
Bridge Inspection Records Information System

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State of California
Department of Transportation

**Division of Maintenance
Structures Maintenance & Investigations**



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0172
Facility Carried: MODJESKA CYN RD
Location : .1 MI N OF MODJESKA G RD
City :
Inspection Date : 17-JAN-02
Inspection Type

Bridge Inspection Report

Routine ☐ Group A ☒ Underwater ☐ Special ☐ Other ☐

Name : SANTIAGO CREEK

CONSTRUCTION INFORMATION

Year Built : 1935 Skew (degrees): 68
Year Widened : N/A No. of Joints : 0
Length (m) : 19.5 No. of Hinges : 0

Description of Structure : Simply supported single span riveted steel through plate girders (2 each) with an RC deck and RC closed end backfilled cantilever abutments, all supported upon spread footings.

Span Configuration : (S) 1 @ 18.3 m (N) c/c

LOAD CAPACITY AND RATINGS

Design Live Load : M - 13.5 OR H - 15
Inventory Rating : 17.2 metric tons Calculation Method : LOAD FACTOR
Operating Rating : 25.4 metric tons Calculation Method : LOAD FACTOR
Permit Rating : GGGGG
Posting Load : Type 3 N/A english tons Type 3S2 N/A english tons Type 3-3 N/A english tons

DESCRIPTION ON STRUCTURE

Bridge width : (W) Steel plate girder, 0.7 m cu, 2 @ 3.0 m, 0.7 m cu, steel plate girder (E)
Total Width : 7.3 m Net Width : 6.10 m No. of Lanes : 2
Rail Description : None. Rail Code : 1000
Min. Vertical Clearance : Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description : Natural earth trapezoidal.

CONDITION OF STRUCTURE

The steel beams have freckled rust with no loss of section.

The southerly concrete abutment is fractured at its easterly corner and at its westerly corners, near the supports for the steel girders.

Otherwise, the structure is in good condition.

GROUP "A" INVESTIGATION

The structure was inspected by Mark Desrosiers and by Makoto Ogata. No distress was found.

ELEMENT LEVEL INSPECTION RATINGS									
F#	Elem	Element Description	Env	Total Units	Qty in each Condition State				
	No.			Quantity	St. 1	St. 2	St. 3	St. 4	St. 5
01 12		Concrete Deck - Bare	2	110 sq.m.	110	0	0	0	0
01 107		Painted Steel Open Girder/Beam	2	40 m.	0	0	40	0	0
01 152		Painted Steel Floor Beam	2	56 m.	0	0	56	0	0
01 215		Reinforced Conc Abutment	2	30 m.	30	0	0	0	0
01 311		Moveable Bearing (roller, sliding, etc.)	2	2 ea.	2	0	0	0	0
01 313		Fixed Bearing	2	2 ea.	2	0	0	0	0

Bridge No.: 55C0172

Location: .1 MI N OF MODJESKA G RD

Inspection Date: 17-JAN-02

WORK RECOMMENDATIONS

Repair the fractured concrete in the southerly abutment at the easterly corner and at the westerly corner.

<u>Item#</u>	<u>Rec. Date</u>	<u>Work By</u>	<u>Work Id.</u>	<u>Prog. Method</u>	<u>Cost</u>
1	17-JAN-2002	County Agency	40172X02017X		

Inspected By : M. Ogata

M. Ogata

Registered Civil Engineer



CC : TMRut
Orange County

Bridge No.: 55C0172 Location: .1 MI N OF MODJESKA G RD Inspection Date: 17-JAN-02

STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME - CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0172
 (5) INVENTORY ROUTE (ON/UNDER) - ON 1 40 000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED - SANTIAGO CREEK
 (7) FACILITY CARRIED - MODJESKA CYN RD
 (9) LOCATION - .1 MI N OF MODJESKA G RD
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK - NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 42 MIN 32 SEC
 (17) LONGITUDE 117 DEG 38 MIN 09 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN: MATERIAL - STEEL
 TYPE - GIRDER & FLOORBEAM SYSTEM CODE 3 03
 (44) STRUCTURE TYPE APPR: MATERIAL -
 TYPE - CODE
 (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 - CONCRETE CODE 1
 B) TYPE OF MEMBRANE - NONE CODE 0
 C) TYPE OF DECK PROTECTION - NONE CODE 0

***** AGE AND SERVICE *****

(27) YEAR BUILT 1935
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON - HIGHWAY 1
 UNDER - WATERWAY 5
 (28) LANES: ON STRUCTURE 02 UNDER STRUCTURE
 (29) AVERAGE DAILY TRAFFIC 1000
 (30) YEAR OF ADT 1998 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 2 KM

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

(48) LENGTH OF MAXIMUM SPAN 19.5 M
 (49) STRUCTURE LENGTH 19.5 M
 (50) CURB OR SIDEWALK: LEFT .7 M RIGHT .7 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 6.1 M
 (52) DECK WIDTH OUT TO OUT 7.3 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 6.1 M
 (33) BRIDGE MEDIAN - NO MEDIAN 0
 (34) SKEW 68 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 M
 (55) MIN LAT UNDERCLEAR RT REF - NOT H/RR 0 M
 (56) MIN LAT UNDERCLEAR LT 0 M

***** NAVIGATION DATA *****

(38) NAVIGATION CONTROL - NOT APPLICABLE CODE N
 (111) PIER PROTECTION - NOT REQUIRED CODE 1
 (39) NAVIGATION VERTICAL CLEARANCE 0 M
 (116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR 0 M
 (40) NAVIGATION HORIZONTAL CLEARANCE 0

***** SUFFICIENCY RATING = 49.5 *****

STATUS = FUNCTIONALLY OBSOLETE

HEALTH INDEX = 71.25

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

(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) FEDERAL LANDS HIGHWAY - NOT APPLICABLE 0
 (110) DESIGNATED NATIONAL NETWORK - NOT ON NET 0
 (20) TOLL - ON FREE ROAD 3
 (21) MAINTAIN - COUNTY HIGHWAY AGENCY 2
 (22) OWNER - COUNTY HIGHWAY AGENCY 2
 (37) HISTORICAL SIGNIFICANCE - NOT ELIGIBLE 5

***** CONDITION ***** CODE

(58) DECK 7
 (59) SUPERSTRUCTURE 5
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION 8
 (62) CULVERTS N

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

(31) DESIGN LOAD - M - 13.5 OR H - 15 2
 (63) OPERATING RATING METHOD - LOAD FACTOR 1
 (64) OPERATING RATING - 25.4
 (65) INVENTORY RATING METHOD - LOAD FACTOR 1
 (66) INVENTORY RATING - 17.2
 (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 4
 (68) DECK GEOMETRY 3
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 8
 (72) APPROACH ROADWAY ALIGNMENT 6
 (36) TRAFFIC SAFETY FEATURES 1000
 (113) SCOUR CRITICAL BRIDGES 8

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

(75) TYPE OF WORK - REPLACE FOR DEFICIENCY CODE 31
 (76) LENGTH OF STRUCTURE IMPROVEMENT 26.89 M
 (94) BRIDGE IMPROVEMENT COST \$236,000
 (95) ROADWAY IMPROVEMENT COST \$24,000
 (96) TOTAL PROJECT COST \$353,000
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 1999
 (114) FUTURE ADT 1000
 (115) YEAR OF FUTURE ADT 2015

***** INSPECTIONS *****

(90) INSPECTION DATE 05/01 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL - YES 48 MO A) 01/02
 B) UNDERWATER INSP - NO -1 MO B)
 C) OTHER SPECIAL INSP - NO -1 MO C)

MAY 24 2002



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0172
Facility Carried: MODJESKA CYN RD
Location : .1 MI N OF MODJESKA G RD
City :
Inspection Date : 29-MAY-01

Bridge Inspection Report

Inspection Type
Routine ☒ Group A ☐ Underwater ☐ Special ☐ Other ☐

Name : SANTIAGO CREEK

CONSTRUCTION INFORMATION

Year Built : 1935 Skew (degrees): 68
Year Widened : N/A No. of Joints : 0
Length (m) : 19.5 No. of Hinges : 0
Description of Structure : Simply supported single span riveted steel through plate girders (2 each) with an RC deck and RC closed end backfilled cantilever abutments, all supported upon spread footings.

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LOAD CAPACITY AND RATINGS

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Total Width : 7.3 m Net Width : 6.10 m No. of Lanes : 2
Rail Description : None. Rail Code : 1000
Min. Vertical Clearance : Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description : Natural earth trapezoidal.

CONDITION OF STRUCTURE

The steel beams have freckled rust with no loss of section.
Otherwise, the structure is in good condition.

ELEMENT LEVEL INSPECTION RATINGS

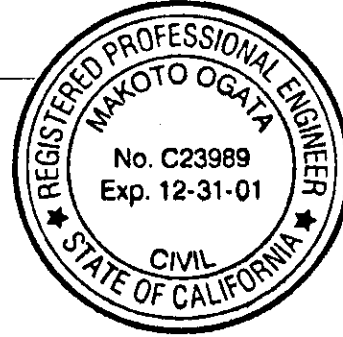
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01 311		Moveable Bearing (roller, sliding, etc.)	2	2 ea.	2	0	0	0	0
01 313		Fixed Bearing	2	2 ea.	2	0	0	0	0

WORK RECOMMENDATIONS - NONE

Bridge No.: 55C0172 Location: .1 MI N OF MODJESKA G RD Inspection Date: 29-MAY-01

Inspected By : M. Ogata

M. Ogata
Registered Civil Engineer



CC : TMRut
Orange County

Bridge No.: 55C0172 Location: .1 MI N OF MODJESKA G RD Inspection Date: 29-MAY-01

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 (105) FEDERAL LANDS HIGHWAY - NOT APPLICABLE 0
 (110) DESIGNATED NATIONAL NETWORK - NOT ON NET 0
 (20) TOLL - ON FREE ROAD 3
 (21) MAINTAIN - COUNTY HIGHWAY AGENCY 2
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 (66) INVENTORY RATING - 17.2
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 (97) YEAR OF IMPROVEMENT COST ESTIMATE 1999
 (114) FUTURE ADT 1000
 (115) YEAR OF FUTURE ADT 2015

***** INSPECTIONS *****

(90) INSPECTION DATE 05/01 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL - YES 48 MO A) 04/91
 B) UNDERWATER INSP - NO -1 MO B)
 C) OTHER SPECIAL INSP - NO -1 MO C)

Bridge Number 55C-172

TYPE OF INVESTIGATION/REPORT

BIENNIAL	<u>X</u>	DAMAGE	___
CATEGORY A	___	OTHER	___
UNDERWATER	___	OFFICE	___

Location 12 - Ora - CR
Dist.-Co.-Rte.-City

Date of Investigation July 5, 1995

Name SANTIAGO CREEK (Modjeska Canyon Road, 0.1 mile north of Modjeska Grade Road)

CONDITION RATINGS:

Condition ratings of all bridge elements are shown on the PONTIS DATA FORM (Attachment A).

Channel & Channel Protection

8

SCOUR CRITICAL:

A scour rating of A-3 is appropriate.

CONDITION OF STRUCTURE:

Bolts, six each, on one end of the floor beam that connects to main girder, are missing. It appears that they were deliberately removed on alternate ends of the beams. Corrosion around bolt holes has resulted from this.

There is light cracking on abutment walls and soffit.

Pedestal cracks, mentioned in last report, remain the same.

Condition of structure is good.

WORK RECOMMENDED:

1. Replace missing bolts at ends of floor beams.
2. Repair cracks on pedestals.

ENCROACHMENT:

One 0.20 m diameter welded steel pipe attached to west exterior.

One 0.038 m diameter steel conduit attached transversely under the girders along the north abutment.

By M. Hadi Behrooj
G. P. Balinghasay

GPB:cd
cc: CDHarris
Orange County
WLindsey



INFORMATION ONLY - NOT FOR UPDATE

BRIDGE NUMBER	FRAME	INSPECTION DATE
55C0172	01	070595
1 8	9	11 16


SCOUR CRITICAL	NO
CATEGORY A	YES
FRACTURE CRITICAL	NO
ELIGIBLE FOR RAIL UPGRADE	NO
UNDERWATER INSPECTION	NO

DISTRICT	12
COUNTY	ORA
ROUTE	
POSTMILE	
NAME	

[illegible]

07/20/95

43 48

BY 

Bridge No. 55C-172

Name SANTIAGO CREEK (Modjeska Canyon
Road, 0.1 mile north of Modjeska
Grade Road)

Location

12-Ora-CR
Dist.-Co.-Rte.-City

SUMMARY OF ENCROACHMENTS

Permit No. and Permittee	Date	Description & Location on Bridge
	Prior to 7-5-95	1 - 0.20 m diameter welded steel pipe attached to west exterior. 1 - 0.038 m diameter steel conduit attached transversely under the girders along the north abutment.

Bridge Number 55C-172

TYPE OF INVESTIGATION/REPORT

BIENNIAL X DAMAGE
CATEGORY A OTHER
UNDERWATER OFFICE

Location 12 - Ora - CR
Dist.-Co.-Rte.-City

Date of Investigation April 22, 1993

Name SANTIAGO CREEK (Modjeska Canyon Road, 0.1 mile north of
Modjeska Grade Road)

CONDITION RATINGS:

Condition ratings of all bridge elements are
shown on the PONTIS DATA FORM (Attachment A).

Channel & Channel Protection

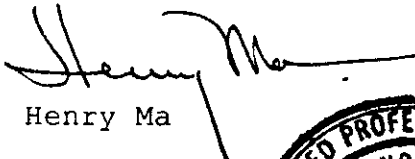
8

CONDITION OF STRUCTURE:

Condition of fractured concrete pedestal under bearing plate of each of the two plate girders at south end remains the same. Otherwise, the structure is in good condition.

WORK RECOMMENDED:

Repair concrete pedestals as previously recommended.


Henry Ma

HM:cd
cc: INagai (2)
County of Orange



(ATTACHMENT A)

INFORMATION ONLY - NOT FOR UPDATE

SCOUR CRITICAL	NO
CATEGORY A	YES
FRACTURE CRITICAL	NO
ELIGIBLE FOR RAIL UPGRADE	NO
UNDERWATER INSPECTION	NO

DISTRICT	12
COUNTY	ORA
ROUTE	***
POSTMILE	*****
NAME	

H. MA

BY:

BRIDGE REPORT

DS-MS8 (REV. 1/91)

14W14

Bridge No. 55C - 172

Location 12 - Ora - CR

Dist Co Rte City

REVISED ORIGINAL REPORT

Date of Investigation April 17, 1991

Name SANTIAGO CREEK (Modjeska Canyon Road, 0.1 mile north of
Modjeska Grade Road)

Lat. 33° - 42.5'N Long. 117° - 38.1'W

Custodian County of Orange Owner County of Orange

STRUCTURAL DATA AND HISTORY

Year Built 1935 By County of Orange Contract No. Unknown

Designed by: County Plans Avail. @ County

Description: Single span simply supported riveted steel through plate
girders (2 each) and RC deck, supported by RC pedestals
and closed end backfilled RC cantilever abutments on
spread footing.

Spans (S) 60' (N)

Length 64' NBIS Bridge Length Yes Skew 68° Right

Number Of Intermediate Joints: @Hinges None @Bents None

Maximum Column/Pier Height: (Less than 20') X (20'-29') (30' & Over)

Design Live Load H15 Design Method Unknown

DESCRIPTION - ON STRUCTURE

Bridge Width (W) steel plate girder, 2.2'cu, 20', 2.2'cu, stl pl and (E)

Total Width 24' Net Width 20' Lanes 2 Tracks None

Median None Rail Type Steel girder

1000

Vert. Clearance over deck Unimpaired Appr. Rdwy. Width 20'

Deck Type 1 Wearing Surface/Prot. Sys. 100 Concrete/none

Alignment Tangent

DESCRIPTION - UNDER STRUCTURE

Roadway Section None

Clearances: Road: Vert. Horiz. Lt. ; Rt.

Lanes Tracks

Facilities Crossed Santiago Creek (E08)

April 17, 1991

DESCRIPTION - HYDRAULICS

Channel Natural stream with moderate vegetation growth

Navigable: Yes ☐ No ☒ Clearances: Vert.

Horiz.

Pier/Abutment Protection (For Navigation) ☐

TRAFFIC INFORMATION

	DECK	YEAR	UNDER	YEAR
Average Daily Traffic & Year :	1,000	1989	N	
Average Daily Traffic (Future) :	1,000 Est	2010	N	
Average Daily Trucks (% OF ADT) :	1% Est		N	
Bypass Detour Length	1 mile		N	
Shell Route:	No		No	
Functional Classification :	09		N	
LOAD RATINGS:	Inventory HS 11	Operating HS 16		
	Permit GGGGG	Computation Method Load Factor		

CONDITION RATINGS:

Deck	8	Superstructure	7	Substructure	7
Channel & Channel Protection	8	Culvert	N	Widenable	No

APPRAISAL RATINGS:

Waterway Adequacy	9	Approach Roadway Alignment	6
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Date of Revisions

CONDITION OF STRUCTURE:

There are several missing rivets (6 ± each), which attach bottom cover plate to main girder, on the east plate girder at the 2nd and 4th floor beam (from south) connection; also on the west plate girder at the 3rd and 5th floor beam (from south) connection. At these locations moisture, corrosion, and subsequent expansion has separated and warped the bottom cover plate.

Previously reported Fracture and incipient spalling of both concrete pedestals supporting the steel plate girders at south end of the bridge remains unchanged.

Condition of the structure is good.

PAINT CONDITION:

Code 4. Condition of paint is poor. There is light freckle rust throughout and moderate flaking rust at isolated locations mentioned above.

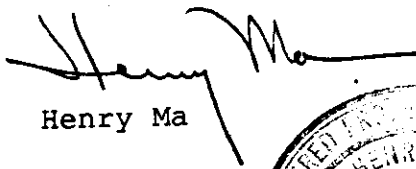
April 17, 1991

WORK RECOMMENDED:

Repair both concrete pedestals supporting girder bearing plate at south abutment noted above.

ENCROACHMENT:

8" welded steel pipe attached to west exterior.


Henry Ma

HM:ms

cc: INagai (2)
County of Orange



Bridge No. 55C-172
Location 12-Ora-CR
Dist. Co. Rte. City
Date of Investigation 4-17-91

SANTIAGO CREEK (Modjeska Canyon Road, 0.1 mile north of Modjeska
Name Grade Road)

CONDITION RATING:

Deck _____ Superstructure _____ Substructure _____
Channel & Channel Protection _____ Culvert _____ Widenable? _____ No _____

TYPE OF INVESTIGATION/REPORT

BIENNIAL _____ DAMAGE _____
CATEGORY A X OTHER _____
UNDERWATER _____ OFFICE _____

CATEGORY "A" INSPECTION:

This structure is a Category "A" structure because it is a 2 girder system with no redundant members.

The 2 steel plate girders are built-up by riveted construction with rivet connected floor beams supporting a through RC deck.

A close-up visual inspection was performed this date by means of ladder.

Next Category "A" inspection: April, 1997

CONDITION OF STRUCTURE:

There is no visual distress and condition of the steel members is good.

Henry Ma

HM:ms

cc: INagai (2)



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
DS-M19 (REV. 1/89)

Bridge No. 55C-172
Location 12-Ora - CR
Dist. Co. Rte. City
Date of Investigation 4-11-89

Name SANTIAGO CREEK (Modjeska Canyon Road, 0.1 mile North of Modjeska Grade Road)

CONDITION RATING:

Deck 7 Superstructure 7 Substr.&Pipes 7
Channel & Channel Protection 6 Culvert N Widenable? No

TYPE OF INVESTIGATION/REPORT

BIENNIAL X DAMAGE
CATEGORY A OTHER
UNDERWATER OFFICE

DISCUSSION:

This structure is a simply supported single span bridge. It consists of two steel riveted through plate girder framing system as load carrying member, supported at each end on an individual concrete pedestal. As such, this bridge is considered to be a nonredundant and fracture critical structure. Therefore, it is recommended that mitigation to deficient conditions noted below be implemented with priority.

CONDITION OF STRUCTURE:

Condition of cracks in the concrete column pedestal supporting south abutment girder bearing of both girders, previously reported, has developed into an incipient concrete spall under the area of masonry bearing plate at southeast and southwest corner.

Condition of the structure is good.

PAINT CONDITION:

Code 4. Condition of paint is poor. Light to moderate freckle rust is appearing throughout.

REVISION:

Location: 12-Ora-CR

WORK RECOMMENDED:

Repair weakened condition of concrete pedestal under both girder bearing plates of south abutment by removing the unsound concrete and reconstructing the pedestal under the bearing plate. Temporary support of both girders will be required to do this work. SUBM

BRIDGE NO. 55C - 172		
SHEET NO. 2	DATE:	4-11-89

RECOMMENDED POSTING:

None.

SUBSTRUCTURE CODING UPDATE:

Single span structure.

2 RC open end seated abutments on spread footing.


Henry Ma

HM:ms

cc: INagai (2)
County of Orange (2)



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
S.B.R. 102 (REV. 1/74)

Bridge No. 55C-172
Location 7-Ora-CR
Sta. - Co. - Km. - Pg. - City
Date of Investigation January 9, 1986

Name SANTIAGO CREEK (Modjeska Canyon Rd., 0.1 mile north of Modjeska Grade Road)

CONDITION RATING:

APPRAISAL RATING:

Deck 7 Superstructure 7 Substr. & Pipes 7 Overall 7
Channel & Channel Protection 6 Retaining Walls N

Widenable? Yes ☒ No ☐ Conditional ☐

Action Required by County Yes ☐ No ☒

PRIORITY

A - Immediate Action
B - Early Scheduling
C - Routine Maint.
O - For Record Only

This structure is classified as Local Agency Category "A" bridge, a close-up inspection was made on the above date.

WORK DONE:

Superficial paint has been applied to the steel girders (tops and insides) only above the road deck level.

ENCROACHMENT:

1½" steel conduit is attached transversely under the girders along the north abutment.

CONDITION OF STRUCTURE:

The overall condition of the structure is good.

CONDITION OF PAINT:

Code 4 - Freckle rust is appearing throughout the structure. Some rusting are also found at contact surfaces of bearing plates and concrete. The condition of paint is poor.

RECOMMENDED POSTING:

None

WORK RECOMMENDED:

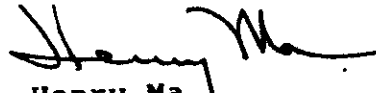
None

BRIDGE No. 55C-172
SHEET 2 of 2
DATE January 9, 1986

RECOMMENDATION:

Program this structure for cleaning and painting of structural steel.

B


Henry Ma
C-36817

HM:pdh
cc: INagai (2)
Orange County (2)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
DN-OS M19 (REV. 1/74)

Bridge No. 55C-172
Location 7-Ora-CR
Dist - Co - Rte - PM - City
Date of Investigation October 26, 1983

Name SANTIAGO CREEK (Modjeska Canyon Rd., 0.1 mile north of Modjeska
Grade Rd.)

CONDITION RATING:

APPRAISAL RATING:

Deck 7 Superstructure 7 Substr. & Pipes 7 Overall 7
Channel & Channel Protection 6 Retaining Walls N

Widenable? Yes ☒ No ☐ Conditional ☐

County ELK
Action Required by ELK Yes ☐ No ☒

PRIORITY

A - Immediate Action
B - Early Scheduling
C - Routine Maint.
O - For Record Only

CONDITION OF STRUCTURE:

The overall condition of the structure is good.

PAINT:

Code 4 - Rust specks throughout apparently from rock throwing.

RECOMMENDED POSTING:

None

RECOMMENDATION:

None

E. L. Neff

E. L. Neff
C-28703

ELN:pdh
cc: DRHiggins (2)
Orange County (2)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
DH-OS 119 (REV. 1/74)

Bridge No. 55C-172
Location C7-Ora-CR
Dist - Co - Rte - PM - City
Date of Investigation October 19, 1981

Name SANTIAGO CREEK (Modjeska Canyon Road, 0.1 mile north of
Modjeska Grade Road)

CONDITION RATING:

APPRAISAL RATING:

Deck 7 Superstructure 7 Substr. & Pipes 7 Overall 7
Channel & Channel Protection 6 Retaining Walls (N)

Widenable? Yes ☒ No ☐ Conditional ☐

County:
Action Required by ~~District~~ Yes ☐ No ☒

WORK DONE:

The previously recommended work appears to have been done.

CONDITION OF STRUCTURE:

The overall condition of the structure is good.

PAINT:

Code 4, rust specks throughout apparently from rock throwing.

RECOMMENDED POSTING:

None.

E. L. Neff
E. L. Neff
C 28703

ELN:cd
cc: DRHiggins (2)
Orange County (2)

Bridge No. **55C-172**
Other No. **8C-7**
P.U.C. No. _____
Location **07-098-0-08**
Dist - Co - Rte - PM - City
Date of Investigation **May 4, 1978**

SEE REVISED
ORIGINAL REPORT

Name **SANTIAGO CREEK (Modjeska Cyn Rd., 0.1 mi. N. of Modjeska Grade Rd.)**
Lat. **33°-42.5'** Long. **117°-38.1'**

STRUCTURAL DATA AND HISTORY

Year Built **1935** By **Orange County** Contract No. **---**

Date of Revisions _____

Designed by: B.D. ☐ **County** Plans Avail. ☐ **County**

Description: **Single span 2 through riveted plate girders, RC
seated abutments supported on spread footings.**

Spans **60'**
Length **64'** Skew **68° Rt.** Design LL **M-15**
Ratings: Inventory **MS 10.74** Operating **MS 15.74** Permit **00000**

DESCRIPTION - ON STRUCTURE

Bridge Width **2' cu, 20.0', 2' cu**
Total Width **24.5'** Lanes **2** Tracks **None**
Median **None** Rail Type **St. Girder (0000)**
Vert. Clearance over deck **Unimpaired** Appr. Rdwy. Width **30'**
Wearing Surface **None** Deck Seal **None**
Alignment **Tangent**

DESCRIPTION - UNDER STRUCTURE

Roadway Section **None**
Clearances: Vert. _____ Horiz. _____ Lt. _____ Rt. _____
Lanes _____ Tracks _____ Pumpplant: None ☐ See Br. No. _____
Facilities Crossed **Santiago Creek**

Bridge No. 550-172
Date May 2, 1978

DESCRIPTION - HYDRAULICS

Channel Natural

Navigable: Yes ☐ No ☒ Clearances: Vert. _____ Horiz. _____

MAINTENANCE

Custodian County Owner County

ORIGINAL
CONDITION RATING

Deck	<u>7</u>
Superstructure	<u>7</u>
Substructure & Pipes	<u>7</u>
Channel & Channel Protection	<u>6</u>
Retaining Walls	<u>---</u>
Approach Rdwy. Alignment	<u>4</u>
Estimated Remaining Life	<u>20</u>

ORIGINAL
APPRAISAL

Overall	<u>7</u>
Deck Geometry	<u>4</u>
Underclearances	Vert. <u>---</u>
	Horiz. <u>---</u>
Safe Load Capacity	<u>5</u>
Waterway Adequacy	<u>8</u>
Approach Rdwy. Alignment	<u>9</u>

Widenable? Yes ☐ No ☒ Conditional ☐

County Orange
Action Required by District: Yes ☒ No ☐

AVERAGE DAILY TRAFFIC:

400 • (1978)

EX PASS INTERCHANGING:

03

ENCROACHMENTS:

8" steel pipe attached to west side.

PAINT:

Code 4 - Rust specks throughout

CONDITION OF STRUCTURE:

The concrete bearing pedestals at the south end are cracked under both girders.

LOAD CAPACITY:

Calculated by the Office of Structures rating section.

WORK RECOMMENDED:

Epoxy inject cracks in concrete bearing pedestals at south end.

J. R. Martin
Original signed by
C. E. Brunsard

CED:ub
cc: Dist. Of Local Ass't
Orange (2)