Bridge Inspection Report

02657

State Highway 28
over
Dailey Creek-Scott Co.

Inspection Date:

Inspected By:

Inspection Type(s):

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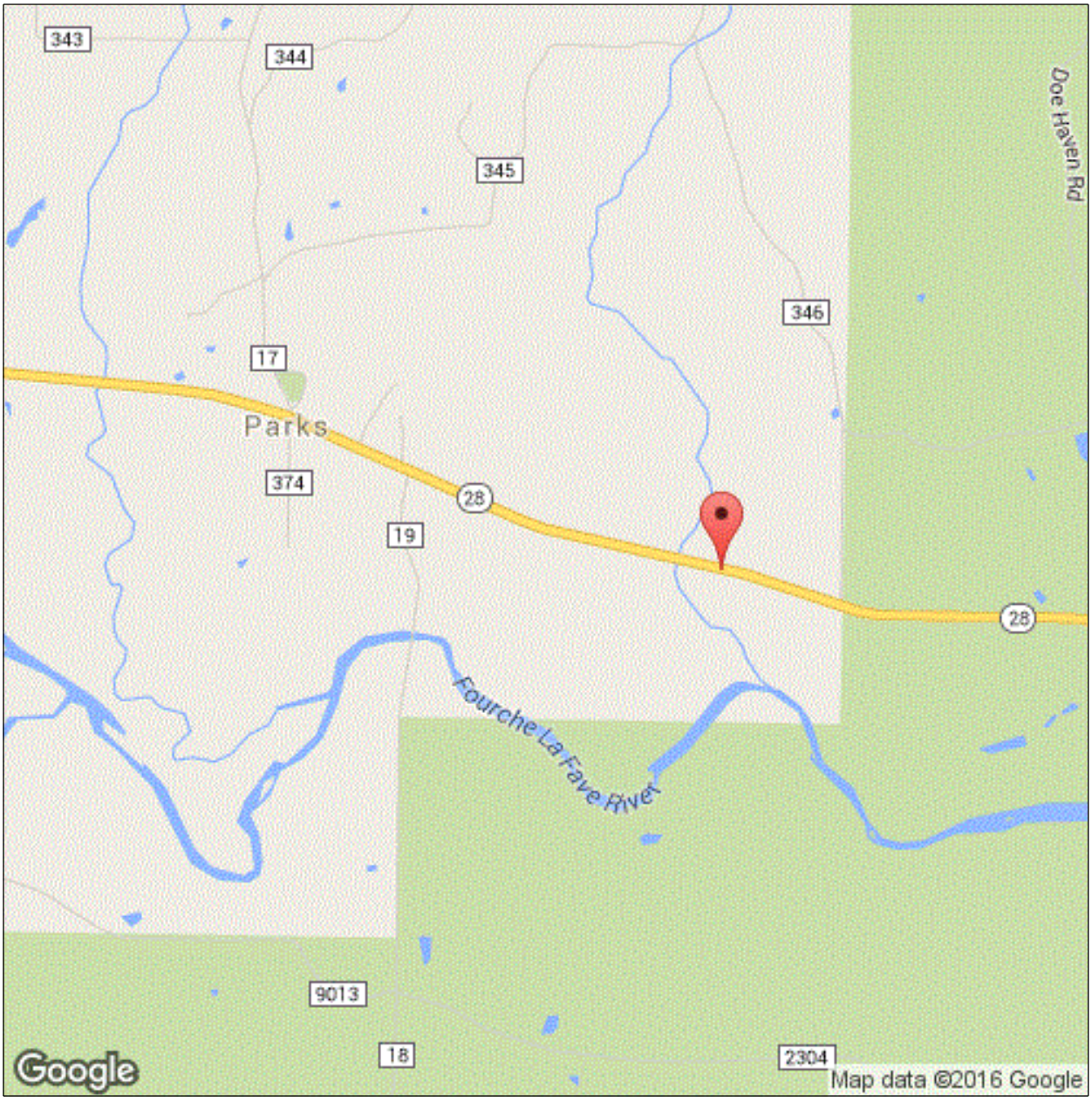
Location Map



Latitude: 34.79741

Longitude: -93.94347

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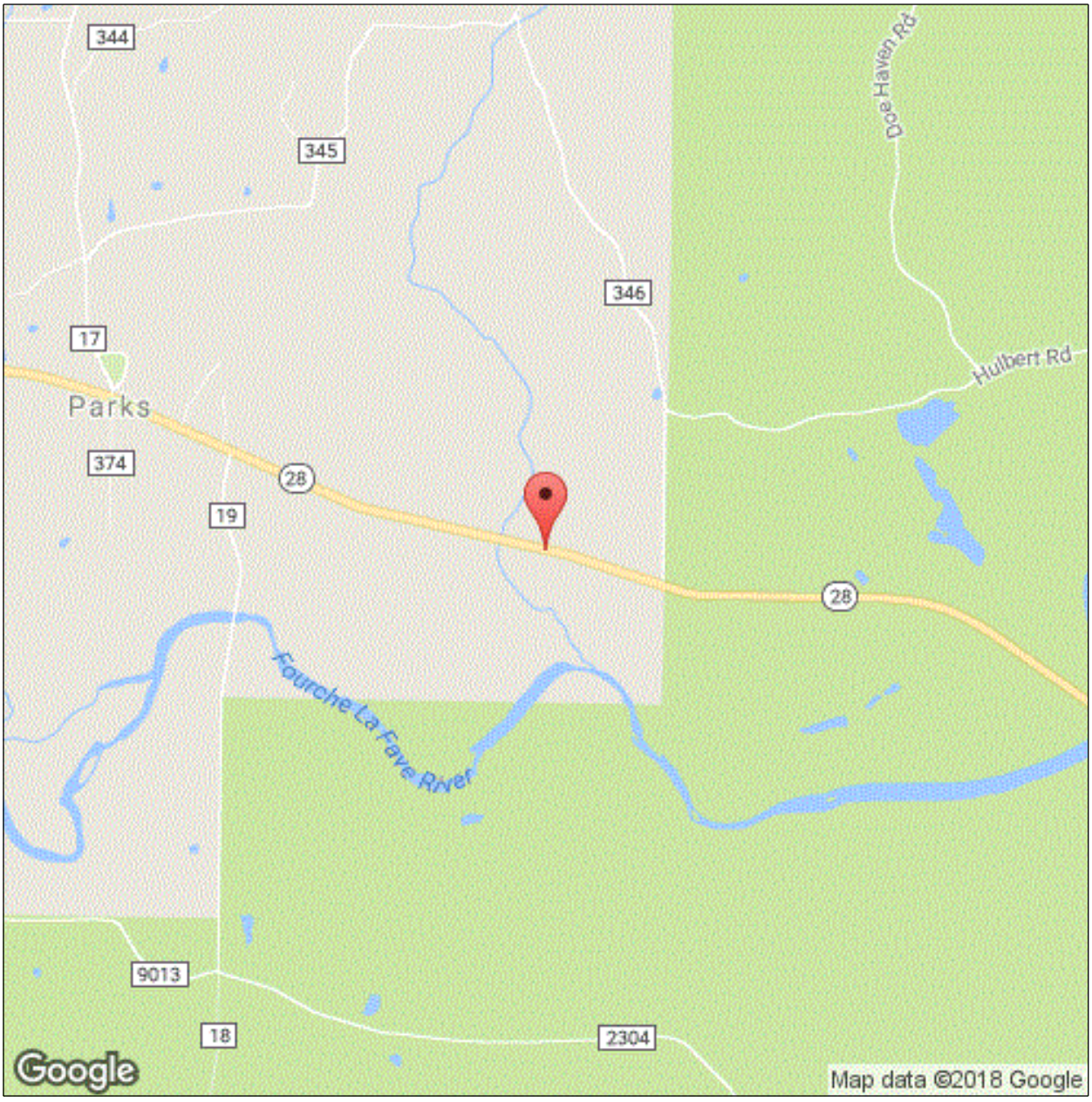

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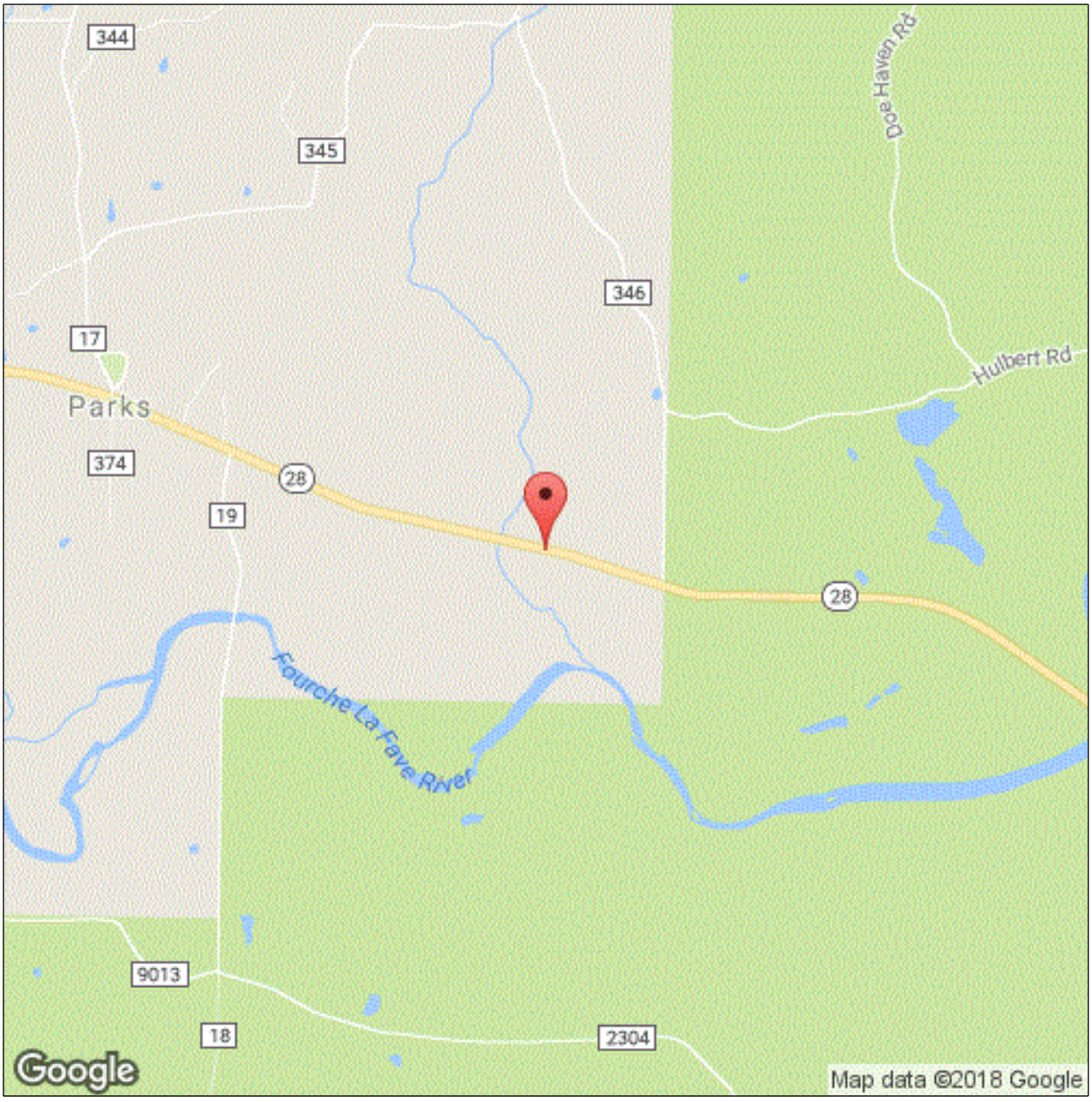

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Executive Summary

01/18/2018 EJW & JRT - Underwater Type 2 inspection conducted on this date. Wading and probing, with low water conditions. The base of the columns have medium/heavy abrasion and the footings have cover at this inspection. There is no apparent noteworthy undermining or scour at this inspection.

01/27/2016 JPB & RSM-Routine inspection conducted this date.

Inspector: **Structure Number:** 02657

Inspection Date: **Facility Carried:** State Highway 28

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION

(1) STATE CODE 056 - Arkansas
(8) STRUCTURE NUMBER 02657
(5) INV. ROUTE (ON/UNDER) 1 3 1 28 0
(2) HIGHWAY AGENCY 04 (3) COUNTY CODE 127
(4) PLACE CODE 00000
(6) FEATURES INTERSECTED Dailey Creek-Scott Co.
(7) FACILITY CARRIED State Highway 28
(9) LOCATION 5.64 MI E JCT OF US 71
(11) MILEPOINT 5.639 (12) BASE HIGHWAY NETWORK 0
(13A) LRS INVENTORY ROUTE 0000000000 (13B) SUBROUTE NUMBER 00
(16) LATITUDE 34.79741 (17) LONGITUDE -93.94347
(98A) BORDER BRIDGE CODE
PERCENT RESPONSIBILITY (99) BORDER BRIDGE STRUCT

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN
A) KIND OF MATERIAL/DESIGN: 1 - Concrete
B) TYPE OF DESIGN/CONSTR: 01 - Slab
(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 4 (46) NUMBER OF APPROACH 0
(107) DECK STRUCTURE TYPE 1 (108A) WEARING SURFACE 6
(108B) DECK MEMBRANE 0 (108C) DECK PROTECTION 0

AGE OF SERVICE

(27) YEAR BUILT 1950 (106) YEAR RECONSTRUCTED 0000
(42) TYPE OF SERVICE ON 1 UNDER 5
(28) LANES ON 02 UNDER 00
(29) AVERAGE DAILY TRAFFIC 280 (19) BYPASS DETOUR LENGTH 14
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014
(109) AVERAGE DAILY TRUCK TRAFFIC 1

GEOMETRIC DATA

(48) LENGTH OF MAX SPAN (ft.) 18 (49) STRUCTURE LENGTH (ft.) 72
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 1 RIGHT 1
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 22.0
(52) DECK WIDTH, OUT-TO-OUT (ft.) 24
(32) APPROACH ROADWAY WIDTH (ft.) 24.0
(33) BRIDGE MEDIAN 0 (34) SKEW (DEG.) 0
(35) STRUCTURE FLARED 0 (10) INV RTE, MIN VERT CLEAR (ft.) 99.99
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 23.6
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99
(54) VERTICAL UNDER CLEARANCE (ft.) N 0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9
(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 366 (115) YEAR OF FUTURE ADT 2028

INSPECTIONS

(90) INSPECTION DATE 01/18/2018
(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 6 (60) SUBSTRUCTURE 6
(61) CHANNEL & CHANNEL PROTECTION 7 (62) CULVERT N

LOAD RATING AND POSTING

(31) DESIGN LOAD 2
(63) METHOD USED TO DETERMINE OPERATING RATING 1
(64) OPERATING RATING 48.0
(65) METHOD USED TO DETERMINE INVENTORY RATING 1
(66) INVENTORY RATING 29.0
(70) BRIDGE POSTING 5
(41) STRUCTURE OPEN/POSTED/CLOSED A

APPRAISAL

(67) STRUCTURAL EVALUATION 6
(68) DECK GEOMETRY 4
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
(71) WATERWAY ADEQUACY 8
(72) APPROACH ROADWAY ALIGNMENT 8
(36) TRAFFIC SAFETY FEATURE
36A) BRIDGE RAILINGS: 0
36B) TRANSITIONS: 0
36C) APPROACH GUARDRAIL: 0
36D) APPROACH GUARDRAIL ENDS: 0
(113) SCOUR CRITICAL BRIDGES 5
SUFFICIENCY RATING 76.2 STATUS 0

CLASSIFICATION

(112) NBIS BRIDGE LENGTH Y
(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE 0
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE 07
(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 0
(20) TOLL 3
(21) MAINTENANCE RESPONSIBILITY 01
(22) OWNER 01
(37) HISTORICAL 5

NAVIGATION DATA

(38) NAVIGATION CONTROL 0
(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

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
38 - Reinforced Concrete Slab	1- Ben.	2564	sq. ft.	2485	72	7	0
	-Concrete slab span with ACHM overlay. -Transverse cracks on the driving surface over the intermediate bent caps. -Spans 1, 2, and 3 have spalls around the drip grooves and deck drains that exposes the reinforcing steel with initial section loss. -Typical longitudinal cracking near the centerline of the spans						
1090 - Exposed Rebar		7				7	
1130 - Cracking (RC and Other)		72			72		
510 - Wearing Surfaces		1584	sq. ft.	1467	117	0	0
3220 - Crack (Wearing Surface)		117			117		
205 - Reinforced Concrete Column	1- Ben.	10	each	4	6	0	0
	-There is medium/heavy abrasion at the base of the columns. -Bent 2 right column has concrete deterioration						
1080 - Delamination/Spall/Patched Area		1			1		
1190 - Abrasion/Wear (PSC/RC)		5			5		
220 - Reinforced Concrete Pile Cap/Footing	1- Ben.	50	ft.	50			
	No apparent problems.						
234 - Reinforced Concrete Pier Cap	1- Ben.	150	ft.	136	10	4	0
	-The Span 3 side of the Rt side of Bent 3 cap has an 18" vertical spall with exposed reinforcing steel with initial section loss to the exposed reinforcing steel. -Water stains on the substructure caps indicate that the deck joints are leaking water. -Typical hairline vertical cracking along the caps.						
1080 - Delamination/Spall/Patched Area		2				2	
1090 - Exposed Rebar		2				2	
1130 - Cracking (RC and Other)		10			10		
330 - Metal Bridge Railing	1- Ben.	144	ft.	0	144	0	0
	-The metal rail has a failing paint system with rust showing through out the railing.. -The metal railing is missing one bolt on the northwest end adjacent to Bent #2 -The concrete end post of the bridge railing on the Northeast side is cracked and spalled showing exposed reinforcing steel from apparent collision damage.						
1000 - Corrosion		142			142		
1010 - Cracking		1			1		
7000 - Damage		1			1		
515 - Steel Protective Coating		288	sq. ft.	0	0	288	0

Element Inspection

3440 - Effectiveness (Steel Protective Coatings)		288				288	

Pictures

PHOTO 1

Description

PHOTO 2

Description

Sketches

Maintenance Needs

Date Reported: 1/30/2014 12:00:00 AM

Priority: D - Routine

Work Code:

Deficiency Description:

Driving Surface:

The asphalt driving surface is breaking apart over the intermediate bents. The deck joint seals appear to leak water on the caps.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned

PHOTO 1 Description

Stage: Assigned

PHOTO 2 Description

Maintenance Needs

Date Reported: 01/18/2018

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Metal Bridge Railing:

The concrete end post of the bridge railing on the Northeast side is cracked and spalled showing exposed reinforcing steel from apparent collision damage.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open

PHOTO 1 Description

Maintenance Needs

Date Reported: 01/18/2018

Priority: D - Routine

Work Code:

Deficiency Description:

R.C. Slab:

There are spalls exposing the reinforcing steel with initial section loss.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open

PHOTO 1 Description

Stage: Open

PHOTO 2 Description