



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 49C0033
Facility Carried: CYPRESS MT RD
Location : 1.9 MI SW KLAU
City :
Inspection Date : 09/28/2008

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: KLAU CREEK

CONSTRUCTION INFORMATION

Year Built : 1953 Skew (degrees): 15
Year Widened: N/A No. of Joints : 0
Length (m) : 8.8 No. of Hinges : 0

Structure Description: Simple span timber stringer (13) with timber plank deck on stone masonry abutments

Span Configuration : 1@8.5m

LOAD CAPACITY AND RATINGS

Design Live Load: OTHER OR UNKNOWN
Inventory Rating: 18.1 metric tons Calculation Method: ALLOWABLE STRESS
Operating Rating: 26.3 metric tons Calculation Method: ALLOWABLE STRESS
Permit Rating : 00000
Posting Load : Type 3 N/A Type 3S2 N/A Type 3-3 N/A

DESCRIPTION ON STRUCTURE

Deck X-Section: 0.15m br, 0.08m cu, 4.3m, 0.08m cu, 0.15m br
Total Width: 4.7 m Net Width: 4.3 m No. of Lanes: 1
Rail Description: Timber Rail Code : 0000
Min. Vertical Clearance: Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description: Heavy gravel, cobbles and some boulders

CONDITION TEXT

CONDITION OF STRUCTURE

The timber deck appears to have been replaced since the previous inspection and its condition state has been upgraded in the report from the last inspection.

There is a large vertical crack (up to 1.5-in wide; previously noted as approximately 1.25-in wide) extending approximately 6-ft in the mortar joint at Abutment 2 left. The cause of the crack is unknown, but could possibly be due to seismic activities or possibly settlement behind the wall as a result of localized scour and undermining on the right side of Abutment 2. The approach roadway exhibited no immediate signs of settlement and no outward signs of movement to the wall were noted other than the mortar crack. See work recommendations.

There is a moderate size crack (approximate 1/8-in) extending non-continuously the entire width of the concrete tie beam/ledger at Abutment 1. The crack has been previously reported and has remained relatively stable since the last routine inspection.

Scour along the right side of Abutment 2 continues with undermining of the wingwall and abutment. The undermining has created a void with approximate dimensions of 12-ft x 3-ft x 3-ft as previously noted in the last routine inspection. Scour is a concern with this structure based on the progression noted between inspections. Considering the cracking in the masonry abutment on the other end and the progression of scour noted between inspections in the past, scour mitigation previously recommended should be expedited.

STRUCTURE INVENTORY AND APPRAISAL REPORT

```

***** IDENTIFICATION *****
(1) STATE NAME- CALIFORNIA 069
(8) STRUCTURE NUMBER 49C0033
(5) INVENTORY ROUTE(ON/UNDER)- ON 140000000
(2) HIGHWAY AGENCY DISTRICT 05
(3) COUNTY CODE 079 (4) PLACE CODE 00000
(6) FEATURE INTERSECTED- KLAU CREEK
(7) FACILITY CARRIED- CYPRESS MT RD
(9) LOCATION- 1.9 MI SW KLAU
(11) MILEPOINT/KILOMETERPOINT 0
(12) BASE HIGHWAY NETWORK- NOT ON NET 0
(13) LRS INVENTORY ROUTE & SUBROUTE
(16) LATITUDE 35 DEG 37 MIN 01.2 SEC
(17) LONGITUDE 120 DEG 54 MIN 54 SEC
(98) BORDER BRIDGE STATE CODE % SHARE %
(99) BORDER BRIDGE STRUCTURE NUMBER

***** STRUCTURE TYPE AND MATERIAL *****
(43) STRUCTURE TYPE MAIN:MATERIAL- WOOD OR TIMBER
TYPE- STRINGER/MULTI-BEAM OR GDR CODE 702
(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- TIMBER CODE 8
(108) WEARING SURFACE / PROTECTIVE SYSTEM:
A) TYPE OF WEARING SURFACE- TIMBER CODE 7
B) TYPE OF MEMBRANE- NONE CODE 0
C) TYPE OF DECK PROTECTION- NONE CODE 0
***** AGE AND SERVICE *****
(27) YEAR BUILT 1953
(106) YEAR RECONSTRUCTED 0000
(42) TYPE OF SERVICE: ON- HIGHWAY 1
UNDER- WATERWAY 5
(28) LANES:ON STRUCTURE 01 UNDER STRUCTURE 00
(29) AVERAGE DAILY TRAFFIC 68
(30) YEAR OF ADT 1990 (109) TRUCK ADT 0 %
(19) BYPASS, DETOUR LENGTH 43 KM
***** GEOMETRIC DATA *****
(48) LENGTH OF MAXIMUM SPAN 8.5 M
(49) STRUCTURE LENGTH 8.8 M
(50) CURB OR SIDEWALK: LEFT 0.1 M RIGHT 0.1 M
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 4.3 M
(52) DECK WIDTH OUT TO OUT 4.7 M
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 3.7 M
(33) BRIDGE MEDIAN- NO MEDIAN 0
(34) SKEW 15 DEG (35) STRUCTURE FLARED NO
(10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 4.3 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 = 22.7
STATUS STRUCTURALLY DEFICIENT
HEALTH INDEX 95.8
PAINT CONDITION INDEX = N/A

***** CLASSIFICATION ***** CODE
(112) NBIS BRIDGE LENGTH- YES Y
(104) HIGHWAY SYSTEM- NOT ON NHS 0
(26) FUNCTIONAL CLASS- MINOR COLLECTOR RURAL 08
(100) DEFENSE HIGHWAY- NOT STRAHNET 0
(101) PARALLEL STRUCTURE- NONE EXISTS N
(102) DIRECTION OF TRAFFIC- 1 LANE, 2 WAY 3
(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 7
(60) SUBSTRUCTURE 3
(61) CHANNEL & CHANNEL PROTECTION 6
(62) CULVERTS N

***** LOAD RATING AND POSTING ***** CODE
(31) DESIGN LOAD- OTHER OR UNKNOWN 0
(63) OPERATING RATING METHOD- ALLOWABLE STRESS 2
(64) OPERATING RATING- 26.3
(65) INVENTORY RATING METHOD- ALLOWABLE STRESS 2
(66) INVENTORY RATING- 18.1
(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 3
(68) DECK GEOMETRY 6
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
(71) WATER ADEQUACY 8
(72) APPROACH ROADWAY ALIGNMENT 4
(36) TRAFFIC SAFETY FEATURES 0000
(113) SCOUR CRITICAL BRIDGES U

***** 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 105
(115) YEAR OF FUTURE ADT 2028

***** INSPECTIONS *****
(90) INSPECTION DATE 09/08 (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)

```