



**DEPARTMENT OF TRANSPORTATION**  
Structure Maintenance & Investigations

Bridge Number : 55C0283  
Facility Carried: BROADWAY  
Location : 100' NE/O PACIFIC CST HW  
City :  
Inspection Date : 08/07/2014

# Bridge Inspection Report

## Inspection Type

Routine FC Underwater Special Other

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**STRUCTURE NAME:** SUNSET CHANNEL

## CONSTRUCTION INFORMATION

Year Built : 1959  
Year Widened: N/A  
Length (m) : 29.3  
Skew (degrees): 0  
No. of Joints : 5  
No. of Hinges : 0

Structure Description: Simply supported 4-span CIP/RC deck slab with RC 5-column pile bents and with column pile bent abutments.

Span Configuration : (S) 4 @ 7.0 m (N) c/c

## SAFE LOAD CAPACITY AND RATINGS

Design Live Load: UNKNOWN  
Inventory Rating: RF=0.75 =>24.3 metric tons  
Operating Rating: RF=1.25 =>40.5 metric tons  
Permit Rating : PPPPP  
Posting Load : Type 3: Legal  
Calculation Method: FIELD EVAL/ENG JUDGMENT  
Calculation Method: FIELD EVAL/ENG JUDGMENT  
Type 3S2: Legal  
Type 3-3: Legal

## DESCRIPTION ON STRUCTURE

Deck X-Section: (W) 0.3 m br, 0.9 m sw, 8.6 m, 0.9 m sw, 0.3 m br (E)  
Total Width: 11.0 m Net Width: 8.5 m No. of Lanes: 2 Speed: 25 mph  
Min. Vertical Clearance: Unimpaired

Rail Code: 1000

Rail Type	Location	Length (ft)	Rail Modifications
Misc. Steel	Right/Left	180	

## DESCRIPTION UNDER STRUCTURE

Channel Description: Tidal basin.

## 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.

## INSPECTION COMMENTARY

### SCOPE AND ACCESS

The structure is over a tidal basin. It was inspected from side and top only. There underwater inspection was performed on 3/21/2011. No defects were noted on all inspected substructure elements. The spalls was mentioned at bent #2 I assumed was repaired during the repair all other spalls on the deck and bents.

### DECK AND ROADWAY

There was post pocket spall (1.5' x 5" x 8") at the post #1 from west of south rail.

### SAFE LOAD CAPACITY

A load Rating Summary sheet was in BIRIS. This load rating was assigned in accordance

INSPECTION COMMENTARY

with current SM&amp;I procedures.

ELEMENT INSPECTION RATINGS AND COMMENTARY

Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							St. 1	St. 2	St. 3	St. 4
38			Slab-RC	3	240	sq.m	240	0	0	0

Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							St. 1	St. 2	St. 3	St. 4
205			Column-RC	4	15	each	15	0	0	0

Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							St. 1	St. 2	St. 3	St. 4
215			Abutment-RC	3	22	m	22	0	0	0


Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							St. 1	St. 2	St. 3	St. 4
234			Pier Cap-RC	3	33	m	33	0	0	0

Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							St. 1	St. 2	St. 3	St. 4
301			Joint-Pourable Seal	3	33	m	33	0	0	0

Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State			
							St. 1	St. 2	St. 3	St. 4
330			Railing-Metal	2	56	m	56	0	0	0

WORK RECOMMENDATIONS - NONE

Team Leader : Mikhael T. Zaarour  
Report Author : Mikhael T. Zaarour  
Inspected By : MT.Zaarour/M.Zolfaghari

 9/9/14  
Mikhael T. Zaarour (Registered Civil Engineer) (Date)



**STRUCTURE INVENTORY AND APPRAISAL REPORT**

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

(1) STATE NAME- CALIFORNIA 069  
 (8) STRUCTURE NUMBER 55C0283  
 (5) INVENTORY ROUTE (ON/UNDER)- ON 140000000  
 (2) HIGHWAY AGENCY DISTRICT 12  
 (3) COUNTY CODE 059 (4) PLACE CODE 00000  
 (6) FEATURE INTERSECTED- SUNSET CHANNEL  
 (7) FACILITY CARRIED- BROADWAY  
 (9) LOCATION- 100' NE/O PACIFIC CST HWY  
 (11) MILEPOINT/KILOMETERPOINT 0  
 (12) BASE HIGHWAY NETWORK- NOT ON NET 0  
 (13) LRS INVENTORY ROUTE & SUBROUTE  
 (16) LATITUDE 33 DEG 43 MIN 05.6 SEC  
 (17) LONGITUDE 118 DEG 04 MIN 12.2 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 4  
 (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 1959  
 (106) YEAR RECONSTRUCTED 0000  
 (42) TYPE OF SERVICE: ON- HIGHWAY-PEDESTRIAN 5  
 UNDER- WATERWAY 5  
 (28) LANES:ON STRUCTURE 02 UNDER STRUCTURE 00  
 (29) AVERAGE DAILY TRAFFIC 2500  
 (30) YEAR OF ADT 2009 (109) TRUCK ADT 1 %  
 (19) BYPASS, DETOUR LENGTH 199 KM

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

(48) LENGTH OF MAXIMUM SPAN 7.0 M  
 (49) STRUCTURE LENGTH 29.3 M  
 (50) CURB OR SIDEWALK: LEFT 0.9 M RIGHT 0.1 M  
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 8.5 M  
 (52) DECK WIDTH OUT TO OUT 11.0 M  
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 8.5 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 8.5 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- NO CONTROL CODE 0  
 (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 = 60.4  
 STATUS  
 HEALTH INDEX 100.0  
 PAINT CONDITION INDEX = N/A

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

(112) NBIS BRIDGE LENGTH- YES Y  
 (104) HIGHWAY SYSTEM- NOT ON NHS 0  
 (26) FUNCTIONAL CLASS- LOCAL URBAN 19  
 (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 \*\*\*\*\*

(58) DECK 8  
 (59) SUPERSTRUCTURE 8  
 (60) SUBSTRUCTURE 8  
 (61) CHANNEL & CHANNEL PROTECTION 9  
 (62) CULVERTS N

## \*\*\*\*\* LOAD RATING AND POSTING \*\*\*\*\*

(31) DESIGN LOAD- UNKNOWN 0  
 (63) OPERATING RATING METHOD- FIELD EVAL/ENG JUD 0  
 (64) OPERATING RATING- 40.5  
 (65) INVENTORY RATING METHOD- FIELD EVAL/ENG JUI 0  
 (66) INVENTORY RATING- 24.3  
 (70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5  
 (41) STRUCTURE OPEN, POSTED OR CLOSED- A  
 DESCRIPTION- OPEN, NO RESTRICTION

## \*\*\*\*\* APPRAISAL \*\*\*\*\*

(67) STRUCTURAL EVALUATION 6  
 (68) DECK GEOMETRY 4  
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N  
 (71) WATER ADEQUACY 9  
 (72) APPROACH ROADWAY ALIGNMENT 8  
 (36) TRAFFIC SAFETY FEATURES 1000  
 (113) SCOUR CRITICAL BRIDGES 5

## \*\*\*\*\* 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 4121  
 (115) YEAR OF FUTURE ADT 2031

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

(90) INSPECTION DATE 08/14 (91) FREQUENCY 24 MO  
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE  
 A) FRACTURE CRIT DETAIL- NO MO A)  
 B) UNDERWATER INSP- YES 60 MO B) 03/11  
 C) OTHER SPECIAL INSP- NO MO C)