



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0185
Facility Carried: OLIVE HILL ROAD
Location : 50' S/O MODJESKA CYN RD
City :
Inspection Date : 09/18/2015

Bridge Inspection Report

Inspection Type
Routine FC Underwater Special Other

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STRUCTURE NAME: SANTIAGO CREEK

CONSTRUCTION INFORMATION

Year Built : 1970 Skew (degrees): 0
Year Widened: N/A No. of Joints : 0
Length (m) : 11 No. of Hinges : 0

Structure Description: Single span CIP/RC rigid frame slab, all supported upon spread footings.

Span Configuration : (S) 1 @ 10.4 m (N) c/c

SAFE LOAD CAPACITY AND RATINGS

Design Live Load: UNKNOWN
Inventory Rating: RF=0.62 =>19.9 metric tons Calculation Method: FIELD EVAL/ENG JUDGMENT
Operating Rating: RF=1.03 =>33.2 metric tons Calculation Method: FIELD EVAL/ENG JUDGMENT
Permit Rating : OOOOO
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

DESCRIPTION ON STRUCTURE

Deck X-Section: (W) 0.1 m br, 4.7 m, 0.1 m br (E)

Total Width: 4.9 m Net Width: 4.7 m No. of Lanes: 1 Speed: 25 mph
Min. Vertical Clearance: Unimpaired Overlay Thickness: 0.0 Inches

Rail Code: 1000

Rail Type	Location	Length (ft)	Rail Modifications
MBBR	Right/Left	130	

DESCRIPTION UNDER STRUCTURE

Channel Description: Natural earth trapezoidal with a cobbled bottom.

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

CONDITION OF STRUCTURE

There is 4" deep and 3 ft wide water in the creek; all elements were visually inspection by walking on the deck and under the bridge.

MISCELLANEOUS

Caltrans currently does not have a set of AS-Built plans for this structure. The county should provide As-Built Plans.

INSPECTION COMMENTARY**SAFE LOAD CAPACITY**

A Load Rating Summary Sheet is included with this bridge inspection report. The current rating has been assigned in accordance with SM&I procedures.

The Inventory rating was change from 40 to 19.9 tons

The operation rating was change from 69.8 to 33.2 tons

the permit rating was change from PPPPP to 00000.

ELEMENT INSPECTION RATINGS AND NOTES

Elem No.	Defect /Prot	Element Description	Env	Total Qty	Units	Qty in St. 1	each St. 2	Condition St. 3	State St. 4
38		Slab-RC	2	54	sq.m	4	50	0	0
	1080	Delamination/Spall/Patched Area	2	50		0	50	0	0
(38-1080)									
There are map cracking 0.5 mm wide at 1 ft spacing throughout the deck.									
215		Abutment-RC	2	14	m	14	0	0	0
(215)									
There were no significant defects noted.									
330		Railing-Metal	2	22	m	21	1	0	0
	1900	Distortion	2	2		0	2	0	0
(330-1900)									
One section of th MBGR is bent									

WORK RECOMMENDATIONS

RecDate: 01/13/2003

Action : Railing-Repair

Work By: LOCAL AGENCY

Status : PROPOSED

EstCost:

StrTarget: 2 YEARS

DistTarget:

EA:

Repair/replace the damaged metal beam guard railing (3.0 m) at the southeasterly quadrant.

CHANNEL X-SECTION

Side : Upstream

Measured From : soffit

X-Section Date: 09/18/2015

Location	Horiz (m)	Vert (m)	Comments
Abut 1	0.00	1.50	face of abut wall
	5.00	2.00	thalweg
Abut 2	0.00	0.70	face of abut wall

Team Leader : Mikhael T. Zaarour

Report Author : Mikhael T. Zaarour

Inspected By : MT.Zaarour/DH.Kim

Mikhael T. Zaarour (Registered Civil Engineer) (Date)



STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0185
 (5) INVENTORY ROUTE(ON/UNDER) - ON 140000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED- SANTIAGO CREEK
 (7) FACILITY CARRIED- OLIVE HILL ROAD
 (9) LOCATION- 50' S/O MODJESKA CYN RD
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 42 MIN 34.04 SEC
 (17) LONGITUDE 117 DEG 37 MIN 31.68 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN:MATERIAL- CONCRETE
 TYPE- SLAB CODE 101
 (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- CIP CONCRETE CODE 1
 (108) WEARING SURFACE / PROTECTIVE SYSTEM:
 A) TYPE OF WEARING SURFACE- NONE CODE 0
 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 0000
 (42) TYPE OF SERVICE: ON- HIGHWAY 1
 UNDER- WATERWAY 5
 (28) LANES:ON STRUCTURE 01 UNDER STRUCTURE 00
 (29) AVERAGE DAILY TRAFFIC 150
 (30) YEAR OF ADT 2009 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 199 KM

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

(48) LENGTH OF MAXIMUM SPAN 10.4 M
 (49) STRUCTURE LENGTH 11.0 M
 (50) CURB OR SIDEWALK: LEFT 0.0 M RIGHT 0.0 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 4.7 M
 (52) DECK WIDTH OUT TO OUT 4.9 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 4.9 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 4.7 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

***** SUFFICIENCY RATING *****

SUFFICIENCY RATING = 61.5
 STATUS
 HEALTH INDEX 80.1
 PAINT CONDITION INDEX = N/A

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

(112) NBIS BRIDGE LENGTH- YES Y
 (104) HIGHWAY SYSTEM- NOT ON NHS 0
 (26) FUNCTIONAL CLASS- LOCAL RURAL 09
 (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 6
 (59) SUPERSTRUCTURE 6
 (60) SUBSTRUCTURE 8
 (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- 33.2
 (65) INVENTORY RATING METHOD- FIELD EVAL/ENG JUI 0
 (66) INVENTORY RATING- 19.9
 (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 5
 (68) DECK GEOMETRY 2
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 9
 (72) APPROACH ROADWAY ALIGNMENT 6
 (36) TRAFFIC SAFETY FEATURES 1000
 (113) SCOUR CRITICAL BRIDGES 8

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

(75) TYPE OF WORK- SUP/SUB REHAB CODE 35
 (76) LENGTH OF STRUCTURE IMPROVEMENT 11 M
 (94) BRIDGE IMPROVEMENT COST \$51,000
 (95) ROADWAY IMPROVEMENT COST \$10,200
 (96) TOTAL PROJECT COST \$85,680
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 2013
 (114) FUTURE ADT 206
 (115) YEAR OF FUTURE ADT 2035

***** INSPECTIONS *****

(90) INSPECTION DATE 09/15 (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)