



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0182
Facility Carried: SILVERADO CANYON RD.
Location : 3.6 MI. E/O SANTIAGO ROA
City :
Inspection Date : 07/12/2011

Bridge Inspection Report

Inspection Type

Routine	FC	Underwater	Special	Other
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STRUCTURE NAME: SILVERADO CANYON CREEK

CONSTRUCTION INFORMATION

Year Built : 1970	Skew (degrees): 53
Year Widened: N/A	No. of Joints : 0
Length (m) : 13.1	No. of Hinges : 0

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

Span Configuration : (W) 1 @ 6.7 m (E) clear, normal

LOAD CAPACITY AND RATINGS

Design Live Load: MS-18 OR HS-20	
Inventory Rating: 87.9 metric tonnes	Calculation Method: NO RATING ANALYSIS
Operating Rating: 99.8 metric tonnes	Calculation Method: NO RATING ANALYSIS
Permit Rating : P P P P P	
Posting Load : Type 3: <u>Legal</u>	Type 3S2: <u>Legal</u> Type 3-3: <u>Legal</u>

DESCRIPTION ON STRUCTURE

Deck X-Section: (S) 0.3 m min deck, 0.3 m br, 6.0 m, 0.3 m br, 0.3 m min deck (N)		
Total Width: 6.7 m	Net Width: 6.1 m	No. of Lanes: 2
Rail Description: MBBR		Rail Code : 1000
Min. Vertical Clearance: Unimpaired		

DESCRIPTION UNDER STRUCTURE

Channel Description: Natural earth trapezoidal with a cobbled bottom.

INSPECTION COMMENTARY

CONDITION OF STRUCTURE

There was 200 mm of water running; all elements were visually inspection.

There are longitudinal cracks in the soffit 2 cracks with light brown efflorescence and 1 crack with white efflorescence.

There are vertical cracks 5 hairline cracks in the east abutment wall and 4 - 0.5 mm wide cracks in the west abutment wall.

MISCELLANEOUS


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

ELEMENT INSPECTION RATINGS

Elem No.	Element Description	Env	Total		Qty in each Condition State				
			Qty	Units	St. 1	St. 2	St. 3	St. 4	St. 5
39	Concrete Slab - Unprotected w/ AC Overlay	2	40	sq.m.	40	0	0	0	0
215	Reinforced Conc Abutment	3	22	m.	22	0	0	0	0
333	Other Bridge Railing	2	38	m.	38	0	0	0	0
359	Soffit of Concrete Deck or Slab	2	1	ea.	0	0	1	0	0

WORK RECOMMENDATIONS - NONE

Inspected By : MT.Zaarour/A.Shenouda



 Mikhael T. Zaarour (Registered Civil Engineer)


STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0182
 (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- SILVERADO CANYON RD.
 (9) LOCATION- 3.6 MI. E/O SANTIAGO ROAD
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 44 MIN 48.61 SEC
 (17) LONGITUDE 117 DEG 37 MIN 08.19 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- 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 0000
 (42) TYPE OF SERVICE: ON- HIGHWAY 1
 UNDER- WATERWAY 5
 (28) LANES:ON STRUCTURE 02 UNDER STRUCTURE 00
 (29) AVERAGE DAILY TRAFFIC 2000
 (30) YEAR OF ADT 2009 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 199 KM

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

(48) LENGTH OF MAXIMUM SPAN 6.7 M
 (49) STRUCTURE LENGTH 13.1 M
 (50) CURB OR SIDEWALK: LEFT 0.0 M RIGHT 0.0 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 6.1 M
 (52) DECK WIDTH OUT TO OUT 6.7 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 6.1 M
 (33) BRIDGE MEDIAN- NO MEDIAN 0
 (34) SKEW 53 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 6.1 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 = 58.0
 STATUS FUNCTIONALLY OBSOLETE
 HEALTH INDEX 100.0
 PAINT CONDITION INDEX = N/A
 ***** CLASSIFICATION ***** CODE
 (112) NBIS BRIDGE LENGTH- YES Y
 (104) HIGHWAY SYSTEM- NOT ON NHS 0
 (26) FUNCTIONAL CLASS- COLLECTOR URBAN 17
 (100) DEFENSE HIGHWAY- NOT STRAHNET 0
 (101) PARALLEL STRUCTURE- NONE EXISTS N
 (102) DIRECTION OF TRAFFIC- 2 WAY 2
 (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 5
 (59) SUPERSTRUCTURE 7
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION 8
 (62) CULVERTS N

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

(31) DESIGN LOAD- MS-18 OR HS-20 5
 (63) OPERATING RATING METHOD- NO RATING ANALYSIS 5
 (64) OPERATING RATING- 99.8
 (65) INVENTORY RATING METHOD- NO RATING ANALYSIS 5
 (66) INVENTORY RATING- 87.9
 (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 7
 (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- MISC STRUCTURAL WORK CODE 38
 (76) LENGTH OF STRUCTURE IMPROVEMENT 13.1 M
 (94) BRIDGE IMPROVEMENT COST \$88,000
 (95) ROADWAY IMPROVEMENT COST \$17,600
 (96) TOTAL PROJECT COST \$147,840
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 2010
 (114) FUTURE ADT 4121
 (115) YEAR OF FUTURE ADT 2029

***** INSPECTIONS *****

(90) INSPECTION DATE 07/11 (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)