DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0176
Facility Carried: KITTERMAN DRIVE
Location : 0.1 MI. S/O SLVRDO CYN R
City :
Inspection Date : 12/20/2015

Bridge Inspection Report

Inspection Type

Routine	FC	Underwater	Special	Other
X				

STRUCTURE NAME: SILVERADO CANYON CREEK

CONSTRUCTION INFORMATION

Year Built : 1970
Year Widened: 1983
Length (m) : 9.1

Skew (degrees): 0
No. of Joints : 0
No. of Hinges : 0

Structure Description: Simply supported single span treated timber stringers (8 each) with a timber deck, all supported by masonry rock abutments.

Span Configuration : (S) 1 @ 8.8 m (N) c/c

SAFE LOAD CAPACITY AND RATINGS

Design Live Load: UNKNOWN
Inventory Rating: RF=0.66 =>21.2 metric tons Calculation Method: FIELD EVAL/ENG JUDGMENT
Operating Rating: RF=1.09 =>35.4 metric tons Calculation Method: FIELD EVAL/ENG JUDGMENT
Permit Rating : GGGGG
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

DESCRIPTION ON STRUCTURE

Deck X-Section: (W) 0.2 m br, 3.8 m, 0.2 m br (E)
Total Width: 4.3 m Net Width: 3.8 m No. of Lanes: 1 Speed: 25 mph
Min. Vertical Clearance: Unimpaired Overlay Thickness: 2.0 Inches

Rail Code: 0000

Rail Type	Location	Length (ft)	Rail Modifications
Timber Rail	Right/Left	70	

DESCRIPTION UNDER STRUCTURE

Channel Description: Natural earth trapezoidal with a cobbled bottom, grouted rock slopes through the site.

NOTICE

The bridge inspection condition assessment used for this inspection is based on the American Association of State Highway and Transportation Officials (AASHTO) Bridge Element Inspection Manual 2013 as defined in Moving Ahead for Progress in the 21st Century (MAP-21) federal law. The new element inspection methodology may result in changes to related condition and appraisal ratings on the bridge without significant physical changes at the bridge.

The element condition information contained in this report represents the current condition of the bridge based on the most recent routine and special inspections. Some of the notes presented below may be from an inspection that occurred prior to the date noted in this report. Refer to the Scope and Access section of this inspection report for a description of which portions of the bridge were inspected on this date.

INSPECTION COMMENTARY

SCOPE AND ACCESS

The channel was dry, so all visible substructure elements were visually inspected. Pedestrian access is from northwest quadrant.

INSPECTION COMMENTARY

SAFE LOAD CAPACITY

This load rating was assigned temporarily on 03/11/2016 until calculations for this structure can be completed. The load rating for this bridge was assigned temporary in accordance with SMI procedures for bridge with as-built plans.

ELEMENT INSPECTION RATINGS AND NOTES

Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State St. 1	St. 2	St. 3	St. 4
31			Deck-Timber	2	40	sq.m	40	0	0	0
	510		Deck Wearing Surface-Asphalt	2	35	sq.m	31	2	2	0
		3220	Cracking-AC (WS)	2	4		0	2	2	0
(31) There were no significant defects noted.										
(31-510-3220) AC exhibits few transverse cracks full width and up to 15 mm wide.										
111			Girder/Beam-Timber	2	70	m	57	13	0	0
	1150		Check/Shake (Timber)	2	11		0	11	0	0
	1160		Crack (Timber)	2	2		0	2	0	0
(111-1150) There is a longitudinal horizontal check up to 3 mm wide, and 30% penetration in the westerly face of the west exterior girder. Timber beam #4 has two cracks at the bottom face at mid span, 9 ft long each. Timber beam #6 has two cracks at the bottom face at mid span, 12 ft long each.										
(111-1160) There are two cracks 8" long at the middle of the easterly timber beam.										
215			Abutment-RC	2	9	m	7	1	1	0
	1130		Cracking (RC and Other)	2	2		2	0	0	0
	1190		Abrasion (PS Conc./RC)	2	2		0	1	1	0
(215-1130) There is a wide horizontal crack at the north abutment westerly end up to 30 mm wide.										
(215-1190) Some aggregates were missing from the north abutment westerly end.										
256			Slope Protection	2	2	ea.	2	0	0	0
(256) There were no significant defects noted.										
332			Railing-Timber	2	18	m	18	0	0	0
(332) There were no significant defects noted.										

WORK RECOMMENDATIONS - NONE

Team Leader : Ashraf Shenouda

Report Author : Ashraf Shenouda

Inspected By : A.Shenouda/KD.Henderson

3/11/2016

Ashraf Shenouda (Registered Civil Engineer) (Date)

REGISTERED PROFESSIONAL ENGINEER
Ashraf
Shenouda
No. 64332
06/30/2017
CIVIL
STATE OF CALIFORNIA

STRUCTURE INVENTORY AND APPRAISAL REPORT

********** IDENTIFICATION **********

(1) STATE NAME- CALIFORNIA 069
(8) STRUCTURE NUMBER **55C0176**
(5) INVENTORY ROUTE(ON/UNDER)- ON 140000000
(2) HIGHWAY AGENCY DISTRICT 12
(3) COUNTY CODE 059 (4) PLACE CODE 00000
(6) FEATURE INTERSECTED- SILVERADO CANYON CREEK
(7) FACILITY CARRIED- KITTERMAN DRIVE
(9) LOCATION- 0.1 MI. S/O SLVRDO CYN RD
(11) MILEPOINT/KILOMETERPOINT 0
(12) BASE HIGHWAY NETWORK- NOT ON NET 0
(13) LRS INVENTORY ROUTE & SUBROUTE
(16) LATITUDE 33 DEG 44 MIN 48.01 SEC
(17) LONGITUDE 117 DEG 38 MIN 15.53 SEC
(98) BORDER BRIDGE STATE CODE % SHARE %
(99) BORDER BRIDGE STRUCTURE NUMBER

******** STRUCTURE TYPE AND MATERIAL *********

(43) STRUCTURE TYPE MAIN:MATERIAL- WOOD OR TIMBER
TYPE- STRINGER/MULTI-BEAM OR GDR CODE 702
(44) STRUCTURE TYPE APPR:MATERIAL- OTHER/NA
TYPE- OTHER/NA CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT 1
(46) NUMBER OF APPROACH SPANS 0
(107) DECK STRUCTURE TYPE- TIMBER CODE 8
(108) WEARING SURFACE / PROTECTIVE SYSTEM:
A) TYPE OF WEARING SURFACE- BITUMINOUS CODE 6
B) TYPE OF MEMBRANE- NONE CODE 0
C) TYPE OF DECK PROTECTION- NONE CODE 0

********** AGE AND SERVICE **********

(27) YEAR BUILT 1970
(106) YEAR RECONSTRUCTED 1983
(42) TYPE OF SERVICE: ON- HIGHWAY 1
UNDER- WATERWAY 5
(28) LANES:ON STRUCTURE 01 UNDER STRUCTURE 00
(29) AVERAGE DAILY TRAFFIC 200
(30) YEAR OF ADT 2009 (109) TRUCK ADT 1 %
(19) BYPASS, DETOUR LENGTH 2 KM

********** GEOMETRIC DATA **********

(48) LENGTH OF MAXIMUM SPAN 9.1 M
(49) STRUCTURE LENGTH 9.1 M
(50) CURB OR SIDEWALK: LEFT 0.0 M RIGHT 0.0 M
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 3.8 M
(52) DECK WIDTH OUT TO OUT 4.3 M
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 3.8 M
(33) BRIDGE MEDIAN- NO MEDIAN 0
(34) SKEW 0 DEG (35) STRUCTURE FLARED NO
(10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 3.8 M
(53) MIN VERT CLEAR OVER BRIDGE RDWY 99.99 M
(54) MIN VERT UNDERCLEAR REF- NOT H/RR 0.00 M
(55) MIN LAT UNDERCLEAR RT REF- NOT H/RR 0.0 M
(56) MIN LAT UNDERCLEAR LT 0.0 M

********** NAVIGATION DATA **********

(38) NAVIGATION CONTROL- NOT APPLICABLE CODE N
(111) PIER PROTECTION- CODE
(39) NAVIGATION VERTICAL CLEARANCE 0.0 M
(116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR M
(40) NAVIGATION HORIZONTAL CLEARANCE 0.0 M

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SUFFICIENCY RATING = 65.8
STATUS
HEALTH INDEX 95.2
PAINT CONDITION INDEX = N/A

********** CLASSIFICATION ********** CODE

(112) NBIS BRIDGE LENGTH- YES Y
(104) HIGHWAY SYSTEM- NOT ON NHS 0
(26) FUNCTIONAL CLASS- MAJOR COLLECTOR RURAL 07
(100) DEFENSE HIGHWAY- NOT STRAHNET 0
(101) PARALLEL STRUCTURE- NONE EXISTS N
(102) DIRECTION OF TRAFFIC- 1 LANE, 2 WAY 3
(103) TEMPORARY STRUCTURE-
(105) FED.LANDS HWY- NOT APPLICABLE 0
(110) DESIGNATED NATIONAL NETWORK - NOT ON NET 0
(20) TOLL- ON FREE ROAD 3
(21) MAINTAIN- COUNTY HIGHWAY AGENCY 02
(22) OWNER- COUNTY HIGHWAY AGENCY 02
(37) HISTORICAL SIGNIFICANCE- NOT ELIGIBLE 5

********** CONDITION ********** CODE

(58) DECK 8
(59) SUPERSTRUCTURE 7
(60) SUBSTRUCTURE 7
(61) CHANNEL & CHANNEL PROTECTION 8
(62) CULVERTS N

********* LOAD RATING AND POSTING ********* CODE

(31) DESIGN LOAD- UNKNOWN 0
(63) OPERATING RATING METHOD- FIELD EVAL/ENG JUD 0
(64) OPERATING RATING- 35.4
(65) INVENTORY RATING METHOD- FIELD EVAL/ENG JUD 0
(66) INVENTORY RATING- 21.2
(70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5
(41) STRUCTURE OPEN, POSTED OR CLOSED- A
DESCRIPTION- OPEN, NO RESTRICTION

********** APPRAISAL ********** CODE

(67) STRUCTURAL EVALUATION 6
(68) DECK GEOMETRY 2
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
(71) WATER ADEQUACY 9
(72) APPROACH ROADWAY ALIGNMENT 6
(36) TRAFFIC SAFETY FEATURES 0000
(113) SCOUR CRITICAL BRIDGES 8

********** PROPOSED IMPROVEMENTS **********

(75) TYPE OF WORK- SUP/SUB REHAB CODE 35
(76) LENGTH OF STRUCTURE IMPROVEMENT 9.1 M
(94) BRIDGE IMPROVEMENT COST $38,000
(95) ROADWAY IMPROVEMENT COST $7,600
(96) TOTAL PROJECT COST $63,840
(97) YEAR OF IMPROVEMENT COST ESTIMATE 2013
(114) FUTURE ADT 210
(115) YEAR OF FUTURE ADT 2035

********** INSPECTIONS **********

(90) INSPECTION DATE 12/15 (91) FREQUENCY 24 MO
(92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
A) FRACTURE CRIT DETAIL- NO MO A)
B) UNDERWATER INSP- NO MO B)
C) OTHER SPECIAL INSP- NO MO C)