105) FEDERAL LANDS HIGHWAYS	0
(110) DESIGNATED NATIONAL NETWORK	1
(20) TOLL	3
(21) MAINTENANCE RESPONSIBILITY	01
(22) OWNER	01
(37) HISTORICAL	5

NAVIGATION DATA	
(38) NAVIGATION CONTROL	N
(111) PIER OR ABUTMENT PROTECTION	1
(39) NAV VERT CLEARANCE (ft.)	0
(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
(40) NAV HORIZONTAL CLEARANCE (ft.)	0

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Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	1- Ben.	14272	sq. ft.	14192		80	0
	Deck - has spall/patched areas located in span #3 repairs appear to be holding at this inspection.						
1080 - Delamination/Spall/Patched Area		80				80	
107 - Steel Open Girder/Beam	1- Ben.	2230	ft.	2230			
	Steel protective coating - has chalking with a loss of pigmentation at this inspection.						
515 - Steel Protective Coating		13500	sq. ft.	8500	5000		0
3410 - Chalking (Steel Protective Coatings)		5000			5000		
205 - Reinforced Concrete Column	1- Ben.	16	each	14	2	0	0
	Bents #4 and #5 columns #2 right side - Delamination and cracking.						
1130 - Cracking (RC and Other)		2			2		
215 - Reinforced Concrete Abutment	1- Ben.	142	ft.	142			
234 - Reinforced Concrete Pier Cap	1- Ben.	284	ft.	262	22	0	0
	Bent #3 left concrete cap ahead side and Bent #4 right concrete cap under bearings - Deep spalls and delamination. Bent #4 concrete cap throughout - Horizontal cracking and deterioration.						
1080 - Delamination/Spall/Patched Area		3			3		
1090 - Exposed Rebar		11			11		
1130 - Cracking (RC and Other)		8			8		
302 - Compression Joint Seal	1- Ben.	450	ft.	177	273	0	0
	Deck expansion joints - Torn, displaced, excessive leakage and debris in joint. Bent 4 - joint material missing.						
2310 - Leakage		48			48		
2340 - Seal Cracking		225			225		
311 - Movable Bearing	1- Ben.	50	each	50			
313 - Fixed Bearing	1- Ben.	50	each	50			
321 - Reinforced Concrete Approach Slab	1- Ben.	2	sq. ft.	2			
331 - Reinforced Concrete Bridge Railing	1- Ben.	450	ft.	450			