



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0628
Facility Carried: ANTONIO PARKWAY
Location : 0.2 MI. N/O ORTEGA HWY
City :
Inspection Date : 08/14/2015

Bridge Inspection Report

Inspection Type

Routine FC Underwater Special Other

☒

STRUCTURE NAME: SAN JUAN CREEK

CONSTRUCTION INFORMATION

Year Built : 1997 Skew (degrees): 22
Year Widened: 2013 No. of Joints : 2
Length (m) : 236.5 No. of Hinges : 0

Structure Description: Continuous five span CIP/PS concrete box girder (five cells) with RC two column bents and with RC closed end seat abutments, all supported upon driven steel H-piles, and upon CIDH concrete piles.
Widen: Box girder from the west side, one one column bent.

Span Configuration : (S) 38.1 m, 3 @ 53.0 m, 38.1 m (N) c/c

SAFE LOAD CAPACITY AND RATINGS

Design Live Load: MS-18 OR HS-20
Inventory Rating: RF=1.00 =>32.4 metric tons Calculation Method: ASSIGNED (LFD)
Operating Rating: RF=1.67 =>54.1 metric tons Calculation Method: ASSIGNED (LFD)
Permit Rating : PPPPP
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

DESCRIPTION ON STRUCTURE

Deck X-Section: (W) 0.3 m br, 1.5 m sw; 13.4 m min; (1.2 m - 4.3 m) curbed med.; 13.4 m; 1.4 m sw; 0.4 m br (E).

Total Width: 34.8 m Net Width: 26.8 m No. of Lanes: 6 Speed: 55 mph
Min. Vertical Clearance: Unimpaired Overlay Thickness: 0.0 Inches

Rail Code: 1110

Rail Type	Location	Length (ft)	Rail Modifications
Type 26	Right/Left	1672	

DESCRIPTION UNDER STRUCTURE

Channel Description: Wide natural earth trapezoidal channel with heavy vegetation, brush, and trees within the creek.

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 inspection was performed by walking the deck and under the structure. All elements have been visually inspected.

SAFE LOAD CAPACITY

INSPECTION COMMENTARY

A Load Rating Summary Sheet dated 05/27/2014 is on file for this structure. The current rating has been assigned in accordance with SM&I procedures.

ELEMENT INSPECTION RATINGS AND NOTES


Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each State	St. 1	St. 2	St. 3	St. 4
16			Top Flange-RC	2	8230	sq.m	1890	6340	0	0	0
	1130		Cracking (RC and Other)	2	6340		0	6340	0	0	0
(16-1130)											
The concrete deck exhibits mostly few short longitudinal cracks +/- 0.7 m long and 1.5 mm wide and spaced 1 ft apart above the bents due to negative moments in northbound lane #2.											
104			Box Girder-PS Conc.	2	472	m	467	5	0	0	0
	1110		Cracking (PS Conc.)	2	5		0	5	0	0	0
(104-1110)											
There a longitudinal hairline crack in span 1, span 3 and span 4 soffit of the box girder.											
205			Column-RC	2	12	each	12	0	0	0	0
(205)											
There were no significant defects noted.											
215			Abutment-RC	2	48	m	48	0	0	0	0
(215)											
There were no significant defects noted.											
220			Pile Cap/Footing-RC	2	1	m	1	0	0	0	0
(220)											
The pile element is included to indicate the presence of piles on this structure. The piles were not exposed for visual inspection. No indication of pile distress was noted in any substructure element.											
225			Pile-Steel	2	1	ea.	1	0	0	0	0
(225)											
The pile element is included to indicate the presence of piles on this structure. The piles were not exposed for visual inspection. No indication of pile distress was noted in any substructure element.											
252			Pile-CIDH	2	1	ea.	1	0	0	0	0
(252)											
The pile element is included to indicate the presence of piles on this structure. The piles were not exposed for visual inspection. No indication of pile distress was noted in any substructure element.											
303			Joint-Assembly w/ Seal	2	40	m	40	0	0	0	0
(303)											
There were no significant defects noted.											
312			Bearing-Enclosed	2	2	each	2	0	0	0	0
(312)											
There were no significant defects noted.											
321			Approach Slab-RC	2	520	sq.m	520	0	0	0	0
(321)											
There were no significant defects noted.											

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
331			Railing-RC	2	473	m	473	0	0	0
(331)										
There were no significant defects noted.										

WORK RECOMMENDATIONS - NONE

Team Leader : Mikhael T. Zaarour
 Report Author : Mikhael T. Zaarour
 Inspected By : MT.Zaarour/KD.Henderson


 Mikhael T. Zaarour (Registered Civil Engineer) (Date) 9/23/15



STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0628
 (5) INVENTORY ROUTE(ON/UNDER)- ON 14000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED- SAN JUAN CREEK
 (7) FACILITY CARRIED- ANTONIO PARKWAY
 (9) LOCATION- 0.2 MI. N/O ORTEGA HWY
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- PART OF NET 1
 (13) LRS INVENTORY ROUTE & SUBROUTE 000000000000
 (16) LATITUDE 33 DEG 31 MIN 20.86 SEC
 (17) LONGITUDE 117 DEG 37 MIN 11.36 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN:MATERIAL- CONCRETE CONT
 TYPE- BOX BEAM OR GIRDER - MULTI CODE 205
 (44) STRUCTURE TYPE APPR:MATERIAL- OTHER/NA
 TYPE- OTHER/NA CODE 000
 (45) NUMBER OF SPANS IN MAIN UNIT 5
 (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 1997
 (106) YEAR RECONSTRUCTED 2013
 (42) TYPE OF SERVICE: ON- HIGHWAY-PEDESTRIAN 5
 UNDER- WATERWAY 5
 (28) LANES:ON STRUCTURE 06 UNDER STRUCTURE 00
 (29) AVERAGE DAILY TRAFFIC 12135
 (30) YEAR OF ADT 2011 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 10 KM

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

(48) LENGTH OF MAXIMUM SPAN 53.0 M
 (49) STRUCTURE LENGTH 236.5 M
 (50) CURB OR SIDEWALK: LEFT 1.5 M RIGHT 1.4 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 26.8 M
 (52) DECK WIDTH OUT TO OUT 34.8 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 26.8 M
 (33) BRIDGE MEDIAN- CLOSED NON-MOUNTABLE 3
 (34) SKEW 22 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 13.4 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 = 94.3
 STATUS
 HEALTH INDEX 77.6
 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 6
 (59) SUPERSTRUCTURE 8
 (60) SUBSTRUCTURE 8
 (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- ASSIGNED (LFD) A
 (64) OPERATING RATING- 54.1
 (65) INVENTORY RATING METHOD- ASSIGNED (LFD) A
 (66) INVENTORY RATING- 32.4
 (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 8
 (68) DECK GEOMETRY 7
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 8
 (72) APPROACH ROADWAY ALIGNMENT 8
 (36) TRAFFIC SAFETY FEATURES 1110
 (113) SCOUR CRITICAL BRIDGES 8

***** 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 21164
 (115) YEAR OF FUTURE ADT 2035

***** INSPECTIONS *****

(90) INSPECTION DATE 08/15 (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)