



**DEPARTMENT OF TRANSPORTATION**  
Structure Maintenance & Investigations

Bridge Number : 55C0670  
Facility Carried: HICKS CANYN HAUL RD  
Location : 4.6 MI. SE/O CHAPMAN AVE  
City :  
Inspection Date : 07/07/2013

**Bridge Inspection Report**

Inspection Type  
Routine FC Underwater Special Other  
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**STRUCTURE NAME:** HICKS CANYON HAUL ROAD OC

**CONSTRUCTION INFORMATION**

Year Built : 1995 Skew (degrees): 0  
Year Widened: N/A No. of Joints : 0  
Length (m) : 36.5 No. of Hinges : 0

Structure Description: Simply supported two span PC/PS concrete channel girders (3 each) with a continuous composite CIP concrete deck, and with an RC two column bent, and with RC open end diaphragm abutments, all supported upon driven Class 70C piles.

Span Configuration : (S) 13.0 m, 22.3 m (N) c/c

**SAFE LOAD CAPACITY AND RATINGS**

Design Live Load: MS-18 OR HS-20  
Inventory Rating: 32.6 metric tons Calculation Method: NO RATING ANALYSIS  
Operating Rating: 53.5 metric tons Calculation Method: NO RATING ANALYSIS  
Permit Rating : PPPPP  
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

**DESCRIPTION ON STRUCTURE**

Deck X-Section: (W) 0.2 m br, 0.7 m sw, 7.3 m, 0.7 m sw, 0.2 m br (E)

Total Width: 9.1 m Net Width: 7.3 m No. of Lanes: 2 Speed: mph

Min. Vertical Clearance: Unimpaired

Rail Code: 1000

Rail Type	Location	Length (ft)	Rail Modifications
Type 26	Right/Left	150	

**DESCRIPTION UNDER STRUCTURE**

Facility Name	Func Class	Lanes	Horiz Clr (m)	Vert Clr (m)
Santiago Canyon Road	14	2	18.30	4.80

Channel Description: Under span #1 natural with riprap under the structure.

**INSPECTION COMMENTARY**

**SCOPE AND ACCESS**

The channel was dry during this inspection, and substructure elements were visually inspected. The top did not inspected

**REVISIONS**

NBI #33 was modified from 2 (closed median w/o barrier) to 0 (no median).  
NBI #55 (Min. Lateral Under clearance R) was modified from 5.5 m to 3.6 m.

**MISCELLANEOUS**

Ten-year bridge roadway, elevation and underside photos were taken during this inspection.

INSPECTION COMMENTARY

## DECK AND ROADWAY

The concrete rails exhibits few vertical and horizontal

The approaches roadways are settled about 50 mm in the south direction.

There are 2 longitudinal cracks < 0.04 inch wide at middle of each direction.

## SUPERSTRUCTURE

No significant defects were found during this inspection

## SUBSTRUCTURE

No significant defects were found during this inspection

ELEMENT INSPECTION RATINGS

Elem No.	Element Description	Env	Total Qty Units	Qty in each Condition State				
				St. 1	St. 2	St. 3	St. 4	St. 5
12	Concrete Deck - Bare	2	333 sq.m.	333	0	0	0	0
109	P/S Conc Open Girder/Beam	2	105 m.	105	0	0	0	0
205	Reinforced Conc Column or Pile Extension	2	2 ea.	2	0	0	0	0
215	Reinforced Conc Abutment	2	18 m.	18	0	0	0	0
226	P/S Conc Submerged Pile	2	1 ea.	1	0	0	0	0
234	Reinforced Conc Cap	2	18 m.	18	0	0	0	0
312	Enclosed/Concealed Bearing	2	2 ea.	2	0	0	0	0
331	Reinforced Conc Bridge Railing	2	46 m.	46	0	0	0	0

WORK RECOMMENDATIONS - NONE

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 Report Author : Ashraf Shenouda  
 Inspected By : A. Shenouda/NN.Vo

*Ashraf Shenouda* 10/7/2013  
 Ashraf Shenouda (Registered Civil Engineer) (Date)



STRUCTURE INVENTORY AND APPRAISAL REPORT

## \*\*\*\*\* IDENTIFICATION \*\*\*\*\*

(1) STATE NAME- CALIFORNIA 069  
 (8) STRUCTURE NUMBER 55C0670  
 (5) INVENTORY ROUTE (ON/UNDER)- ON 18800000  
 (2) HIGHWAY AGENCY DISTRICT 12  
 (3) COUNTY CODE 059 (4) PLACE CODE 00000  
 (6) FEATURE INTERSECTED- SANTIAGO CANYON ROAD  
 (7) FACILITY CARRIED- HICKS CNYN HAUL RD  
 (9) LOCATION- 4.6 MI. SE/O CHAPMAN AVE.  
 (11) MILEPOINT/KILOMETERPOINT 0  
 (12) BASE HIGHWAY NETWORK- PART OF NET 1  
 (13) LRS INVENTORY ROUTE & SUBROUTE 000000000000  
 (16) LATITUDE 33 DEG 45 MIN 36 SEC  
 (17) LONGITUDE 117 DEG 42 MIN 12 SEC  
 (98) BORDER BRIDGE STATE CODE % SHARE %  
 (99) BORDER BRIDGE STRUCTURE NUMBER

## \*\*\*\*\* STRUCTURE TYPE AND MATERIAL \*\*\*\*\*

(43) STRUCTURE TYPE MAIN:MATERIAL- PRESTRESS CONC  
 TYPE- STRINGER/MULTI-BEAM OR GDR CODE 502  
 (44) STRUCTURE TYPE APPR:MATERIAL- OTHER/NA  
 TYPE- OTHER/NA CODE 000  
 (45) NUMBER OF SPANS IN MAIN UNIT 2  
 (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 1995  
 (106) YEAR RECONSTRUCTED 0000  
 (42) TYPE OF SERVICE: ON- HIGHWAY 1  
 UNDER- HIGHWAY W/O PEDESTF 1  
 (28) LANES:ON STRUCTURE 02 UNDER STRUCTURE 02  
 (29) AVERAGE DAILY TRAFFIC 100  
 (30) YEAR OF ADT 2009 (109) TRUCK ADT 40 %  
 (19) BYPASS, DETOUR LENGTH 22 KM

## \*\*\*\*\* GEOMETRIC DATA \*\*\*\*\*

(48) LENGTH OF MAXIMUM SPAN 22.6 M  
 (49) STRUCTURE LENGTH 36.5 M  
 (50) CURB OR SIDEWALK: LEFT 0.7 M RIGHT 0.7 M  
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 7.3 M  
 (52) DECK WIDTH OUT TO OUT 9.1 M  
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 7.3 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 7.3 M  
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 99.99 M  
 (54) MIN VERT UNDERCLEAR REF- HIGHWAY 4.87 M  
 (55) MIN LAT UNDERCLEAR RT REF- HIGHWAY 3.6 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 = 96.9  
 STATUS  
 HEALTH INDEX 100.0  
 PAINT CONDITION INDEX = N/A

## \*\*\*\*\* CLASSIFICATION \*\*\*\*\* CODE

(112) NBIS BRIDGE LENGTH- YES Y  
 (104) HIGHWAY SYSTEM- ROUTE ON NHS 1  
 (26) FUNCTIONAL CLASS- OTHER PRIN ART URBAN 14  
 (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 7  
 (59) SUPERSTRUCTURE 8  
 (60) SUBSTRUCTURE 7  
 (61) CHANNEL & CHANNEL PROTECTION N  
 (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- 53.5  
 (65) INVENTORY RATING METHOD- NO RATING ANALYSIS 5  
 (66) INVENTORY RATING- 32.6  
 (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 6  
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL 5  
 (71) WATER ADEQUACY N  
 (72) APPROACH ROADWAY ALIGNMENT 8  
 (36) TRAFFIC SAFETY FEATURES 1000  
 (113) SCOUR CRITICAL BRIDGES N

## \*\*\*\*\* PROPOSED IMPROVEMENTS \*\*\*\*\*

(75) TYPE OF WORK- CODE  
 (76) LENGTH OF STRUCTURE IMPROVEMENT M  
 (94) BRIDGE IMPROVEMENT COST  
 (95) ROADWAY IMPROVEMENT COST  
 (96) TOTAL PROJECT COST  
 (97) YEAR OF IMPROVEMENT COST ESTIMATE  
 (114) FUTURE ADT 206  
 (115) YEAR OF FUTURE ADT 2029

## \*\*\*\*\* INSPECTIONS \*\*\*\*\*

(90) INSPECTION DATE 07/13 (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)