

U.S. Department of Transportation Federal Highway Administration- California Division- Title 23 Damage Assessment Form (DAF)		DAF No. <input type="text"/> - <input type="text"/> NAP <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/>
Applicant Napa County Public Works		County Napa Congressional districts 5
Location of Damage: Name of Road/Bridge: CUTTINGS WHARF ROAD		Incident Date (mm/dd/yyyy) 08/24/2014 Inspection 09/25/2014
Per Site <input checked="" type="checkbox"/> or <input type="checkbox"/> Per Mile		Federal-aid Highway? Y for yes, if no, ineligible for ER funds <input type="checkbox"/> Y
PM Begin: 2.25 PM Length: 600.00 PM End: 2.35 (in feet)		Map No <input type="text"/> 5K22
Road/Bridge Data: Bridge No <input type="text"/> Type: <input type="text"/>		Functional Classification Type: MAJOR COLLECTOR
Traveled Way: Width 18 Type: PCC <input type="checkbox"/> AC <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Shoulder: Width 12 Type: PCC <input type="checkbox"/> AC <input checked="" type="checkbox"/> Gravel <input type="checkbox"/>		Route # <input type="text"/> Forest Hwy? Y/N <input type="checkbox"/> N Interstate? Y/N <input type="checkbox"/> N Existing ADT: 1,370
Description of Damage: Multiple deep longitudinal and transverse cracks (gaps) over 1 inch thick (impacting about 18300 SF pavement area) due to 2014 South Napa earthquake event (Magnitude 6.0).		

COST ESTIMATE				
Emergency Opening (EO)	Type of Repair	Description of Work	Cost Summary	
	EO- AGENCY FORCES CT Work Order #(s): EA(s):	EO- CONTRACT EO EA(s):	Roadway rehabilitation; See Sheet 2 for detailed project. Items and cost description.	PE
			CE	2,400
			Construction	16,000
NOTE: Environmental documentation for EO is required. It is generally started after work has begun.			R/W	
			Subtotal Emergency Opening \$20,000	
Permanent Restoration (PR)	PR- CONSTRUCTION FA requires an approved PIF <input type="checkbox"/> Contract <input type="checkbox"/> FA PR EAs	Excavate 10 inches, re-compact base and apply 4 inches of hot mix asphalt. Length of excavation is approximately 600 linear feet.	PE	15,980
			CE	23,970
			Construction	175,781
NOTE: PRIOR AUTHORIZATION (APPROVED E-76) IS REQUIRED TO PROCEED WITH PERMANENT RESTORATION R/W & CONSTRUCTION			R/W	
NOTE: Environmental clearance for permanent restoration is conducted through normal Federal-aid procedures			Subtotal Permanent Restoration \$215,731	
Eligible	Signature	Date	PE Total	\$17,580
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Local Agency (if applicable)	4/13/15	CE Total	\$26,370
<input type="checkbox"/> Yes <input type="checkbox"/> No	Caltrans	5/8/15	R/W Total	\$0
<input type="checkbox"/> Yes <input type="checkbox"/> No	FHWA*		Construction Total	\$191,781
TOTAL ESTIMATE			\$235,731	

Agency sig. Name (print): FOR Mallika Ramachandran, P.E. FHWA Sig. Name (print): _____
 CT signature Name (print): John Brewster DAF Prepared by (print): William Silva - ghd

Original: Caltrans District **Copies:** FHWA, Division of Local Assistance(local roads), Federal Resources (state hwy), HQ Major Damage Engineer (state hwy)
 *Write "N/A" in FHWA signature block if the project has no Federal ER funding or Federal ER funding delegated to the State.
FHWA Signature: REQUIRED for all Federal Funded State projects. REQUIRED for any Local Agency projects with 1) any BETTERMENT, 2) more than 2 ROW takes or 3) when paving is more than 50% of the Total Estimated Cost. **Reminder:** This DAF must be accompanied by photos of the damage.

U.S. Department of Transportation Federal Highway Administration- California Division- Title 23 Damage Assessment Form (DAF)	DAF No. <input type="text"/>	-	NAP <input type="text"/>	-	0	1	3	-	0
	Sheet # 2 of 3		Federal Project # EO ER - <input type="text"/>						
	Disaster No. CA <input type="text"/> <input type="text"/>	-	<input type="text"/>		PR ER - <input type="text"/>				
	Agency EO Calc <input checked="" type="checkbox"/>		EO contract <input type="checkbox"/>		PR Calc <input type="checkbox"/>				

Cost Estimate					
DAF 13 - Cuttings Wharf Road (MPM 02.25)					
NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
A	INITIAL RESPONSE REPAIR				
1	TEMPORARY REPAIR (EXCAVATE RAISED SECTIONS, FILL CRACKS AND SETTLEMENT)	1	LS	\$16,000.00	\$16,000
CONSTRUCTION SUBTOTAL: EMERGENCY OPENING					\$16,000
PE (10% OF TOTAL CONSTRUCTION COSTS)					\$1,600
CE (15% OF TOTAL CONSTRUCTION COSTS)					\$2,400
TOTAL: EMERGENCY OPENING					\$20,000
B	ADDITIONAL EO REPAIR REQUIRED - Excavate 10 inch and recompacted- Full depth 10" recompact and place 4 inch HMA				
GENERAL CONDITIONS					
1	TRAFFIC CONTROL	1	LS	\$3,500.00	\$3,500
2	EROSION CONTROL	1	LS	\$1,500.00	\$1,500
3	MOBILIZATION	1	LS	\$4,000.00	\$4,000
DEMOLITION					
4	REMOVE ASPHALT	203	CY	\$20.00	\$4,067
5	REMOVE AGGREGATE BASE	678	CY	\$10.00	\$6,778
6	SAWCUT	60	LF	\$2.00	\$120
ROADWAY					
7	BASE PREPARATION	2,033	SY	\$10.00	\$20,333
8	CLASS 2 AGGREGATE BASE	678	CY	\$45.00	\$30,500
9	ASPHALT CONCRETE SURFACE	534	TON	\$120.00	\$64,123
STRIPING					
10	PAINT - FOG LINE	1,220	LF	\$2.50	\$3,050
11	PAINT - CENTERLINE	610	LF	\$3.00	\$1,830
CONSTRUCTION SUBTOTAL					\$159,801
10% CONTINGENCY					\$15,980
TOTAL CONSTRUCTION					\$175,781
PE					\$15,980.10
CE					\$23,970
TOTAL PERMANENT RESTORATION					\$215,731
TOTAL CONTRACT ALLOWANCE					\$235,731

Justifications/comments: Non-typical Scope, PE/CE Cost, Engineering

This site qualifies under EO 1 and EO 2. Emergency repair was required to make the road safe for drivers and bicyclists and protect the substructure for the winter season. The County applied immediate remedial improvements to address cracking and settlement or to remove raised pavements. It became apparent after couple of attempts of repair that the initial measures would not be sufficient as the ground kept shifting or the temporary "fix" was not an adequate solution as more failure was resurfaced and identified. Therefore, more extensive repair was done because of the upcoming winter season and to bridge the pavement and prevent additional substructure failure. The site required additional EO Repair - Excavated 10-inches and recompacted - Full depth 10-inch recompacting and placed 4-inch HMA. Based on the additional repairs of the existing damaged pavement, it is anticipated that the emergency repairs will provide the necessary roadway longevity and a permanent repair is not required at this time.

The County's approach to repair of this site provided a very cost effective approach by recycling existing site materials for use in the pavement section and reducing the amount of imported material. Along with the new HMA surface, this approach provided an efficient project delivery, minimized the extent of damage, and protected the roadway facilities from potential further damage and possible public injury or vehicle damage. The County will submit EO - Initial Response Repair costs and additional repair costs as soon as all the cost is compiled and accounted.

County has initiated CEQA and have contacted Caltrans Environmental Department to initiate the NEPA process.



DAF 13 (CUTTINGS WHARF RD, MPM BEGIN 02.25 MPM END 02.35)

U.S. Department of Transportation
Federal Highway Administration-
California Division- Title 23
Damage Assessment Form (DAF)

DAF No. - - NAP 0 1 3 0
Sheet # 3 of 3 Federal Project # EO ER - ()
Disaster No. CA 1 4 - 1 PR ER - ()
Agency EO Calc EO contract PR Calc

Photos, Sketches and/or Narrative

Photo Description: These pictures illustrate the existing conditions along Cuttings Wharf Road prior to the August 2014 Earthquake in Napa County. The photograph immediately below this description begins at approximately MPM 2.25. Subsequent photos are taken northward of this point. The last photo depicts the termination of Cuttings Wharf Road at State Route 121. Images were collected from Google Earth on 4.9.2015. At this time, images taken from the site were dated 7.2011 (July 2011).



© 2014 Google

Cullings Wharf Rd

© 2014 Google

Google Earth

lat. 38.253664° lon. -122.33371° elev. 85 ft

Eye alt 66 ft



© 2014 Google

© 2014 Google



Cuttings Wharf Rd

© 2015 Google

Google earth

lat 38.294465° lon -122.326615° elev 94 ft

Eye at 92 ft



© 2015 Google

Cuttings Wharf Rd

© 2015 Google

Google earth

lat 36.254552° lon -122.825712° elev 94 ft

Eye alt 46 ft

© 2014 Google

Cuttings Wharf Rd

© 2015 Google

Google earth

lat 38.255176° lon -122.827831° elev 103 ft

Eye alt 101 ft





Cuttings Wharf Rd

© 2015 Google

Google earth

lat 38.255564° lon -122.33717° elev 108 ft

Eye alt 106 ft



© 2014 Google

Cuttings Wharf Rd

© 2016 Google

Google earth

lat 38.255561° lon -122.366150° elev 127 ft

Eye alt 118 ft

DAF No. - [] - NAP [] [] [] [] []
Sheet # 3 of 3 Federal Project # EO ER - ()
Disaster No. CA [1] [4] - [1] PR ER - ()
Agency EO Calc EO contract PR Calc

Photos, Sketches and/or Narrative

Photo Description: Multiple deep longitudinal and transverse cracks (gaps) over 1 inch thick (impacting about 18300 SF pavement area) due to 2014 South Napa earthquake event (Magnitude 6.0).

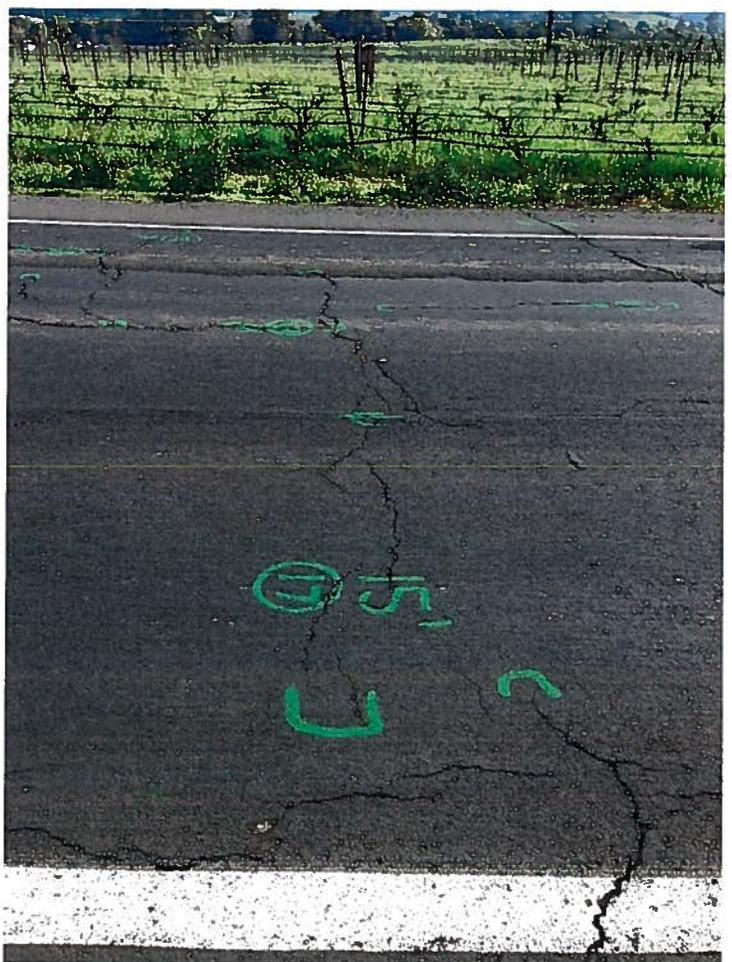
The following photos show the area north of the section of road already fixed. The repaired section is approximately 106 feet in length. The length of the area north of the repaired section is approximately 400 feet in length.

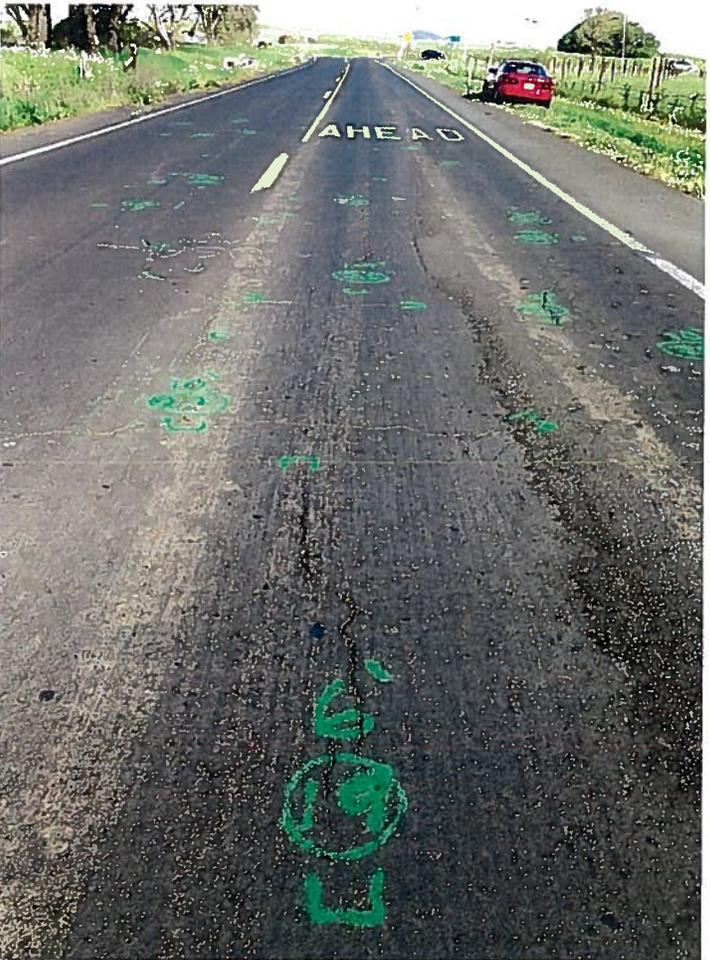




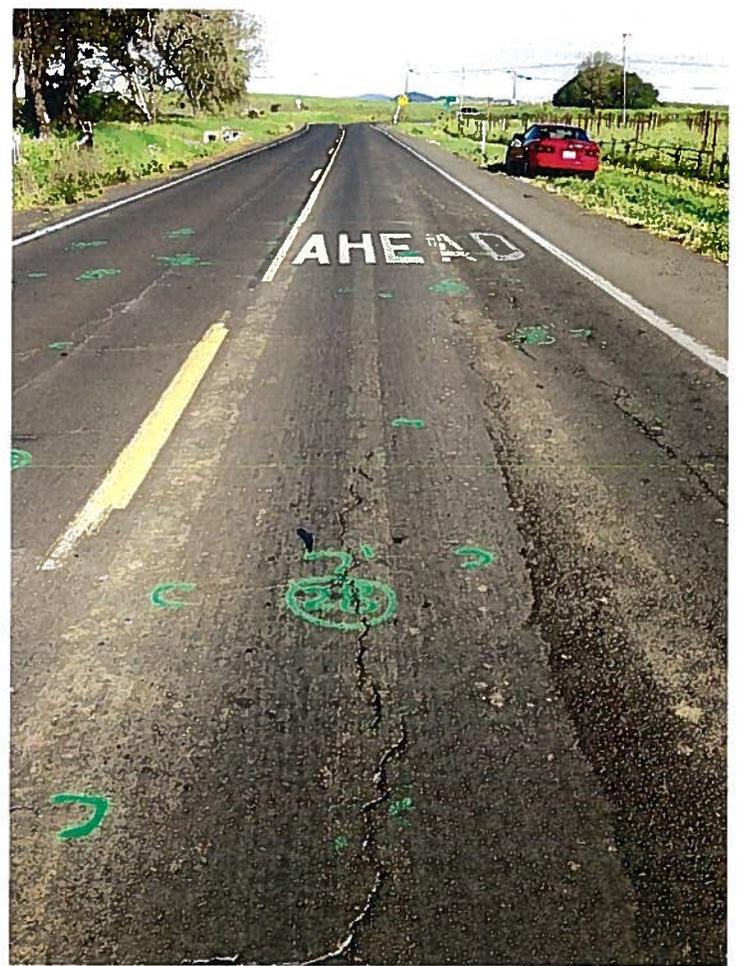
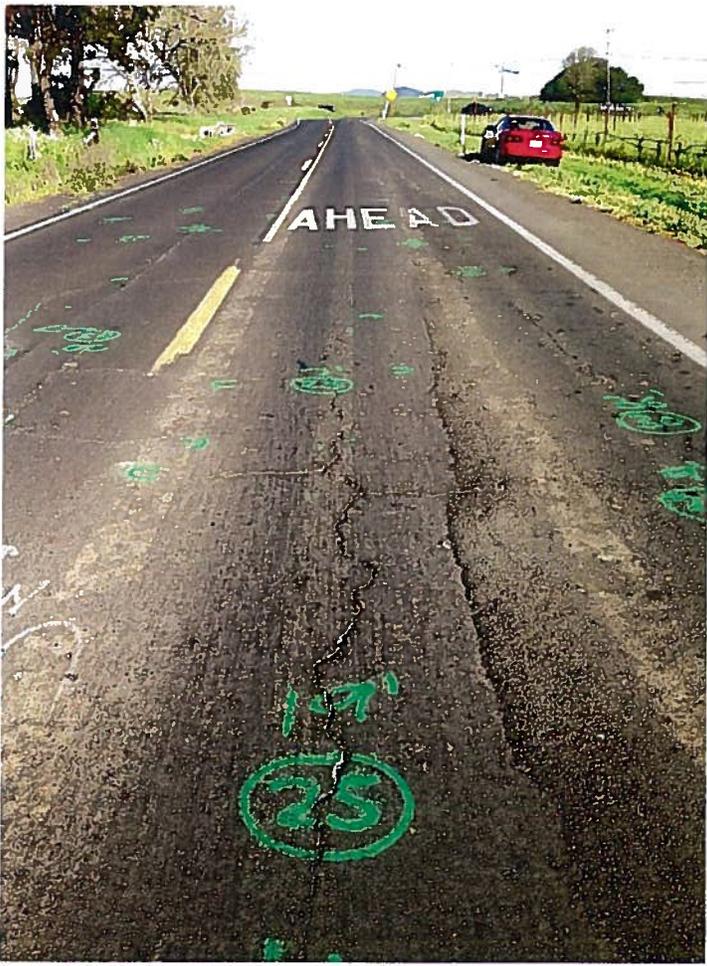


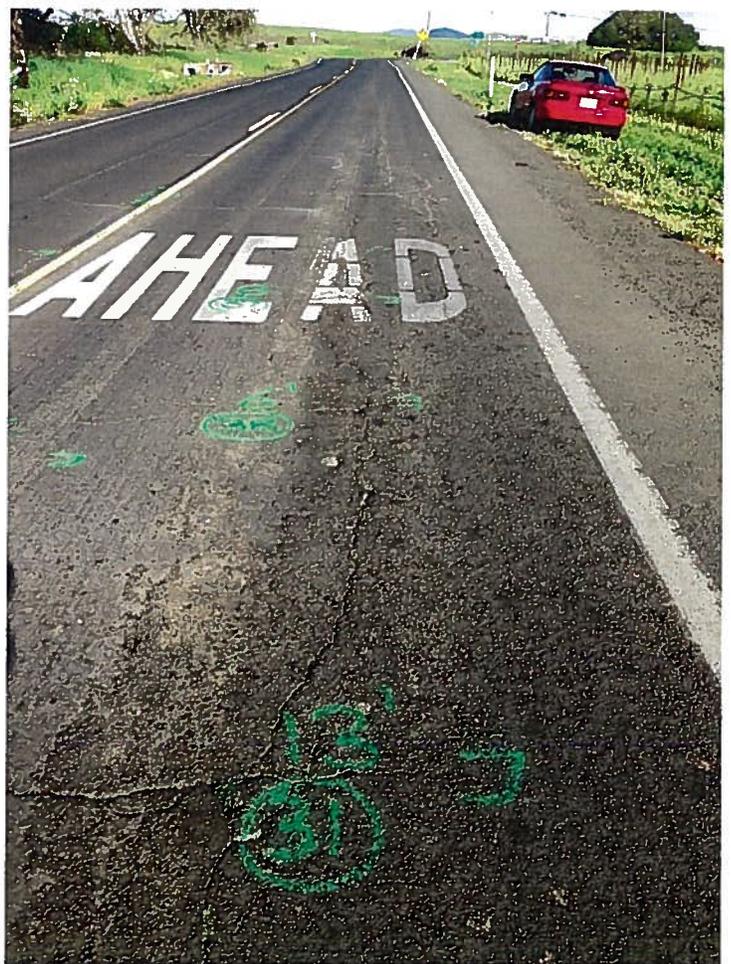
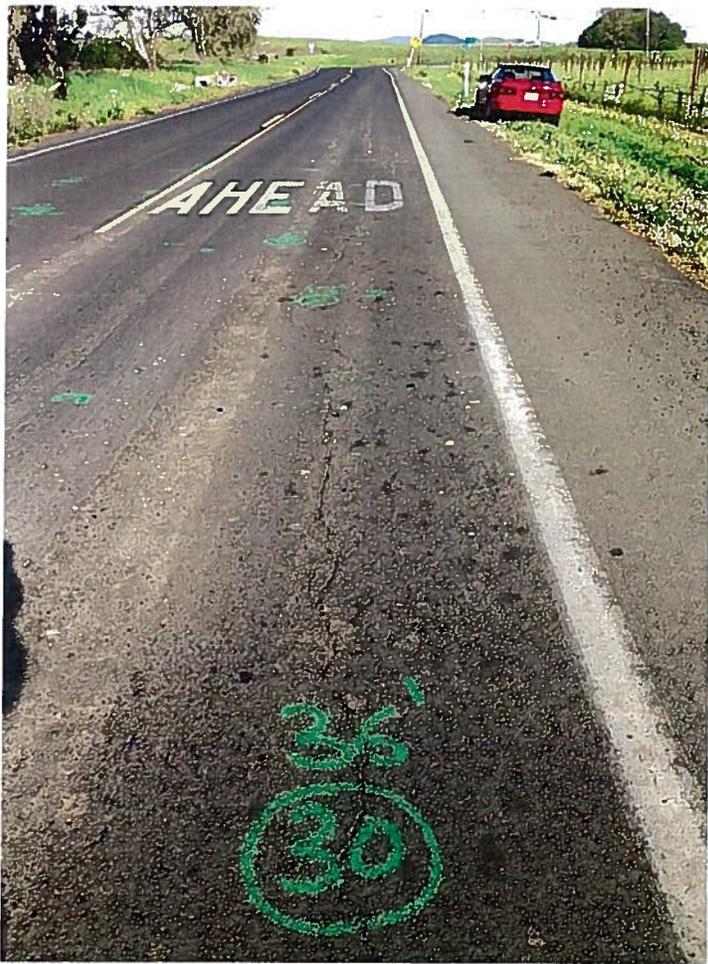










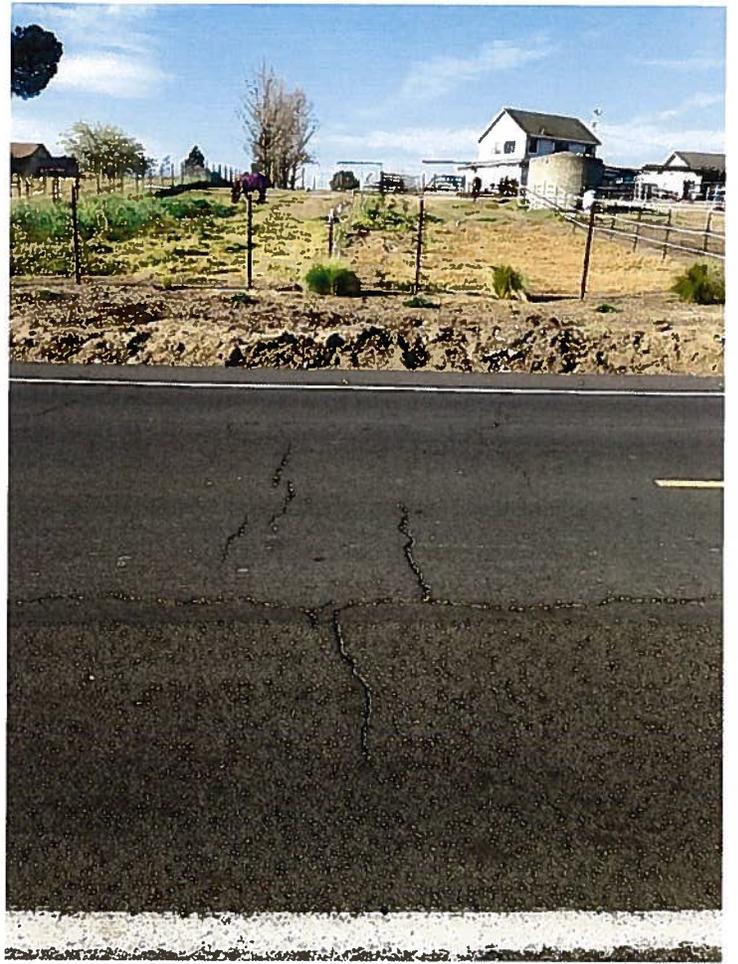
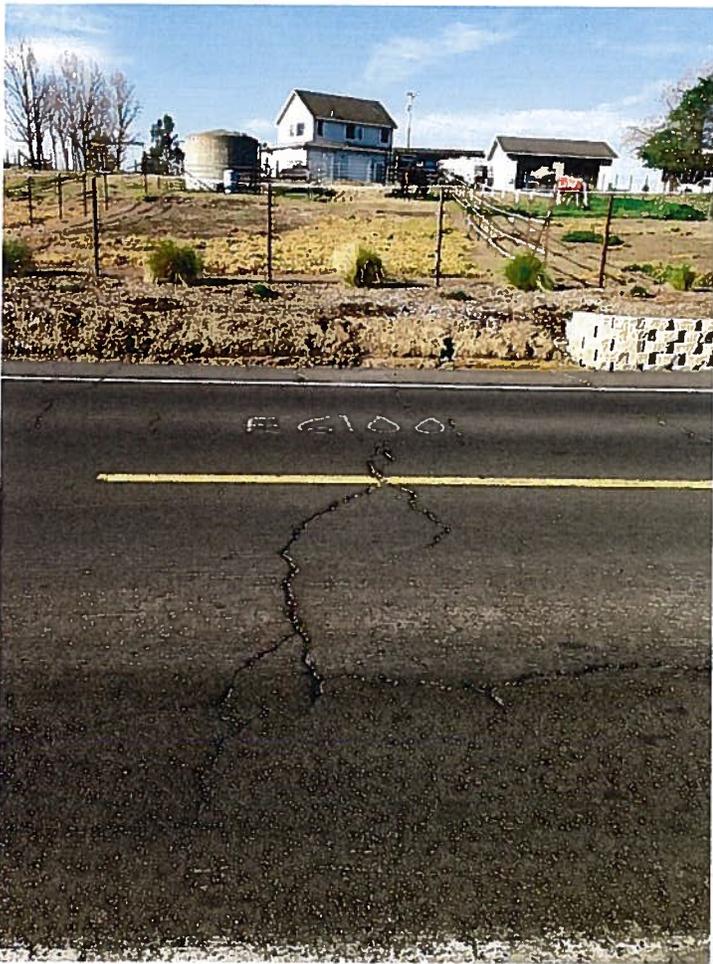






The photos below depict the area to be repaired south of repair site. This section is approximately 200 feet in length.





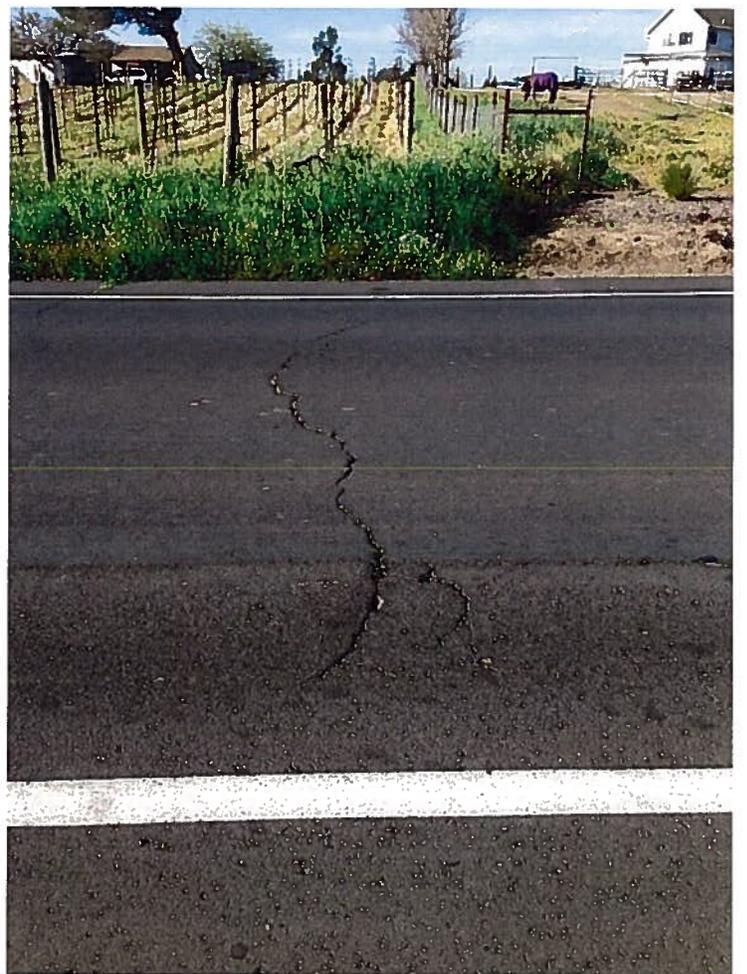
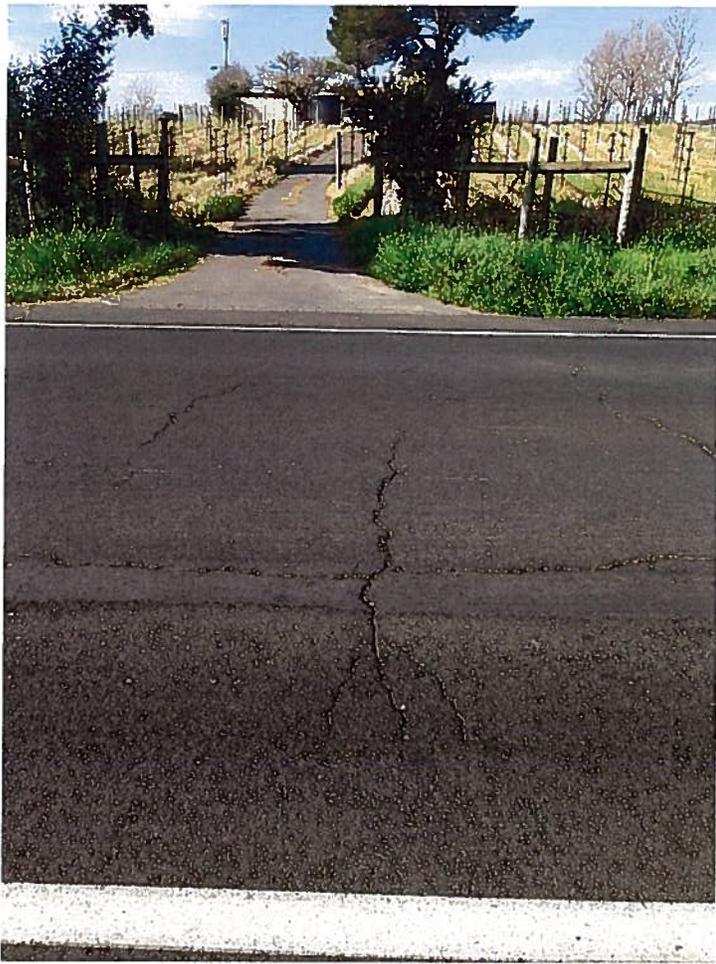


PHOTO NO.	DESCRIPTION	LENGTH
1	Longitudinal crack	8 FT, ½" wide
2	Longitudinal crack	13 FT
3	Longitudinal crack	3 FT, ½" wide
4	Transverse crack	11 FTv
5	Transverse & longitudinal crack	20 FT
6	Transverse crack	5 FT
7	Transverse & longitudinal crack	21 FT
8	Transverse crack	13 FT
9	Longitudinal crack	25 FT
10	Longitudinal crack	11 FT
11	Transverse crack	19 FT, ½" wide
12	Transverse & longitudinal crack	5 FT, ½" wide
13	Longitudinal crack	7 FT
14	Transverse crack	12 FT
15	Longitudinal crack	22 FT
16	Transverse crack	6 FT
17	Transverse crack	15 FT
18	Longitudinal crack	19 FT
19	Longitudinal crack	6 FT
20	Transverse crack	10 FT, ½" wide
21	Transverse & longitudinal crack	9 FT, ½" wide
22	Longitudinal crack	10 FT, ½" wide
23	Longitudinal crack	20 FT, ½" wide
24	Transverse crack	9 FT, ½" wide
25	Longitudinal crack	19 FT, ½" wide
26	Transverse crack	14 FT
27	Longitudinal crack	47 FT
28	Transverse crack	7 FT
29	Transverse crack	6 FT
30	Longitudinal crack	36 FT
31	Transverse crack	13 FT
32	Longitudinal crack	24 FT
33	Transverse crack	13 FT
34	Transverse crack	11 FT
35	Longitudinal crack	9 FT
36	Longitudinal crack	18 FT
37	Transverse crack	8 FT
38	Transverse crack	6 FT

Permanent restoration is required. Excavate 10 inch and recompact- Full depth 10" recompact and place 4 inch HMA. The County's approach to permanent restoration of this site will provide a very cost effective approach by recycling existing site materials for use in the pavement section and reduce the amount of imported material. Along with the new HMA surface, this approach will provide for an efficient project delivery. The County will submit a PIF if the work will be completed using County Forces.

EXHIBIT 3-O SAMPLE LOCAL FEDERAL-AID PROJECT FINANCE LETTER

DEPARTMENT OF TRANSPORTATION
 DIVISION OF ACCOUNTING
 LOCAL PROGRAM ACCOUNTING BRANCH

ATTN: RACHEL CARPENTER

Work on State Highway (Y or N): N If yes, provide following:
 Administered by State or Local? _____

Project Manager Name: _____

Accounting Program Code(s): _____

Coop or Contribution Agrmt No.: _____

Date: 4/13/2015

Agency: NAPA COUNTY

Fed Project No.: _____

Project ID: DAF13 CUTTINGS WHARF MPM 2.31

PPNO: _____

Bridge No: _____

"P" or "L"*	TOTAL COST OF WORK	FEDERAL PARTICIPAT. COST	100% FEDERAL FUND TYPE (1)	88.53% FEDERAL FUND TYPE (2)	STATE MATCH FUNDS	LOCAL MATCH FUNDS	OTHER FUNDS
-------------	--------------------	--------------------------	----------------------------	------------------------------	-------------------	-------------------	-------------

P	\$1,600	\$1,600	\$1,600	\$1,600		\$0	
P	\$15,980	\$15,980		\$14,147		\$1,833	
PRELIMINARY ENGINEERING							
Preliminary Engineering: EMERGENCY OPENING							
Preliminary Engineering: PERMANENT RESTORATION							
State Furnished Preliminary Engineering							
Overhead at _____ %							
RIGHT OF WAY (R/W)							
Purchase Costs							
Relocation Assistance /Utility							
CONSTRUCTION:							
Contract Items EO PR							
\$16,000 \$159,801.00							
Utilities							
Supplemental Work							
Contingencies \$0 \$15,980.10							
Trainees							
Agency/State Furn. Mat.							
Contract Total: \$16,000 \$175,781.10							
CONSTRUCTION ENGINEERING							
Construction Engineering: EMERGENCY OPENING							
Construction Engineering: PERMANENT RESTORATION							
State Furnished Construction Engineering							
Overhead at _____ %							
State Furnished Materials Testing							
Overhead at _____ % Subjob _____							
Striping by Agency							
Force Account Work by Agency							
TOTALS:							
P	\$235,731	\$235,731	\$20,000	\$190,987		\$24,744	
* "P" = Pro Rata, "L" = Lump Sum							

Federal Participation: _____
 Federal Appn. Code(s): _____
 Federal Reimbursement Rate(s) for Progress Invoice: _____

PHASE	FED (1)	FED (2)
PE		
R/W		
CON	100	88.53%
CE		

Distribution: (1) Original + 4 copies-Caitrans DLAE
 (2) Copy-Local Agency Project File

I certify that this Finance Letter accurately reflects the current cost estimate for all phases of the project obligated but not fully expended.

For questions regarding finance letter, contact:
 Printed Name: MALLIKA RAMACHANDRAN, P.E.
 Telephone No.: 707-259-8194

Signature: _____
 Title: SUPERVISING CIVIL ENGINEER
 Project location: CUTTINGS WHARF MPM 2.31 NAPA COUNTY
 Remarks: _____