

DEPARTMENT OF TRANSPORTATION

DIVISION OF MAINTENANCE  
STRUCTURE MAINTENANCE & INVESTIGATIONS  
1801 30th Street  
Sacramento, CA 95816  
PHONE (916) 227-8631  
FAX (916) 227-8357



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JAN 19 2010

RESOURCE MANAGEMENT AGENCY  
January 18, 2010 PUBLIC WORKS - ADMIN

Bridge Number: 44C0163

Co. No. 536

Bridge Name: TURNER CREEK

Mr. Yazdan T Emrani  
Director Of Public Works  
County of Monterey  
168 W. Alisal Street, 2nd floor  
Salinas, CA 93901

Dear Mr. Emrani:

In accordance with Title 23 of the Code of Federal Regulations (Federal Highway Act) and the National Bridge Inspection Standards (NBIS), Caltrans Structure Maintenance and Investigations performed a Routine Inspection for the above noted bridge. This bridge has been rated considering its deficiencies, structural adequacy, safe load carrying capacity and overall general condition.

**Posting for limited speed is recommended for this structure.** After you have reviewed the report, please notify us within 30 days as to what action you propose to take with regard to the posting (permanent or temporary) or corrective maintenance.

Section 35754 of the California Vehicle Code extends authority to the County to temporarily post restrictive weights on a bridge structure for periods not in excess of ninety (90) days. The most commonly used authority for permanently posting a bridge structure exists in Section 35751. Specific notification, public hearings and a signed posting order are among the requirements contained within that Section.

If you wish to discuss these or other aspects of the bridge posting process, please call Tim Campbell @ (916) 227-8629 or Erol Kaslan @ (916) 227-8205.

Sincerely,

PETE WHITFIELD  
Office Chief  
Structure Maintenance & Investigations - (Investigations North)

Enclosures

PWD       APWD       FMIII

RES# 10000001306

CONSTR/MAINT: Atkins; Martinez

FINANCE: \_\_\_\_\_

DESIGN: Adlawan; Poochigian

DEV. TRANSP: \_\_\_\_\_

ENVIRONMENTAL: \_\_\_\_\_

CAP PROJ: \_\_\_\_\_

FIELD: \_\_\_\_\_

FACILITIES: \_\_\_\_\_

ACTION NOTES: \_\_\_\_\_

MF: bridge # 436

**DEPARTMENT OF TRANSPORTATION**

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**Bridge Report Transmittal Sheet**Batch 17749

Br. Number	Bridge Name	Inspection		Outstanding Work
		Date	Type	
44C0163	TURNER CREEK	10/28/2009	Routine/FC	Y
Open/Posted/Closed (41):		Posted For Speed, Etc	Type 3	25 Tons per Vehicle
Posting (70):		5 At/Above Legal Loads	Type 3S2	36 Tons per Semi Trailer Combination
Speed:		5 MPH	Type 3-3	40 Tons per Truck and Full Trailer



DEPARTMENT OF TRANSPORTATION  
Structure Maintenance & Investigations

Bridge Number : 44C0163  
Facility Carried: PALO COLORADO ROAD  
Location : 5.2 MI SE SH 1  
City :  
Inspection Date : 10/28/2009

### Bridge Inspection Report

Inspection Type  
Routine  FC  Underwater  Special  Other

STRUCTURE NAME: TURNER CREEK

#### CONSTRUCTION INFORMATION

Year Built : 1954 Skew (degrees): 0  
Year Widened: N/A No. of Joints : 0  
Length (m) : 11.3 No. of Hinges : 0

Structure Description: Single rolled steel girder span with a total of 4 girders in a two 2-girder configuration with rolled steel transverse floor stringers supporting an open grid steel deck between Girders 1 and 2 and 3 and 4 (the transverse floor stringers are discontinuous between the center two closely spaced girders where a RC deck is present) on rolled steel caps fully supported by four steel piles at both abutments. PC/RC panels are in place behind the piles to retain the approach fill. A timber log wingwall exists at Abutment 2 right.

Span Configuration : 1 @ 10.82 m

#### LOAD CAPACITY AND RATINGS

Design Live Load: OTHER OR UNKNOWN  
Inventory Rating: 13.3 metric tonnes Calculation Method: LOAD FACTOR  
Operating Rating: 22.4 metric tonnes Calculation Method: LOAD FACTOR  
Permit Rating : XXXXX  
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

#### DESCRIPTION ON STRUCTURE

Deck X-Section: 0.45 m cu, 6.9 m, 0.45 m cu  
Total Width: 7.8 m Net Width: 6.9 m No. of Lanes: 2  
Rail Description: MBGR w/steel angle posts Rail Code : 0000  
Min. Vertical Clearance: Unimpaired

#### DESCRIPTION UNDER STRUCTURE

Channel Description: V shaped channel with large boulders and light vegetation.

#### CONDITION TEXT

##### CONDITION OF STRUCTURE

The concrete panel lagging at Abutment 1 right is vertically exposed up to 0.6 m below the bottom edge and horizontally undermined up the 0.2 m from the face for approximately 2 m in length. It appears that bank slumping, not scour, is the cause of this condition.

There was up to 0.2 m of flowing water in the channel during this inspection. Both the abutments were dry. No underwater investigation was necessary.

##### PAINT CONDITION

This structure was repainted just prior to the 9/26/2007 Routine Inspection. The paint is dirty and there is a build up of dirt on the bottom flanges of the steel girders.

##### FRACTURE CRITICAL INVESTIGATION

A Fracture Critical Inspection of this structure was conducted according to the attached

CONDITION TEXT

fracture critical inspection plan dated 09/26/2007. The tension areas of the rolled steel girders along with the Category "E" weld details indicated on the fracture critical inspection plan that were accessible with the use of a ladder were inspected. A portion of the girder tension areas and the category "E" weld details, including the girder splices, near center span could not be inspected due to the height above the channel. The uneven channel bottom also made the inspection difficult. No defect indications were found in the members or details inspected.

SAFE LOAD CAPACITY

This structure was re-rated on 10/28/2009 using the Load Factor Method. According to the new rating the inventory and operating ratings have changed from 17.2 metric tons and 29 metric tons to 13.3 metric tons and 22.4 metric tons. The permit rating has not changed and is XXXXX.

According to the load rating analysis performed on 10/28/2009, this structure is adequate for all combinations of legal loads without the addition of impact loading.

With the addition of impact loading the safe load capacity of this structure calculates to be:

- 21 tons - Type 3
- 33 tons - Type 3S2
- 40 tons - Type 3-3

The moment capacity of the steel girders controls the load capacity. The capacity of the steel girders is based on a yield stress of 33 ksi due to the year constructed.

EXISTING POSTING

This structure is currently not posted.

RECOMMENDED POSTING

It is recommended that this structure be posted for the following speed restriction:

5 MPH ON BRIDGE FOR VEHICLES OVER 20 TONS

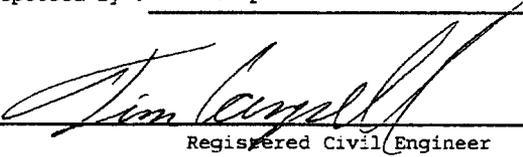
<u>ELEMENT INSPECTION RATINGS</u>								
F#Elem	Element Description	Env	Total Units	Qty in each Condition State				
				Qty	St. 1	St. 2	St. 3	St. 4
101 12	Concrete Deck - Bare	2	11 sq.m.	11	0	0	0	0
101 28	Steel Deck - Open Grid	2	63 sq.m.	63	0	0	0	0
101 107	Painted Steel Open Girder/Beam	2	44 m.	44	0	0	0	0
101 152	Painted Steel Floor Beam	2	132 m.	132	0	0	0	0
101 202	Painted Steel Column or Pile Extension	2	8 ea.	8	0	0	0	0
101 217	Other Material Abutment	2	16 m.	16	0	0	0	
101 231	Painted Steel Cap	2	14 m.	14	0	0	0	0
101 330	Metal Bridge Railing - coated or uncoated	2	26 m.	26	0	0	0	

WORK RECOMMENDATIONS

WORK RECOMMENDATIONS

RecDate: 10/28/2009	EstCost: \$	Place slope protection adjacent to the
Action : Sub-Misc.	StrTarget: 2 YEARS	undermied concrete panel lagging at
Work By: LOCAL AGENCY	DistTarget:	Abutment 1 right.
Status : PROPOSED	EA:	

Inspected By : T.Campbell

  
\_\_\_\_\_  
Registered Civil Engineer



STRUCTURE INVENTORY AND APPRAISAL REPORT

```

***** IDENTIFICATION *****
(1) STATE NAME- CALIFORNIA                069
(8) STRUCTURE NUMBER                      44C0163
(5) INVENTORY ROUTE (ON/UNDER) - ON      140000000
(2) HIGHWAY AGENCY DISTRICT              05
(3) COUNTY CODE 053 (4) PLACE CODE 00000
(6) FEATURE INTERSECTED-                 TURNER CREEK
(7) FACILITY CARRIED-                    PALO COLORADO ROAD
(9) LOCATION-                             5.2 MI SE SH 1
(11) MILEPOINT/KILOMETERPOINT            0
(12) BASE HIGHWAY NETWORK- NOT ON NET    0
(13) LRS INVENTORY ROUTE & SUBROUTE      00
(16) LATITUDE                             36 DEG 22 MIN 22 SEC
(17) LONGITUDE                             121 DEG 50 MIN 13 SEC
(98) BORDER BRIDGE STATE CODE            % SHARE %
(99) BORDER BRIDGE STRUCTURE NUMBER

***** STRUCTURE TYPE AND MATERIAL *****
(43) STRUCTURE TYPE MAIN:MATERIAL-        STEEL
      TYPE- STRINGER/MULTI-BEAM OR GDR CODE 302
(44) STRUCTURE TYPE APPR:MATERIAL-        OTHER/NA
      TYPE- OTHER/NA CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT         1
(46) NUMBER OF APPROACH SPANS             0
(107) DECK STRUCTURE TYPE- OPEN GRATING   CODE 3
(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                           1954
(106) YEAR RECONSTRUCTED                   0000
(42) TYPE OF SERVICE: ON- HIGHWAY          1
      UNDER- WATERWAY                     5
(28) LANES:ON STRUCTURE 02 UNDER STRUCTURE 00
(29) AVERAGE DAILY TRAFFIC                 700
(30) YEAR OF ADT 2005 (109) TRUCK ADT 2 %
(19) BYPASS, DETOUR LENGTH                 199 KM

***** GEOMETRIC DATA *****
(48) LENGTH OF MAXIMUM SPAN                 11.0 M
(49) STRUCTURE LENGTH                      11.3 M
(50) CURB OR SIDEWALK: LEFT 0.5 M RIGHT 0.5 M
(51) BRIDGE ROADWAY WIDTH CURB TO CURB     6.9 M
(52) DECK WIDTH OUT TO OUT                 7.8 M
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)  4.6 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    6.9 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 = 39.5
STATUS
HEALTH INDEX 100.0
PAINT CONDITION INDEX = 100.0

***** CLASSIFICATION ***** CODE
(112) NBIS BRIDGE LENGTH- YES Y
(104) HIGHWAY SYSTEM- NOT ON NHS 0
(26) FUNCTIONAL CLASS- LOCAL RURAL 09
(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 7
(60) SUBSTRUCTURE 8
(61) CHANNEL & CHANNEL PROTECTION 9
(62) CULVERTS N

***** LOAD RATING AND POSTING ***** CODE
(31) DESIGN LOAD- OTHER OR UNKNOWN 0
(63) OPERATING RATING METHOD- LOAD FACTOR 1
(64) OPERATING RATING- 22.4
(65) INVENTORY RATING METHOD- LOAD FACTOR 1
(66) INVENTORY RATING- 13.3
(70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5
(41) STRUCTURE OPEN, POSTED OR CLOSED- R
      DESCRIPTION- POSTED FOR SPEED, ETC.

***** APPRAISAL ***** CODE
(67) STRUCTURAL EVALUATION 4
(68) DECK GEOMETRY 4
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
(71) WATER ADEQUACY 5
(72) APPROACH ROADWAY ALIGNMENT 4
(36) TRAFFIC SAFETY FEATURES 0000
(113) SCOUR CRITICAL BRIDGES 5

***** PROPOSED IMPROVEMENTS *****
(75) TYPE OF WORK- MISC STRUCTURAL WORK CODE 38
(76) LENGTH OF STRUCTURE IMPROVEMENT 11.3 M
(94) BRIDGE IMPROVEMENT COST $106,000
(95) ROADWAY IMPROVEMENT COST $11,000
(96) TOTAL PROJECT COST $159,000
(97) YEAR OF IMPROVEMENT COST ESTIMATE 1999
(114) FUTURE ADT 824
(115) YEAR OF FUTURE ADT 2029

***** INSPECTIONS *****
(90) INSPECTION DATE 10/09 (91) FREQUENCY 24 MO
(92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
A) FRACTURE CRIT DETAIL- YES 24 MO A) 10/09
B) UNDERWATER INSP- NO MO B)
C) OTHER SPECIAL INSP- NO MO C)

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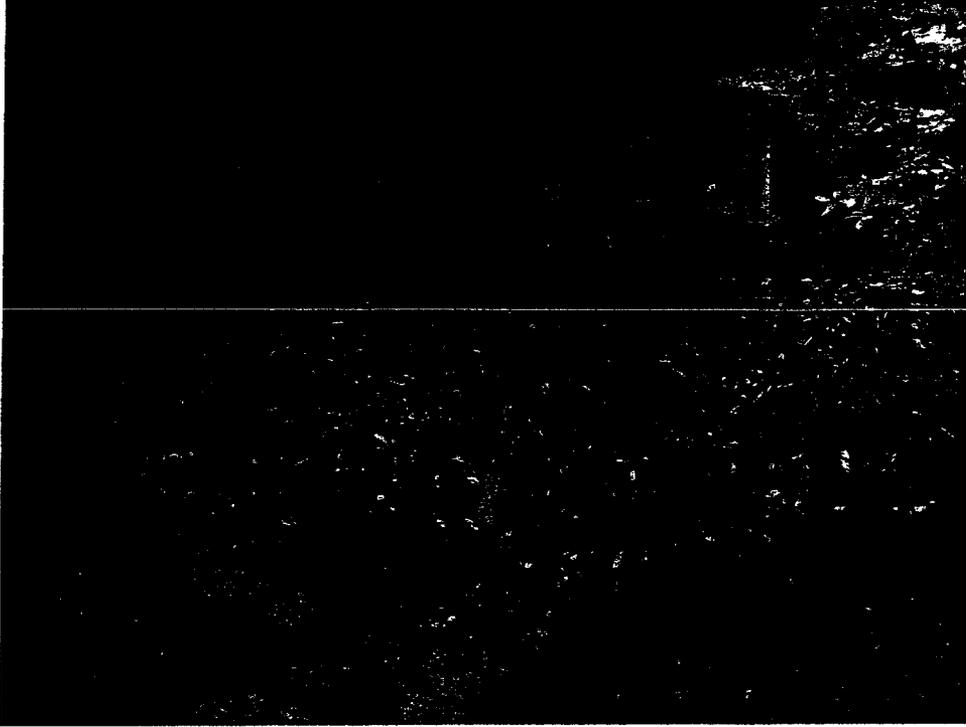
**TURNER CREEK**

5.2 MI SE SH 1

10/28/2009 [AAAF]

44C0163

116 - PHOTO-SUB SCOUR/EROSION (2009\_10\_28\_19-52-09)



Embankment erosion at Abutment 1

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JAN 19 2010



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RESOURCE MANAGEMENT AGENCY  
PUBLIC WORKS - ADMIN

January 18, 2010

Bridge Number: **44C0164** Co. No. **540**  
Bridge Name: **MILL CREEK**

Mr. Yazdan T Emrani  
Director Of Public Works  
County of Monterey  
168 W. Alisal Street, 2nd floor  
Salinas, CA 93901

Dear Mr. Emrani:

In accordance with Title 23 of the Code of Federal Regulations (Federal Highway Act) and the National Bridge Inspection Standards (NBIS), Caltrans Structure Maintenance and Investigations performed a Routine Inspection for the above noted bridge. This bridge has been rated considering its deficiencies, structural adequacy, safe load carrying capacity and overall general condition.

**Posting for limited speed is recommended for this structure.** After you have reviewed the report, please notify us within 30 days as to what action you propose to take with regard to the posting (permanent or temporary) or corrective maintenance.

Section 35754 of the California Vehicle Code extends authority to the County to temporarily post restrictive weights on a bridge structure for periods not in excess of ninety (90) days. The most commonly used authority for permanently posting a bridge structure exists in Section 35751. Specific notification, public hearings and a signed posting order are among the requirements contained within that Section.

If you wish to discuss these or other aspects of the bridge posting process, please call Tim Campbell @ (916) 227-8629 or Erol Kaslan @ (916) 227-8205.

Sincerely,

PETE WHITFIELD  
Office Chief  
Structure Maintenance & Investigations - (Investigations North)

Enclosures

PWD       APWD       FMIII

RES# 1000001299

CONST MAINT: Atkins; Martinez

FINANCE: \_\_\_\_\_

DESIGN: Adawson; Poosingian

DEV TRANSP: \_\_\_\_\_

ENV TRAI: \_\_\_\_\_

CAP PROJ: \_\_\_\_\_

FLEET: \_\_\_\_\_

FACILITIES: \_\_\_\_\_

ACTION NOTES: \_\_\_\_\_

MF: Bridge #540

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**Inspection Type Definitions****Routine Inspection:**

Routine Inspections consist of both the initial Inventory Inspection (the first inspection of the bridge that places it in the bridge inventory or when there has been a change in the configuration of the structure) and subsequent regularly scheduled inspections. The initial inspection provides all the Structural Inventory & Appraisal (SI&A) data required by federal and state regulations, determines the baseline structural conditions, lists any existing problems, and establishes the load capacity of the structure. Subsequent inspections consist of observations, measurements needed to determine the physical and functional condition of the bridge, to identify any changes from the previously recorded conditions, and verification of its load capacity. These inspections are generally conducted from the deck, ground and/or water level, and from permanent work platforms and walkways, if present. Inspection of underwater portions of the substructure is limited to observations during low-flow periods and/or probing for signs of undermining. Special equipment should be utilized in circumstances where its use provides the only practical access to areas of the structure.

**Fracture Critical, Special Feature & Underwater Inspections:**

Fracture Critical, Special Feature, and Underwater Inspections are up close, hands-on inspections of one or more members above or below the water level to identify any deficiencies not readily detectable using Routine Inspection procedures. These inspections generally require special equipment such as under-bridge inspection equipment, manlifts, boats, traffic control, and railroad flagging. Personnel with special skills such as divers or structural steel inspectors trained in non-destructive testing techniques may be required.

**Other Inspections:**

Other Inspections are conducted on damaged structures, structures that have developed specific problems, or structures suspected of developing problems. The scope of these investigations should be sufficient to determine the need for emergency load restrictions or closure of the structure, monitor a changing condition, and to access the level of effort necessary to effect a repair.



DEPARTMENT OF TRANSPORTATION  
Structure Maintenance & Investigations

Bridge Number : 44C0164  
Facility Carried: PALO COLORADO ROAD  
Location : 6.9 MI SE SH 1  
City :  
Inspection Date : 10/28/2009

### Bridge Inspection Report

Inspection Type				
Routine	FC	Underwater	Special	Other
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STRUCTURE NAME: MILL CREEK

#### CONSTRUCTION INFORMATION

Year Built : 1954	Skew (degrees): 0
Year Widened: N/A	No. of Joints : 0
Length (m) : 19.5	No. of Hinges : 0

Structure Description: Span 1 - Two continuous rolled steel girders (right girder is fully supported on a concrete wall) with rolled steel transverse floor stringers supporting an open grid steel deck. On a rolled steel cap fully supported by two steel piles at Abutment 1 and a RC pier wall at Pier 2. PC/RC panels are in place behind the piles at Abutment 1 to retain the approach fill.

Span 2 - Rolled steel girder span with a total of 4 girders (Girders 1 and 2 are continuous from Span 1) in a two 2-girder configuration with rolled steel transverse floor stringers supporting an open grid steel deck between Girders 1 and 2 and 3 and 4 (the transverse floor stringers are discontinuous between the center two closely spaced girders where a RC deck is present) on a partial RC pier wall and RC abutment at Pier 2 and a RC abutment at Abutment 3. The RC abutment and pier encapsulates original steel caps and steel piles.

Span Configuration : West Side: 1 @ 8.08 m, 1 @ 10.82 m  
East Side: 1 @ 11.13 m

#### LOAD CAPACITY AND RATINGS

Design Live Load: OTHER OR UNKNOWN		
Inventory Rating: 13.6 metric tonnes	Calculation Method: LOAD FACTOR	
Operating Rating: 22.7 metric tonnes	Calculation Method: LOAD FACTOR	
Permit Rating : XXXXX		
Posting Load : Type 3: <u>Legal</u>	Type 3S2: <u>Legal</u>	Type 3-3: <u>Legal</u>

#### DESCRIPTION ON STRUCTURE

Deck X-Section: 0.45 m cu, 6.9 m, 0.45 m cu		
Total Width: 7.8 m	Net Width: 6.9 m	No. of Lanes: 2
Rail Description: MBGR w/steel angle posts		Rail Code : 0000
Min. Vertical Clearance: Unimpaired		

#### DESCRIPTION UNDER STRUCTURE

Channel Description: There is no channel in Span 1. Span 2 is a V shaped channel with silt banks.

#### CONDITION TEXT

##### CONDITION OF STRUCTURE

There was up to 0.1 m of flowing water in the channel in Span 2 during this inspection. Both the abutments and Pier 2 were dry. No underwater investigation was necessary.

##### PAINT CONDITION

Printed on: Monday 12/28/2009 09:35 AM

44C0164/AAAF/17448

**DEPARTMENT OF TRANSPORTATION**

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**Bridge Report Transmittal Sheet**

Batch 17750

Br. Number	Bridge Name	Inspection Date	Inspection Type	Outstanding Work
44C0164	MILL CREEK	10/28/2009	Routine/FC	N
Open/Posted/Closed (41):		Posted For Speed, Etc	Type 3	25 Tons per Vehicle
Posting (70):		5 At/Above Legal Loads	Type 3S2	36 Tons per Semi Trailer Combination
Speed:		5 MPH	Type 3-3	40 Tons per Truck and Full Trailer

CONDITION TEXT

This structure was repainted just prior to the 9/26/2007 Routine Inspection. The paint is dirty and there is a build up of dirt on the bottom flanges of the steel girders.

## FRACTURE CRITICAL INVESTIGATION

A Fracture Critical Inspection of this structure was conducted according to the attached fracture critical inspection plan dated 09/26/2007. The tension areas of the rolled steel girders along with the Category "E" weld details indicated on the fracture critical inspection plan that were accessible with the use of a ladder were inspected. A portion of the girder tension areas and the category "E" weld details, including the girder splices, near the center of Span 2 could not be inspected due to the height above the channel. The uneven and soft channel bottom in Span 2 also made the inspection difficult. No defect indications were found in the members or details inspected.

## SAFE LOAD CAPACITY

This structure was re-rated on 10/28/2009 using the Load Factor Method. According to the new rating the inventory and operating ratings have changed from 16.3 metric tons and 26.3 metric tons to 13.6 metric tons and 22.7 metric tons. The permit rating has not changed and is XXXXX.

According to the load rating analysis performed on 10/28/2009, this structure is adequate for all combinations of legal loads without the addition of impact loading.

With the addition of impact loading the safe load capacity of this structure calculates to be:

22 tons - Type 3  
33 tons - Type 3S2  
40 tons - Type 3-3

The moment capacity of the steel girders controls the load capacity. The capacity of the steel girders is based on a yield stress of 33 ksi due to the year constructed.

## EXISTING POSTING

This structure is currently not posted.

## RECOMMENDED POSTING

It is recommended that this structure be posted for the following speed restriction:

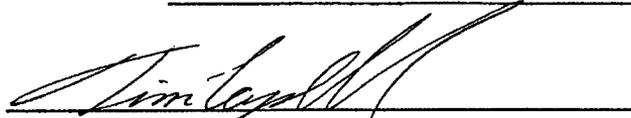
5 MPH ON BRIDGE FOR VEHICLES OVER 20 TONS

<u>ELEMENT INSPECTION RATINGS</u>								
F#Elem	Element Description	Env	Total Units	Qty in each Condition State				
				Qty	St. 1	St. 2	St. 3	St. 4
101 12	Concrete Deck - Bare	2	11 sq.m.	11	0	0	0	0
101 28	Steel Deck - Open Grid	2	94 sq.m.	94	0	0	0	0
101 107	Painted Steel Open Girder/Beam	2	63 m.	63	0	0	0	0
101 152	Painted Steel Floor Beam	2	186 m.	186	0	0	0	0
101 202	Painted Steel Column or Pile Extension	2	2 ea.	2	0	0	0	0
101 210	Reinforced Conc Pier Wall	2	7 m.	7	0	0	0	0
101 215	Reinforced Conc Abutment	2	7 m.	7	0	0	0	0
101 217	Other Material Abutment	2	3 m.	3	0	0	0	0

#Elem	Element Description	Env	Total	Units	Qty in each Condition State				
					Qty	St. 1	St. 2	St. 3	St. 4
101 225	Unpainted Steel Submerged Pile	2	1	ea.	1	0	0	0	0
101 231	Painted Steel Cap	2	3	m.	3	0	0	0	0
101 330	Metal Bridge Railing - coated or uncoated	2	32	m.	32	0	0	0	0

WORK RECOMMENDATIONS - NONE

Inspected By : T.Campbell

  
 Registered Civil Engineer



STRUCTURE INVENTORY AND APPRAISAL REPORT

```

***** IDENTIFICATION *****
(1) STATE NAME- CALIFORNIA 069
(8) STRUCTURE NUMBER 44C0164
(5) INVENTORY ROUTE (ON/UNDER) - ON 140000000
(2) HIGHWAY AGENCY DISTRICT 05
(3) COUNTY CODE 053 (4) PLACE CODE 00000
(6) FEATURE INTERSECTED- MILL CREEK
(7) FACILITY CARRIED- PALO COLORADO ROAD
(9) LOCATION- 6.9 MI SE SH 1
(11) MILEPOINT/KILOMETERPOINT 0
(12) BASE HIGHWAY NETWORK- NOT ON NET 0
(13) LRS INVENTORY ROUTE & SUBROUTE 00
(16) LATITUDE 36 DEG 21 MIN 43 SEC
(17) LONGITUDE 121 DEG 49 MIN 19 SEC
(98) BORDER BRIDGE STATE CODE % SHARE %
(99) BORDER BRIDGE STRUCTURE NUMBER

***** STRUCTURE TYPE AND MATERIAL *****
(43) STRUCTURE TYPE MAIN:MATERIAL- STEEL
TYPE- STRINGER/MULTI-BEAM OR GDR CODE 302
(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- OPEN GRATING CODE 3
(108) WEARING SURFACE / PROTECTIVE SYSTEM:
A) TYPE OF WEARING SURFACE- NONE CODE 0
B) TYPE OF MEMBRANE- NONE CODE C
C) TYPE OF DECK PROTECTION- NONE CODE 0

***** AGE AND SERVICE *****
(27) YEAR BUILT 1954
(106) YEAR RECONSTRUCTED 0000
(42) TYPE OF SERVICE: ON- HIGHWAY 1
UNDER- WATERWAY 5
(28) LANES:ON STRUCTURE 02 UNDER STRUCTURE 00
(29) AVERAGE DAILY TRAFFIC 700
(30) YEAR OF ADT 1999 (109) TRUCK ADT 2 %
(19) BYPASS, DETOUR LENGTH 199 KM

***** GEOMETRIC DATA *****
(48) LENGTH OF MAXIMUM SPAN 11.0 M
(49) STRUCTURE LENGTH 19.5 M
(50) CURB OR SIDEWALK: LEFT 0.5 M RIGHT 0.5 M
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 6.9 M
(52) DECK WIDTH OUT TO OUT 7.8 M
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 4.6 M
(33) BRIDGE MEDIAN- NO MEDIAN 0
(34) SKEW 0 DEG (35) STRUCTURE FLARED YES
(10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 6.9 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 *****
(36) NAVIGATION CONTROL- NO CONTROL CODE C
(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 = 41.8
STATUS
HEALTH INDEX 100.0
PAINT CONDITION INDEX = 100.0

***** CLASSIFICATION ***** CODE
(112) NBIS BRIDGE LENGTH- YES Y
(104) HIGHWAY SYSTEM- NOT ON NHS 0
(26) FUNCTIONAL CLASS- LOCAL RURAL 09
(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 7
(60) SUBSTRUCTURE 7
(61) CHANNEL & CHANNEL PROTECTION 9
(62) CULVERTS N

***** LOAD RATING AND POSTING ***** CODE
(31) DESIGN LOAD- OTHER OR UNKNOWN 0
(63) OPERATING RATING METHOD- LOAD FACTOR 1
(64) OPERATING RATING- 22.7
(65) INVENTORY RATING METHOD- LOAD FACTOR 1
(66) INVENTORY RATING- 13.6
(70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5
(41) STRUCTURE OPEN, POSTED OR CLOSED- R
DESCRIPTION- POSTED FOR SPEED, ETC.

***** APPRAISAL ***** CODE
(67) STRUCTURAL EVALUATION 4
(68) DECK GEOMETRY 4
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
(71) WATER ADEQUACY 6
(72) APPROACH ROADWAY ALIGNMENT 4
(36) TRAFFIC SAFETY FEATURES 0000
(113) SCOUR CRITICAL BRIDGES C

***** PROPOSED IMPROVEMENTS *****
(75) TYPE OF WORK- MISC STRUCTURAL WORK CODE 38
(76) LENGTH OF STRUCTURE IMPROVEMENT 19.5 M
(94) BRIDGE IMPROVEMENT COST $183,000
(95) ROADWAY IMPROVEMENT COST $18,000
(96) TOTAL PROJECT COST $274,000
(97) YEAR OF IMPROVEMENT COST ESTIMATE 1999
(114) FUTURE ADT 838
(115) YEAR OF FUTURE ADT 2029

***** INSPECTIONS *****
(90) INSPECTION DATE 10/09 (91) FREQUENCY 24 MO
(52) CRITICAL FEATURE INSPECTION: (93) CFI DATE
A) FRACTURE CRIT DETAIL- YES 24 MO A) 10/09
B) UNDERWATER INSP- NO MO B)
C) OTHER SPECIAL INSP- NO MO C)

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