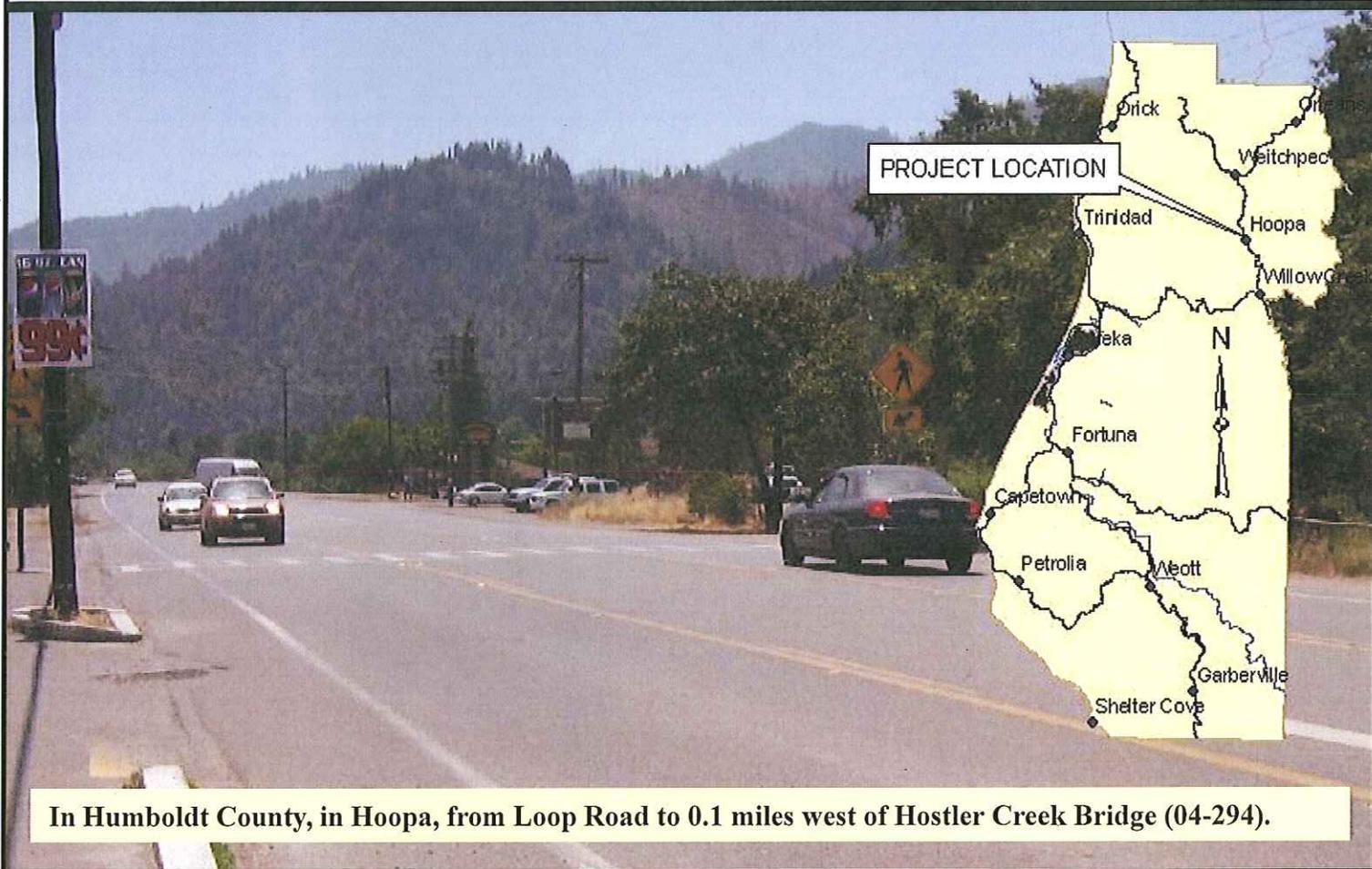




Project Study Report

01-HUM-96
PM 11.0/13.2
01216-49370K
20.10.201.010
October 2011



In Humboldt County, in Hoopa, from Loop Road to 0.1 miles west of Hostler Creek Bridge (04-294).

I have reviewed the right of way information contained in this Project Study Report and the R/W Data Sheet attached hereto, and find the data to be complete, current and accurate:

John Ballantyne
John Ballantyne, Acting North Region Division Chief – Right of Way

APPROVAL RECOMMENDED:

Richard Mullen
Richard Mullen, Project Manager

Ralph Martinelli
Ralph Martinelli, District Program Advisor

APPROVED:

Charles C. Fielder
Charles C. Fielder, District Director

November 10, 2011
Date

01 - HUM - 96 - PM11.0/13.2

This Project Study Report has been prepared under the direction of the following Registered Engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.



Valency M. Langtry, REGISTERED CIVIL ENGINEER

10/31/2011
DATE



Table of Contents

1.	Introduction.....	1
	Type of Facility.....	1
	Legal Description.....	1
2.	Background.....	2
3.	Purpose and Need Statement	2
4.	Deficiencies.....	2
5.	Corridor and System Coordination	3
6.	Alternatives	3
7.	Community Involvement	4
8.	Environmental Determination/Document.....	5
9.	Funding	5
10.	Schedule.....	5
11.	FHWA Coordination.....	6
12.	District Contacts.....	6
13.	Project Reviews	6

1. INTRODUCTION

Brief Project Description:

The project proposes to widen shoulders to a minimum of 4 feet, install an in-roadway warning light (IRWL) enhanced crosswalk system, install highway lighting at crosswalks, install landscaped or hardscaped areas and adjust metal beam guard railing.

See the Cost estimate for specific work items included in this project.

Project Limits (Dist., Co., Rte., PM)	01-HUM-96 PM 11.0/13.2
Number of Alternatives:	2 (including no build)
Alternative Recommended for Programming:	Build Alternative
Programmed or Proposed Capital Construction Costs:	\$1,119,000 (2011)
Programmed or Proposal Capital Right of Way Costs:	\$131,000 (2011)
Funding Source:	20.10.201.010
Type of Facility (conventional, expressway, freeway):	Conventional
Number of Structures:	None
Anticipated Environmental Determination/Document	Initial Study/Negative Declaration, Categorical Exclusion
Legal Description	In Humboldt County, in Hoopa, from Loop Road to 0.1 miles west of Hostler Creek Bridge (04-294).

A project report will serve as approval of the “selected” alternative.

Alternative 1 is recommended for programming. It is proposed that this project be programmed into the 2012 State Highway Operation and Protection Program (SHOPP) and funded in the 2014/15 fiscal year through the 201.010 Safety Improvement Program. The Construction and Right of Way capital costs escalated to FY 2014/2015 are \$1,313,000 and \$151,000, respectively.

2. BACKGROUND

A traffic safety investigation at this location was completed in response to a high number of collisions in the area. Review of the 2.2-mile segment determined that a total of 26 collisions occurred during a five-year period.

The primary traffic patterns are as follows: twenty-seven percent of collisions are attributed to Improper Turn, twenty-seven percent are Speeding, and twenty-three percent are Failure to Yield. Eleven percent are Run-Off-Road collisions and sixty-nine percent are coded as proceeding straight. Twenty percent of collisions were night-time collisions. Overall, eighty percent involved collisions with other vehicles.

The actual collision rates, Fatal, Fatal plus Injury, and Total, for this segment are approximately 2.18, 1.72 and 1.43 times the statewide average when compared to a similar facility. One of the fatalities was a pedestrian collision at PM 12.72.

3. PURPOSE AND NEED STATEMENT

Need:

The project is needed because the total collision rate is 1.43 times the statewide average collision rate and to reduce conflicts with non-motorized traffic.

Purpose:

The purpose of this project is to reduce the frequency and severity of collisions, improve mobility and reduce conflicts for pedestrian, bicyclist, and equestrian users.

4. DEFICIENCIES

This safety project was proposed in response to the number of collisions occurring within this segment of Route 96.

- Collision Data

Collision Data Summary (10/1/2002 to 9/30/2007)					
Total	Fatal	Injury	PDO	Wet	Dark
26	1	15	10	5	6

PDO = Property Damage Only, MV = Multiple Vehicle

Collision Rates* (10/1/2002 to 9/30/2007)					
Actual			State Average		
Fatal	F+I	Total	Fatal	F+I	Total
0.096	1.53	2.50	0.044	0.89	1.75

*Rates are expressed as # of accidents/million vehicle miles

- **Current and Forecasted Traffic Data**

The current and forecasted traffic data is listed in the table below. The data was provided in a memorandum dated June 8, 2011 from the office of Travel Forecasting and Modeling.

	<u>Annual ADT</u>	<u>Peak Hour</u>
Base Year 2009	3,400	340
Year 2019	3,740	370
Year 2029	4,080	410
Year 2039	4,420	440
20-Year Directional Percentage		60
20-Year Truck Percentage		1.0
10-Year Traffic Index		7.0
20-Year Traffic Index		8.0

5. CORRIDOR AND SYSTEM COORDINATION

In the Transportation Concept Report for Route 96, Route 96 is classified as a Rural Minor Arterial. Surface Transportation Assistance Act (STAA) trucks are currently prohibited. There has been community interest in upgrading this route to accommodate STAA trucks between Willow Creek and Hoopa. Route 96 is identified in the Transportation Concept Report to remain as a two-lane conventional highway, at the present width. Widening Route 96 to accommodate non-motorized traffic may be appropriate in some communities along the Route.

6. ALTERNATIVES

One build alternative, Alternative 1, and the no build alternative were studied:

Alternative 1 – Widening Shoulders, Installing Landscaped/Hardscaped Areas, Installing an IRWL, and Installing Highway Lighting

This alternative includes widen shoulders to a 4-foot-minimum width, place open graded hot mix asphalt (HMA-O), install IRWL enhanced crosswalk system, install highway lighting, adjust metal beam guard railing, relocate and replace culverts, install landscaped or hardscaped areas, and place imported material (shoulder backing).

Widening or replacement of the Trinity River Bridge (4-137) will not be included in the scope of this project. Additionally, no widening will occur through

Downtown Hoopa, PM 12.42 to 12.58, where shoulder widths will remain at 4 feet. Landscaped or hardscaped areas will be added within these limits to better define driveways and provide a visual narrowing of the roadway. These improvements are intended to address vehicle conflicts and reduce speed.

Drainage improvements will be required due to the widening of the roadway and the condition of existing culverts. The 18-inch CMP culverts parallel to the alignment and crossing the driveway to the parking lot in front of Hoopa Valley Elementary School (PM 11.39) and Orchard Loop Road (PM 11.36) will need to be relocated in kind. The existing 18-inch CMP that crosses Route 96 at PM 12.07 will need to be replaced with a 24-inch CMP. The inlet at PM 12.07 will need to be relocated.

Side slopes will be graded to 4:1 throughout to help with the run-off-road type collisions, except for the existing 1-1/2:1 side slope that will be perpetuated in two areas: PM 12.27 to 12.32 and PM 12.45 to 12.74. The side slopes have been approved in the Advisory Design Exception Fact Sheet and the Slope Approval Form.

Highway lighting will be installed at the crosswalks at PM 12.47 and PM 12.54 in Hoopa. The lighting was included to address the history of pedestrian related collisions at night.

The Headquarters Office of Geometric Design was consulted for this project. Existing highway features that do not conform to current standards in the vicinity of this work are addressed in the attached approved Mandatory and Advisory Design Exceptions.

No Build – Do Nothing

This alternative leaves the existing facility in place and as a result, collisions will not likely be reduced. Since this alternative does not meet the project “Need and Purpose,” it is not recommended.

The proposed project safety improvements have a Traffic Safety Index above 230 and have been reviewed by the District Traffic Liaison and Headquarters Safety Program Manager.

7. COMMUNITY INVOLVEMENT

This safety project was being developed for a Project Initiation Form while District 1 Advance Planning was preparing a Project Study Report (PSR) for the Hoopa Downtown Enhancement Project, dated April 2010. The April 2010 Caltrans prepared PSR was based on a PSR prepared by the Hoopa Valley Roads Department in 2008, which was coordinated with District 1 Advance Planning.

The Hoopa Valley Tribe developed a Conceptual Plan for Downtown Hoopa in January 2006 and a Project Study Report (PSR) for the Downtown Enhancement Project in January 2008. As a result of the 2006 Conceptual Plan, many public meetings and workshops were facilitated. The result of the meetings was the development of the conceptual project drawings included in the 2008 and 2010 PSRs. Elements of this safety project, such as lighting, the location of crosswalks and landscaped/hardscaped buffers, have been based on these documents and additional meetings with the Hoopa Valley Roads Department. Since the project is located within the Hoopa Indian Reservation, coordination with the Tribe is recommended throughout the life cycle of the project.

8. ENVIRONMENTAL DETERMINATION/DOCUMENT

It is anticipated that an Initial Study/Negative Declaration (IS/ND) will fulfill CEQA requirements and that a Categorical Exclusion (CE) would fulfill the NEPA requirement. See the Mini-Preliminary Environmental Assessment Report (Mini-PEAR), Attachment E.

9. FUNDING

The District recommends that this project be programmed for \$1,313,000 in construction costs and for \$151,000 in Right of Way cost in the 2014/2015 fiscal year of the SHOPP. This project qualifies for funding through the 20.XX.201.010 Safety Improvement Program and is eligible for Federal Funding. For a detailed cost estimate, see Attachment D.

10. SCHEDULE

The Programming Sheet, which summarizes the project schedule, is included as Attachment O. A summary of milestones is included in the table below.

HQ Milestones	Delivery Date (Month, Day, Year)
Circulate DED	September 2013
PA & ED	November 2013
Project PS&E	July 2014
Right of Way Certification	August 2014
Ready to List	September 2014
Approve Contract	February 2015
Contract Acceptance	March 2016

11. FHWA COORDINATION

No FHWA action required for this project.

12. DISTRICT CONTACTS

<u>Name</u>	<u>Title</u>	<u>Telephone</u>
Valency Langtry	Project Engineer	707-445-5208
Richard Mullen	Project Manager	707-441-5877
Ilene Poindexter	Chief, Advance Planning	707-441-3969
Ralph Martinelli	Chief, Traffic Safety	707-445-6376
Troy Arseneau	Chief, Traffic Operations	707-445-6377
Edward Espinoza	Senior, Environmental Planning	530-225-3308
David McCanless	Supervising Right of Way Agent	707-445-6424
Kathleen Sartorius	Native American Liaison	707-441-5815

13. PROJECT REVIEWS

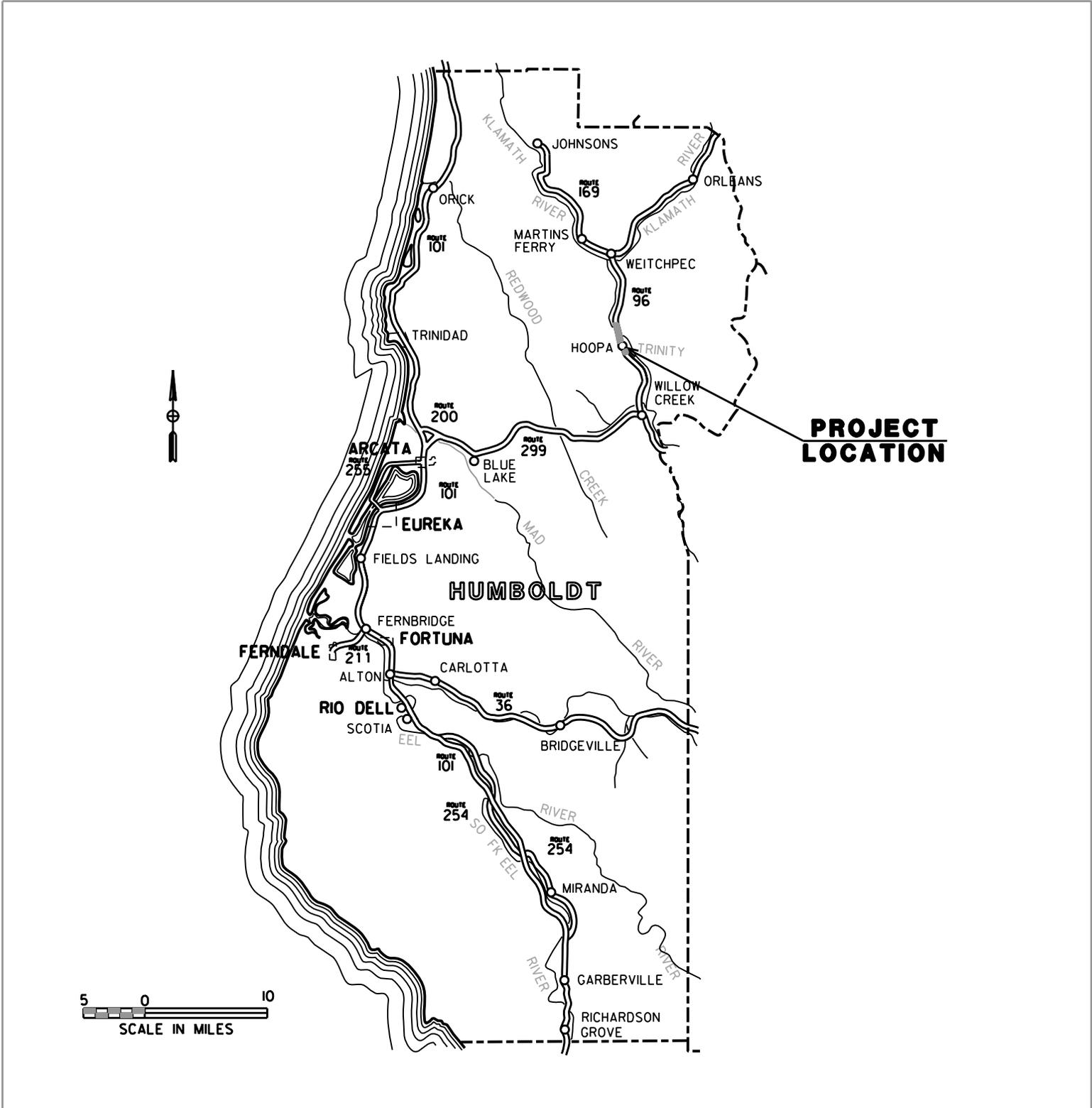
Field Review	<u>Valency Langtry, Juan Trupp</u>	Date	<u>1/14/2010</u>
District Maintenance	<u>Antonio Alvarez</u>	Date	<u>Draft Circulation</u>
District Safety Review	<u>Steve Hughes</u>	Date	<u>Draft Circulation</u>
Constructability Review	<u>Michael Lewis</u>	Date	<u>Draft Circulation</u>
HQ Design Coordinator	<u>Heidi Sykes, Jim Deluca</u>	Date	<u>7/6/11, 8/11/11</u>
Project Manager District Safety Review	<u>Richard Mullen</u>	Date	<u>Draft Circulation</u>
District SHOPP Program Advisor	<u>Ralph Martinelli</u>	Date	<u>Draft Circulation</u>
HQ SHOPP Program Advisor	<u>Robert Peterson</u>	Date	<u>Draft Circulation</u>

ATTACHMENTS:

- A Project Location Map (1)
- B Typical Section (1)
- C Layouts (5)
- D Cost Estimate (4)
- E Mini Preliminary Environmental Assessment Report (Mini-PEAR) (3)
- F Initial Site Assessment (ISA) (1)
- G Right of Way Data Sheet (4)
- H Preliminary Materials Recommendation and Supplemental Materials Recommendations #1 (11)
- I Pavement Selection Committee Form (1)
- J Transportation Management Plan (TMP) (8)
- K Traffic Safety Analysis Memorandum (1)
- L Storm Water Data Report (5)
- M Landscape Assessment Sheet (2)
- N Programming Sheet (1)

ATTACHMENT A

PROJECT LOCATION MAP



LOCATION MAP

01-HUM-96-PM 11.0/13.2

ATTACHMENT B

TYPICAL SECTION

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

REVISOR BY
 DATE REVISED

CALCULATED-DESIGNED BY
 CHECKED BY

FUNCTIONAL SUPERVISOR

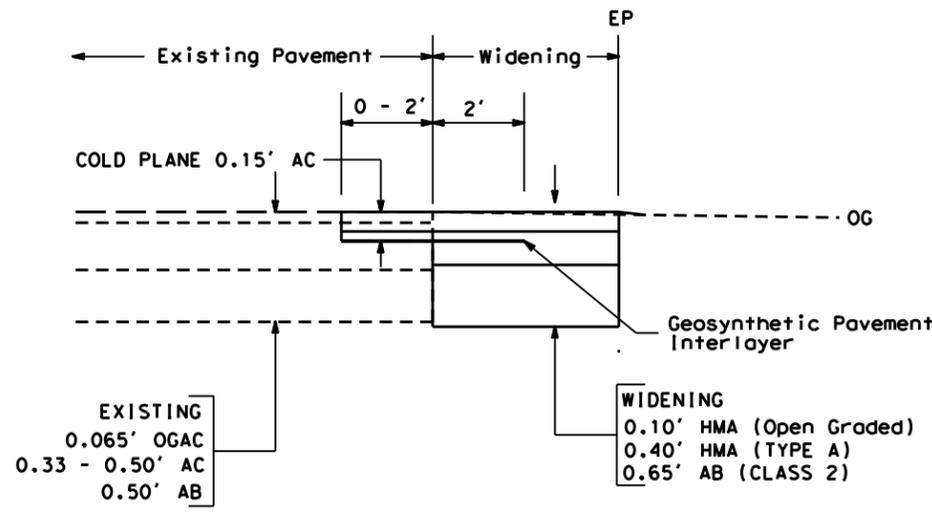
DATE PLOTTED => \$TIME
 00-00-00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	96	11.0/13.2	1	1

REGISTERED CIVIL ENGINEER DATE _____

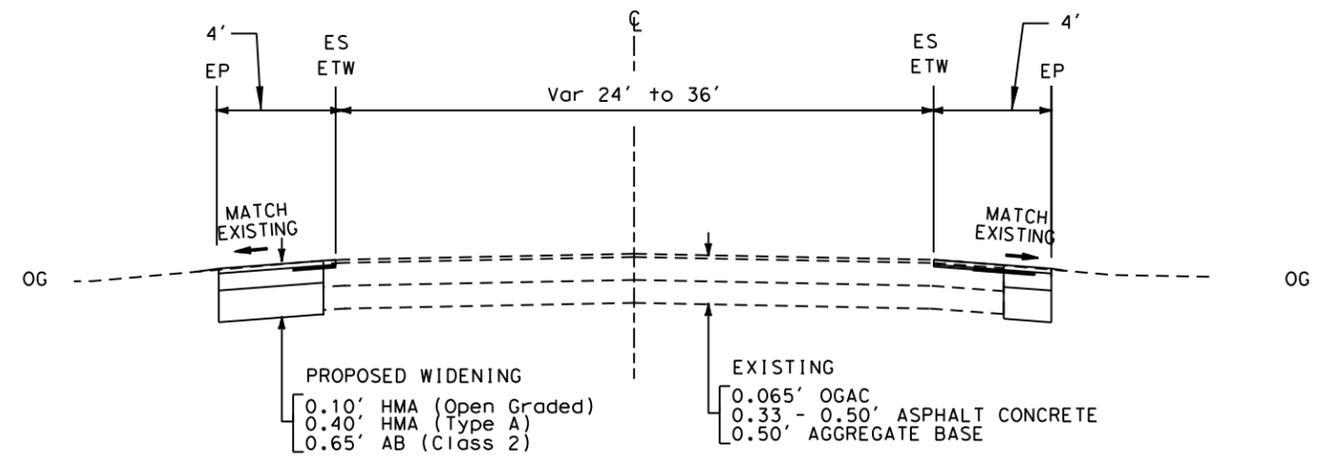
PLANS APPROVAL DATE _____

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



SHOULDER WIDENING

PM 11.0 TO PM 13.2



TYPICAL CROSS SECTION

NO SCALE



**PRELIMINARY PLANS
 FOR DESIGN STUDY ONLY**

ATTACHMENT C

LAYOUTS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	96	PM 11.0/13.2	2	5

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



Hoopla Safety

(2 of 5)

ESL Coincident with Existing R/W Unless Otherwise Noted

ESL Located 50 feet From Existing Centerline PM 11.48 to 11.52 (Right)

ESL Located 50 feet From Existing Centerline PM 11.46 to 11.58 (Left)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

REVISOR BY
DATE REVISION

CALCULATED-DESIGNED BY
CHECKED BY

FUNCTIONAL SUPERVISOR

DEPARTMENT OF TRANSPORTATION

LEGEND

- Existing R/W and APN Lines
- Proposed Cut/Fill Limits
- Environmental Study Limits
- Existing Roadway
- Existing Structure
- Overhead Power/Telephone



ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SHOWN

DESIGN STUDY ONLY

To Welchpec

To Willow Creek

SR 96
PM 11.42

ATTACHMENT D

COST ESTIMATE

PSR Cost Estimate

01-HUM-96

PM 11.0/13.0

EA 01-49370K

PROJECT DESCRIPTION:

Limits: In Humboldt County, in Hoopa, from Loop Road, to 0.1 miles west of the Hostler Creek Bridge (04-0138).

Proposed Improvement (Scope): Widen shoulders to 4 feet, install radar feedback signs, install IRWL, upgrade metal beam guard railing, install landscaped/hardscaped areas and install lighting.

Alternative 1

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$1,119,000
TOTAL STRUCTURE ITEMS	\$0
SUBTOTAL CONSTRUCTION COSTS	\$1,119,000
TOTAL RIGHT OF WAY ITEMS	\$131,000
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$1,250,000

I. ROADWAY ITEMS

Item No.	Section 1 Earthwork	Quantity	Unit	Unit Price	Item Cost
160101	Clearing & Grubbing	1	LS	\$4,000	\$4,000
190101	Roadway Excavation	2,410	CY	\$30	\$72,300
198001	Imported Borrow	128	CY	\$70	\$8,960
198007	Imported Material (Shoulder Backing)	140	CY	\$80	\$11,200
Subtotal Earthwork					\$96,460

	Section 2 Pavement Structural Section	Quantity	Unit	Unit Price**	Item Cost
390132	Hot Mix Asphalt (Type A)	1,330	TON	\$115	\$152,950
390134	Hot Mix Asphalt (Open Graded)	400	TON	\$110	\$44,000
260201	Aggregate Base (Class 2)	620	CY	\$55	\$34,100
394090	Place Hot Mix Asphalt (Miscellaneous Area)	140	SQYD	\$44	\$6,160
393001	Pavement Reinforcement Fabric	56,500	SQFT	\$0.20	\$11,300
150305	Obliterate Pavement	320	SQYD	\$8.50	\$2,720
153103	Cold Plane Asphalt Concrete Pavement	2,320	SQYD	\$7.60	\$17,632
Subtotal Pavement Structural Section					\$268,862

	Section 3 Drainage	Quantity	Unit	Unit Price	Item Cost
665018	18" Corrugated Steel Pipe (.109" Thick)	120	LF	\$120	\$14,400
665024	24" Corrugated Steel Pipe (.109" Thick)	50	LF	\$125	\$6,250
510502	36" GMP Inlet	5	LF	\$500	\$2,500
750001	Misc. Iron and Steel (frames and grates)	1,075	LB	\$2.70	\$2,903
Subtotal Drainage					\$6,250

	Section 4 Specialty Items	Quantity	Unit	Unit Price	Item Cost
070012	Progress Schedule (Critical Path)	1	LS	\$4,000	\$4,000
074016	Construction Site Management	1	LS	\$5,000	\$5,000
074017	Prepare Storm Water Pollution Program	1	LS	\$1,500	\$1,500
190110	Lead Compliance Plan	1	LS	\$1,500	\$1,500
	Lighting	4	EA	\$15,000	\$60,000
	Light Guard Crosswalk	1	LS	\$30,000	\$30,000
	Curb Ramp Detectable Warning Surface	120	SQFT	\$100	\$12,000
839604	Crash Cushion (REACT 9CBB)	1	EA	\$6,000	\$6,000
839585	Alternative Flared Terminal System	2	EA	\$2,300	\$4,600
839584	Alternative In-Line Terminal System	1	EA	\$2,900	\$2,900
839541	Transition Railing (Type WB)	3	EA	\$3,500	\$10,500
510502	Minor Concrete (Minor Structure)	48	CY	\$1,700	\$81,600
	Stormwater Items	1	LS	\$27,000	\$27,000
203016	Erosion Control	1	LS	\$32,000	\$32,000
066666	Price Index Fluctuations (AC)	1	LS	\$7,900	\$7,900
066845	Incentive for Asphalt Concrete (QC/QA) (4% of HMAC)	1	LS	\$7,878	\$7,878
Subtotal Specialty Items					\$294,378

	Section 5 Traffic Items	Quantity	Unit	Unit Price	Item Cost
840504	4" Thermoplastic Traffic Stripe	16,605	LF	\$0.55	\$9,133
840515	Thermoplastic Pavement Marking	807	SQFT	\$5	\$4,035
128650	Portable Changeable Message Sign (PCMS)	2	EA	\$3,000	\$6,000
120090	Construction Area Signs	1	LS	\$2,000	\$2,000
Subtotal Traffic Items					\$21,168

Traffic Additions (Added in "TOTAL SECTIONS 1 thru 5)					
	Traffic Control System	1	LS	(6% Item Subtotal)	\$41,300
	Maintain Traffic	1	LS	(7% Item Subtotal)	\$48,100

SUBTOTAL	\$687,118
TOTAL SECTIONS 1 thru 5	\$776,518

Section 6 Minor Items	
\$776,518 x (5%) = (Subtotal Sections 1 thru 5)	\$38,826
TOTAL MINOR ITEMS	\$38,826

Section 7 Roadway Mobilization	
\$815,344 x (5%) = (Subtotal Sections 1 thru 6)	\$40,767
TOTAL ROADWAY MOBILIZATION	\$40,767

Section 8 Roadway Additions	Quantity	Unit	Unit Price	Item Cost
Supplemental Work				
			\$815,344 x (5%) = (Subtotal Sections 1 thru 6)	\$40,767
			Contingencies \$815,344 x (25%) =	\$203,836
			\$ Per Hour Hours Per Day Work Days	
COZEEP setups @ \$100 per Hour Working 10 Hour Day	\$100	10	15	\$15,000
Construction Office			RE Office (\$2200/month for 25 days)	\$2,500
			(Subtotal Sections 1 thru 6)	\$815,344

TOTAL ROADWAY ADDITIONS (Sections 7 & 8) \$302,870

TOTAL ROADWAY ITEMS	\$1,119,000
----------------------------	--------------------

CALL \$1,119,000

II. STRUCTURES ITEMS

TOTAL STRUCTURES ITEMS	\$0
-------------------------------	------------

III. RIGHT OF WAY ITEMS

A. Acquisition, including excess lands,	\$0
B. Mitigation acquisition & credits	\$15,000
C. Project Development Permit Fees	\$6,000
D. Utility Relocation (State share)	\$110,000
E. Relocation Assistance (RAP)	\$0
F. Clearance/Demolition	\$0
G. Title and Escrow Fees	\$0

TOTAL RIGHT OF WAY ITEMS	\$131,000
---------------------------------	------------------

Anticipated Date of Right of Way Certification (Date to which Values are Escalated) N/A

F. Construction Contract Work

Brief Description of Work: Widen Shoulders.

Estimate Prepared By: Valency Langtry Phone # 707.445.5208

Estimate Checked By: Katie Beach Phone # 707.441.2044

ATTACHMENT E

MINI PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT (MINI-PEAR)

Mini-Preliminary Environmental Analysis Report

Project Information

District 01 County HUM Route 96 Post Mile 11.0 – 13.0 EA 01-49370K

Project Title: Hoopa Safety Project

Project Manager Richard Mullen Phone # (707) 441-5877

Project Engineer Valency Langtry Phone # (707) 445-5208

Environmental Branch Chief Ed Espinoza Phone # (530) 225-3308

Project Description

Purpose and Need: Traffic safety has determined the project is necessary to improve pedestrian, equestrian and bicycle safety through Hoopa. These improvements are needed due to high levels of non-motorized versus motorized interaction within the defined post mile limits. The purpose and need for this project is also supported by a safety index greater than 230.

Description and Work: Advance Planning is preparing a PSR to improve a two mile segment of State Route 96 by widening shoulders where necessary to obtain a minimum 4 foot paved width. Work will also include installing a light guard crosswalk, highway lighting and radar feedback signs. Additional work planned for this project includes: restriping thermoplastic traffic stripes and replacing raised pavement markers. Widening shoulders in areas where there are culverts would include lengthening and/or modifying some of the culverts to fit the increased shoulder width.

Anticipated Environmental Approval:

CEQA

Initial Study (ND)

NEPA

Categorical Exclusion (CE)

Summary Statement:

In order to identify environmental issues, constraints, costs and resource needs a mini-PEAR (Preliminary Environmental Analysis Report) was prepared for this project. It is important to note that all technical studies will be deferred to the Capital phases of the project. In addition, during project development, proposed staging areas, disposal sites, utility relocation plans, and construction site access requirements will be need to be included as part of this project. The cultural and biological studies for this report were limited to database searches and windshield surveys. For environmental engineering, resources and time were estimated to meet an aggressive schedule. With regard to the conceptual plans being presented at this stage, it is anticipated that an Initial Study/Negative Declaration (IS/ND) will fulfill CEQA requirements and that a Categorical Exclusion (CE) would fulfill the NEPA requirement. Based on existing workload and available resources, it is estimated to take **30 months** to complete the environmental process. If possible, Environmental Planning would like to receive the ESR for

Hoopa Safety Project

environmental clearance for this project, no later than February of a given year in order to complete any required surveys during the spring.

Special Considerations:

Biology: A project at this location has the potential to affect many biologically sensitive species (i.e. Coho Salmon, Northern Spotted Owl, four Special Status Amphibians and Howell's montia). Staff will survey for sensitive species and conduct informal/formal consultation with NOAA, USF&WS and the CDFG.

Archaeology: The project will require Native American consultation and the development of an APE, ASR and HPSR. The potential for encountering historical architecturally significant features will require evaluation and the possible development of an HRER.

Section 4(f): Section 106, access to public facilities and wild and scenic river features require evaluation using 4f criteria.

Wild and Scenic River: The Trinity River is considered a Wild and Scenic River. Because of the river's designation, evaluation of potential impacts to wild and scenic features require assessment.

Hazardous Waste: An ISA will need to be completed during the '0' phase of the project.

Water Quality: A water quality assessment will be prepared for this project.

Air Quality: An air quality report will be necessary.

Noise: A noise report will be necessary.

Hydrology: A hydrology study will be necessary.

Visual Resources: View shed impacts analysis necessary.

Cumulative Impacts: Previous projects in conjunction with this proposed project need evaluation.

Permits:

This project will need the following permits/certifications: 1602 Streambed Alteration Permit from the California Department of Fish and Game, a 401 Water Quality Certification from the Regional Water Quality Control Board, and a 404 Nationwide Permit from the United States Army Corp of Engineers.

Additionally, MOU/MOA's may be required with the Hoopa.

Mitigation:

Estimated mitigation costs will be developed as preliminary environmental analysis sheds light on potential values that might be impacted. Impacts to sensitive values will need to be quantified and cost estimates generated, based on current industry practices.

Disclaimer:

This report is not an environmental document. Due to resource constraints, only minimal information was provided from specialists. The above recommendations are based on the project description provided in this report. The discussion and conclusions provided by this mini-PEAR are approximate and are based on an in-house review of records to estimate the potential for probable effects. The purpose of this report

Hoop Safety Project

is to provide a preliminary level of environmental analysis to supplement the PSRPR. Changes in project scope, alternatives, or environmental law will require a reevaluation of this report.

Prepared by:

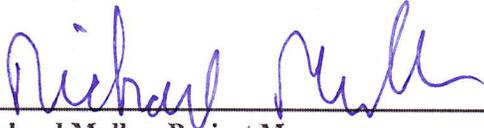


Ed Espinoza, Chief, Office of Environmental Management Redding 1

Date:

6/7/11

Reviewed by:



Richard Mullen, Project Manager

Date:

6/10/11

ATTACHMENT F

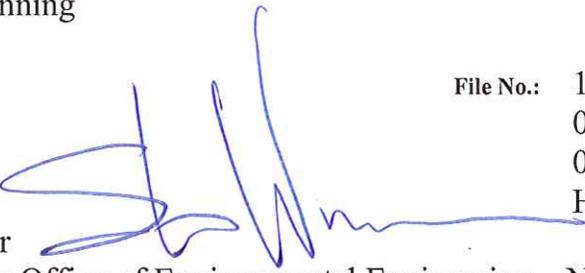
INITIAL SITE ASSESSMENT (ISA)

Memorandum

To: Valency Langtry,
Advance Planning

Date: May 3, 2011

File No.: 1-HUM-96 PM 11.0/13.0
01-49370K
0100000478
Hoopa Safety

From: Steve Werner 
North Region Office of Environmental Engineering—North

Subject: Initial Site Assessment

An Initial Site Assessment (ISA) was conducted for the above-referenced "Hoopa Safety" project after receiving your request of April 9, 2011. The request supersedes the March 23, 2011 ISA request for a project with a larger scope.

Based on the information provided in your request, the ISA found that the project could have hazardous waste issues related to Aerially Deposited Lead (ADL) in shoulder soils that will be excavated during the proposed construction. It appears that there will be no issues related to the two gas stations adjacent to the Right of Way at approximately Post Mile 12.5, based on the scope of work presented. Replacing the Bridge Rail on the Trinity River Bridge (Br. No. 04-137) will require an Asbestos survey of the structure

This office can initiate a Task Order on a consultant contract to test shoulder soils within the work area of the project to determine ADL concentrations when the project enters the zero phase. It is likely, but uncertain until testing is complete, that ADL concentrations will be below hazardous waste thresholds due to the low traffic volumes in the area. At this point, you can anticipate the inclusion of SSP 15-027 EARTH MATERIAL CONTAINING LEAD into the contract specifications for non-hazardous waste concentrations of ADL. If ADL levels are high and hazardous waste will be generated, re-use of the excavated materials under a Department of Toxic Substances Control (DTSC) Variance should be pursued. A lead compliance plan (LCP) will be required for ADL, as well as for the lead present in paint stripe on the project. Issues related to possible releases from the two gas stations could also be addressed with consultant studies during the zero phase in the event that drainage work is proposed in that area.

For the purposes of determining the appropriate environmental documents required for the project, it appears that the work site should not be considered to be on the *Hazardous Waste and Substances Site List (Cortese List)*.

Valency Langtry
May 3, 2011
Page 2

If there are any changes to the scope of the project, please send an e-mail or letter describing the changes so that they may be evaluated for possible hazardous waste issues that could affect your project. Communications may also be directed to me at (707) 445-6658.

cc: 1-SWerner 2-File

e-mail copies to: Steve Werner
Environmental

SSW/ks

ATTACHMENT G

RIGHT OF WAY DATA SHEET

Memorandum

*Flex your power!
Be energy efficient!*

To: ILENE POINDEXTER
Advance Planning Senior
Department of Transportation, District 1

Attention VALENCY LANGTRY
Project Engineer

Date: August 18, 2011

File: 01-HUM-96-PM 11.0/13.2
E.A. 49370K
Alternate No. 1 of 1 -
Shoulder widening/light guard
crosswalk
In Hum Co. near Hoopa
from Loop Rd. to 0.1 mile
west of Hostler Creek
Bridge #4-294

From: KAREN E. HAWKINS
Assistant Chief
North Region Right of Way
Eureka/Redding

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on June 29, 2011. The attached estimate is based on the following assumptions and limiting conditions:

Acquisition:

No right of way is required, all work within existing right of way. No TCEs were requested as well. If surveys indicate that there will need to be Right of Way a new RWDS will need to be sent.

Permits:

A 401, 1602, 404, and MOU/MOA's may be required with the Hoopa Valley Tribe.

Mitigation:

\$15,000 was given as an estimate for mitigation costs by the Environmental Branch. No specifics were given to indicate what type of mitigation was required. If in the future there are any changes to the mitigation requirements a new RWDS will be required.

Right of Way Lead Time will require a minimum of 12 months after we receive project first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of 12 months will be required after receiving the last appraisal map to Right of Way for certification. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.



KAREN E. HAWKINS
Assistant Chief
North Region Right of Way
Eureka/Redding

Attachments:
Right of Way Data Sheet

cc. RICHARD MULLEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET

4. Are there any major items of construction contract work?

Yes _____ No X

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

No right of way required.

6. Are any properties acquired for this project expected to be rented, leased, or sold?

Yes _____ No X

7. Is there an effect on assessed valuation?

No X

Yes _____

Not Significant _____

8. Are utility facilities or rights of way affected?

Yes X

No _____

As additional information regarding Design's "Clear Recovery Zone" requirements, as well as information regarding property rights and liability determination becomes available, this estimate may need to be revised.

Verifications required for: PG&E (Gas)

Relocations required for: PG&E - Electric Transmission, PG&E - Electric Distribution, Verizon - Communications, Hoopa Valley Public Utilities District - Water and Almega - CATV

9. Are railroad facilities or rights of way affected?

Yes _____

No X

10. Were any previously unidentified sites with hazardous waste and/or material found?

Yes _____ None Evident X

11. Are RAP displacements required?

Yes _____

No X

No. of single family

No. of business/nonprofit

No. of multi-family

No. of farms

Based on Draft/Final Relocation Impact Statement/Study dated N/A
it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

12. Are there material borrow and/or disposal sites required?

Yes _____ No X

13. Are there potential relinquishments and/or abandonments?

Yes _____ No X

14. Are there any existing and/or potential airspace sites?

Yes _____ No X

15. What type of mitigation is required for the project?

Specifics were not provided and it is too early in the process to determine the type of mitigation which might be required according to Edward J. Espinoza, D2 Branch Chief.

16. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated.)

Right of Way Lead Time will require a minimum of 12 months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of 12 months will be required after receiving the last appraisal map to Right of way for certification.

17. Is it anticipated that Caltrans will perform all Right of Way work?

Yes X No _____

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DATA SHEET

Evaluation Prepared By:

Right of Way: Nancy Hueske
NANCY HUESKE

Date 9/19/11

Reviewed By:

RW Project Coordinator: Robert Close
ROBERT CLOSE

Date 9/16/11

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

RECOMMENDED FOR APPROVAL

David M. McCannless
DAVID M. McCANLESS,
Senior Right of Way Agent
Project Delivery Branch
Eureka

9/19/11
Date

APPROVED:

Karen E. Hawkins
KAREN E. HAWKINS,
Assistant Chief
North Region Right of Way
Eureka/Redding

9/15/11
Date

ATTACHMENT H

PRELIMINARY MATERIALS RECOMMENDATION and SUPPLEMENTAL MATERIALS RECOMMENDATIONS #1

Memorandum

To: Ilene Poindexter
Division Chief,
Advance Planning

Date: September 26, 2011

Attn: Valency Langtry

File: 01-HUM 96, PM 11.0/13.0
01-49370K
EFIS# 0100000478 K
Widening,
Safety Improvement

From: DEPARTMENT OF TRANSPORTATION - North Region
Wesley D. Johnson - North Region, Eureka Materials

Subject: Supplemental Materials Recommendation #1

In response to a request for a supplement to the Preliminary Materials Recommendation from Valency Langtry of your office, dated September 26, 2011, the following is provided. In lieu of work to resurface the existing highway when widening work is complete, locate the joint of the area to be widened at the existing Edge of Traveled Way and provide a neat saw cut to facilitate the bond between the old and new HMA. Where possible, include Geosynthetic Pavement Interlayer (GPI) at the joint as shown on your typical section submitted with your request. Finish the widened areas with a surface layer of 0.10 feet of OGFC to match existing finish grade. All pertinent recommendations contained in the Preliminary Materials Recommendation, dated July 21, 2011 remain in effect. An updated Materials Recommendation should be requested when this project begins the Design Phase.

If you have any questions, please call Dave Waterman at (707)445-6355 or Wesley Johnson at (707)445-6386.

WJ:wj

cc: I. Poindexter
V. Langtry
R. Mullen
Lab Files



Wesley D. Johnson

Memorandum

To: Ilene Poindexter
Division Chief,
Advance Planning

Date: July 21, 2011

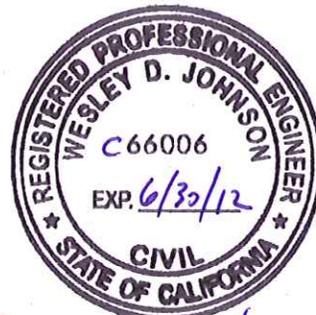
Attn: Valency Langtry

File: 01-HUM 96, PM 11.0/13.0
01-49370K
EFIS# 0100000478 K
Widening,
Safety Improvement

From: DEPARTMENT OF TRANSPORTATION - North Region
Wesley D. Johnson - North Region, Eureka Materials

Subject: PRELIMINARY Materials Recommendation

In response to a request for a Preliminary Materials Recommendation from Valency Langtry of your office, dated June 3, 2011, the project history files in the Eureka Materials Lab were reviewed for previous sub basement soil studies from the original construction or, from previous work adjacent to and within the limits of the project area. Also, a field review was conducted to determine the condition of the existing surface and its suitability to receive overlay. Due to the response time requested and the current phase of the project, no soil sampling was conducted. Prior work in and near the project limits revealed subbasement soil R-values ranging from 51 to 86. For the purposes of this report, an assumed R-value of 50 and a Traffic Index of 8.0 which was provided by the Office of Traffic Forecasting and Modeling was used for calculation of the structural section. It should be noted that the current Traffic Index (8.0) is slightly lower than the Traffic Index (9.5) used to construct project 01-165704 in 1977 at this same location. Additionally, a search of records of projects constructed in the near vicinity provided information regarding installed culverts and this data was used to develop the culvert recommendation contained below. To more accurately determine culvert material types and thicknesses; and, to review the structural section, an updated Materials Recommendation should be requested when this project begins the Design Phase.



WESLEY D. JOHNSON

In order to provide a fresh surface to receive the proposed striping and cross walk treatments, this recommendation includes work to overlay the finished roadway from edge of pavement to edge of pavement. The existing OGFC layer was placed prior to the establishment of the District 1 Pavement Selection Committee (PSC) by District Directive and currently, under PSC guidelines, OGFC is not warranted at this location unless outside circumstances are indicated. For this reason, the Project Engineer shall seek and receive guidance for the material type selected for the final overlay at this location. See Notes below.

Existing Structural Section and Pavement Surface Condition

The Materials Laboratory's Structural Section History Files and the "as-built" project files of the existing roadway were reviewed to determine the existing structural section and surface treatment at the location of proposed work. The Structural section data for the original roadway construction is somewhat incomplete but indicates approximately 0.16 feet or greater of Asphalt Concrete on top of an unknown thickness of oiled gravel. This original construction has received seal coat and currently, the surface layer consists of 0.065 feet (20 mm) of Open Graded Asphalt Concrete. Please see Attachment "A" for pavement history details. Also, preliminary data obtained from the State's Ground Penetrating Radar (GPR) pavement management project indicates the existing HMA thickness to vary from 0.33 feet to 0.50 feet thick at this project's location. Additionally, the 2007 Pavement Condition Survey (PCS) indicates an International Roughness Index (IRI) average score of 94 which is less than the score needed (170) to trigger a pavement rehabilitation project. Overall, the pavement surface is in good condition and can receive overlay without prior removal. The existing open graded asphalt concrete is sufficiently plugged and is not expected to create water retention issues when overlaid with new pavement. If existing structural section thicknesses at specific locations are required, please request coring services from this office and allow enough lead time to schedule traffic control using Maintenance forces.

Repair and Overlay Existing

In the absence of a current deflection study for this section of roadway, the following repair strategy is recommended: A thorough inspection should be made to locate areas of severe pavement failure identified by rutting greater than 1/2" and/or loose spalling pavement. Dig out and repair the localized failed areas to a depth of 0.20' (mill & fill with HMA (Type A)) and seal all cracks wider than 1/4" by rout and seal method. Upon completion of repairs noted above and work to widen shoulder, the existing surface will be overlaid from edge of pavement to edge of pavement with either 0.10' of Hot Mix Asphalt or 0.10' of Open Graded Friction Course, depending on recommendation of the District 1 Pavement Selection Committee.

Structural Sections for Travelled Way and Shoulder Widening (20 year design life)

Based on an assumed R-value of **50**, and a 20 year traffic index of **8.0**, which was provided by the Office of Traffic Forecasting and Modeling, the following structural section strategies are recommended for travelled way and shoulder. Each strategy is structurally equivalent.

Strategy	<u>HMA (Type A)</u>	<u>AB (Cl. 2)</u>
1	0.40'	0.45'
2	0.65'	----

Notes:

- For new and reconstructed shoulder widening, Highway Design Manual (HDM) Table 612.2 recommends that for projects with AADT < 150000 and AADTT < 15000; shoulders ≤ 5 feet wide should match the adjacent travelled way structural section thickness. For shoulders > 5 feet wide, only the first 2 feet are required to match the adjacent travelled way structural section thickness. Since the intent of this project is to widen shoulders to 4 feet, structural section recommendation for travelled way only is provided.
- District 1 has developed a formal Pavement Selection Committee (PSC) to help provide a process for proper and consistent pavement selection in pavement design. District Directive Number DD-07-1 entitled "*District 1 Pavement Selection Committee*" defines and assigns responsibilities for the management of the District's pavement standards, policies, and guidelines. The objective is to have a concurrence or recommendation for pavement selection in pavement design by the Committee as early as possible in the Capital Project Development process, typically in the Advanced Planning/Project Initiation Document (PID) stage. For further guidance and direction, see: http://northregion.dot.ca.gov/pd/d1_district_resources.htm and select *Materials*, then navigate to *Pavement Selection Process Flowchart*. It is the responsibility of the Project Engineer to document approval of pavement strategy by the PSC for Office Engineer at P&E submittal.
- If the Pavement Selection Committee determines HMA-A as the final overlay strategy, the HMA in the structural section in the area to be widened can be reduced by the equivalent overlay thickness.
- When a widened shoulder or new structural section is constructed to adjoin an existing structural section, geosynthetic pavement interlayer (GPI) should be placed so that it will overlap the new/existing joint by 2 feet on each side. Placement of the GPI

should be as low in the HMA as possible and on the same plane for both the existing structural section and the new structural section. This will help prevent reflective cracking from the underlying joint. Please see Attachment "B" for detail.

- Routing Cracks: Rout cracks 1/4 inch wide and wider. The width of the routing should be 1/4 inch wider than the crack width. The depth should be equal to the width of the routing plus 1/4 inch. In order to alleviate the potential bump in the overlay from the crack sealant, leave the crack sealant 1/4 inch below grade to allow for expansion. Please see Attachment "C" for details.
- Local or imported borrow used to construct embankment, must meet a minimum R-value of 50 when placed within 4 feet of finished grade.
- For structural sections designed to last 20 years, the alternative to use full depth HMA (Type A) should be considered for special situations only. This would include, but not be limited to, narrow widening, shallow utilities coverage, or reducing traffic control periods due to less overall construction time.

Material Specifications

- Open Graded Friction Course (OGFC): Shall be 1/2 inch OGFC conforming to Section 39 of the Standard Specifications.
- Hot Mix Asphalt (HMA): Shall be Type A (HMA-A), conforming to revised Section 39 of the Standard Specifications.
- Paint Binder (Tack Coat): Shall conform to revised Section 39 of the Standard Specifications.
- Asphalt Binder: For "North Coast" area shall be PG 64-28 TR for both OGFC and HMA-A. The estimated percentage of asphalt to be added per dry weight of aggregate is 6.0% for 1/2" OGFC. The estimated percentage of asphalt to be added per dry weight of aggregate is 5.5% for 1/2" HMA-A and 4.9% for 3/4 inch HMA-A.
- Aggregate Base (AB): Shall be Class 2, conforming to Section 26 of the Standard Specifications with the following changes: The Durability Index per California Test Method 229 shall be 25 minimum and the minimum loose unit weight per California Test Method 212, Compacted Method (by rodding) shall be 105 lb/ft³.
- Asphalt Concrete Dike: Hot Mix Asphalt used in the construction of dikes shall be 3/8 inch, Type A (HMA-A), conforming to Section 39 of the Standard Specifications.
- Shoulder Backing: Shall conform to the requirements within the Standard Special Provisions for shoulder backing, with the following change: The minimum loose unit weight per California

Test Method 212, Compacted Method (by rodding) shall be 105 lb/ft³.

Alternative Pipe Culverts

The following Alternative Pipe Culvert recommendations included in this materials report are based on historic file data. No soil or water samples were taken for testing at this phase of project delivery. Alternative pipe culverts for an estimated 50 year service life are shown below.

- Reinforced Concrete Pipe may be used with the following addition to Section 65 of the Standard Specifications: Type II modified or Type IP cement shall be used with a maximum water-to-cement ratio of 0.45.
- 0.109" (12 gage) galvanized, corrugated steel pipe conforming to Section 66 of the Standard Specifications.
- 0.079" (14 gage) galvanized, polymeric sheet coated, corrugated steel pipe conforming to Section 66 of the Standard Specifications.
- Plastic pipe - Shall be high density polyethylene (HDPE), conforming to Section 64 of the Standard Specifications. Reference should be made to durability in Section 854.8 of the Highway Design Manual.

See Attachment "D" or "E" for culvert installation details.

If you have any questions, please call Dave Waterman at (707)445-6355 or Wesley Johnson at (707)445-6386.

WJ:wj

cc: I. Poindexter
V. Langtry
R. Mullen
Lab Files

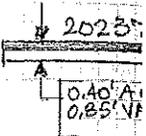
2010

Attachment A

01-HUM-96 PM 11.0/13.5
01-49370K

2000
01-357601 AC OVERLAY 20MM OBAE 35MM AC (B)

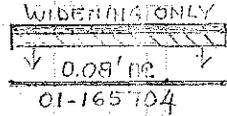
'90



202094 SEAL COAT

'80

0.10' AC
01-198094



0.43' AC / 0.65' VA

01-111064

0.08' AC

'70

YEAR
01-089304

Seal Coat

CONSTRUCTION
0.08' AC '60

62-1T1501

'50

01-078124 100#3 0.20' AC / 100' AB

'40

depth unknown

56-14BC1 0.25' AC / 0.50' BASE

level by BPR

'30

PM 11.02-11.03 SUPPLY CR. BK. 4-130

PM 12.26 } TRINITY RIVER BK. 4-137
PM 12.38 }

PM 13.27-13.28 HOETTLER CR. 4-138

PROJECT LIMITS →

←

1920

HUM 96

HOOPA

LES 10

11 POST MILE

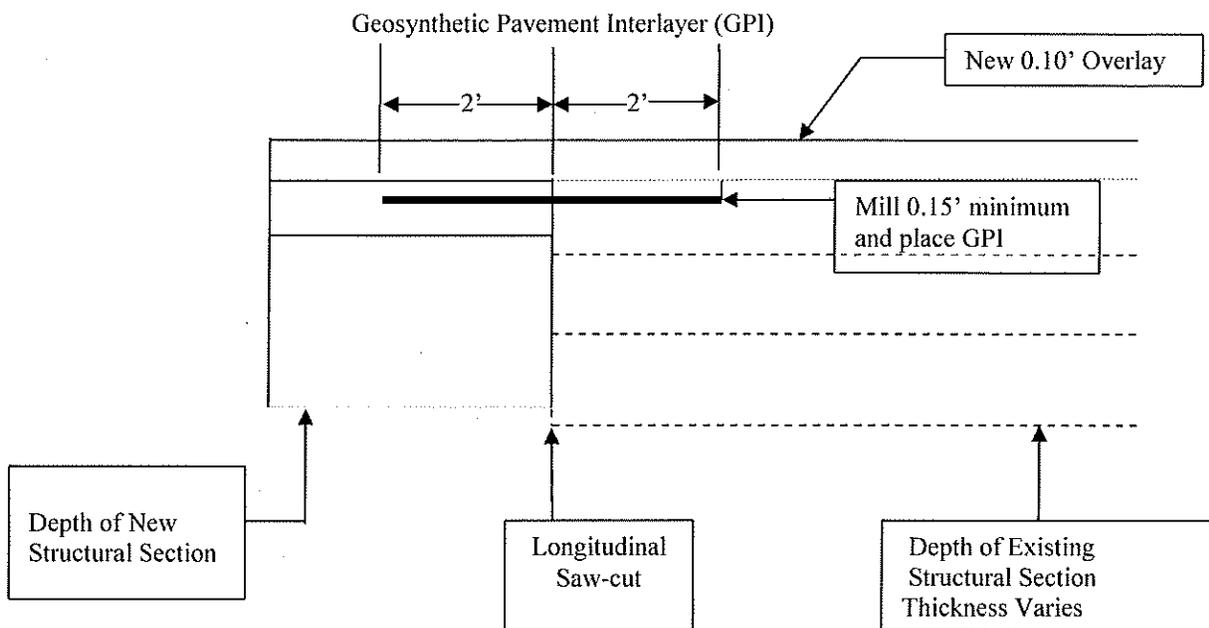
12

13

Attachment B

01-HUM-96 PM 11.0/13.0
01-49370K

Structural Section and Geosynthetic Pavement Interlayer Detail



NO SCALE

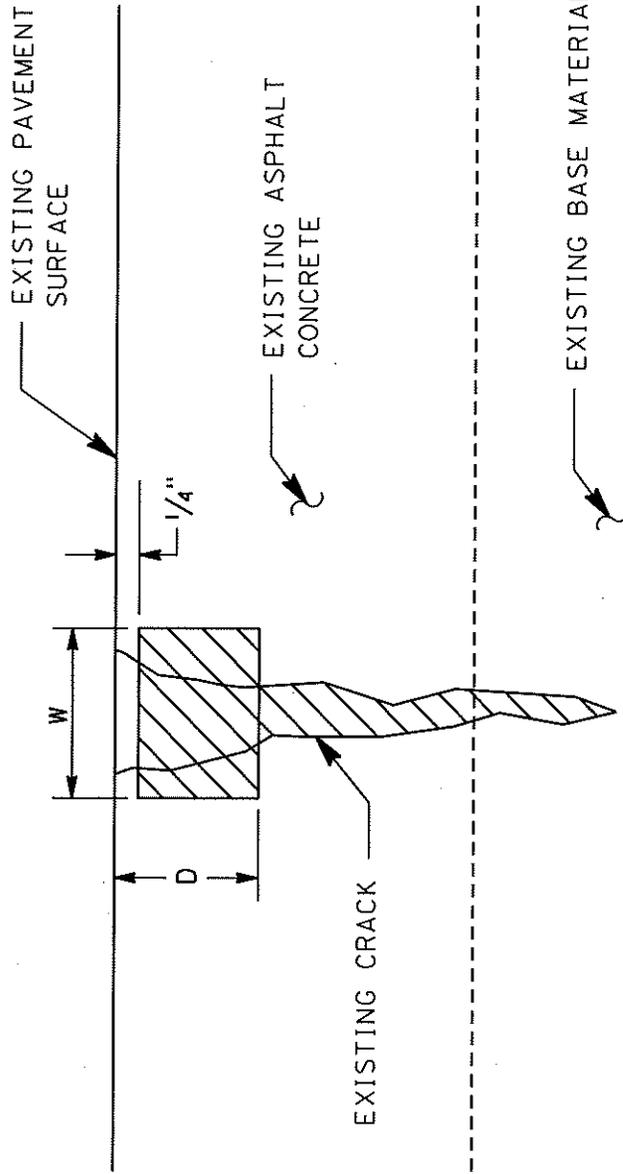
ATTACHMENT C

01-HUM-96 PM 11.0/13.0

01-49370K

W = WIDTH OF ROUTING = WIDTH OF CRACK + 1/4" MIN

D = DEPTH OF ROUTING = W + 1/4" MIN



NOTES:

1. ALL CRACKS 1/4" WIDE OR GREATER ARE TO BE ROUTED AND SEALED.
2. IF ANY PART OF ANY CRACK IS 1/4" OR WIDER, THEN THE ENTIRE CRACK WILL BE ROUTED AND SEALED.
3. NO SEALANT MATERIAL WILL BE ALLOWED ON HMA PAVEMENT SURFACE.



CRACK SEALANT

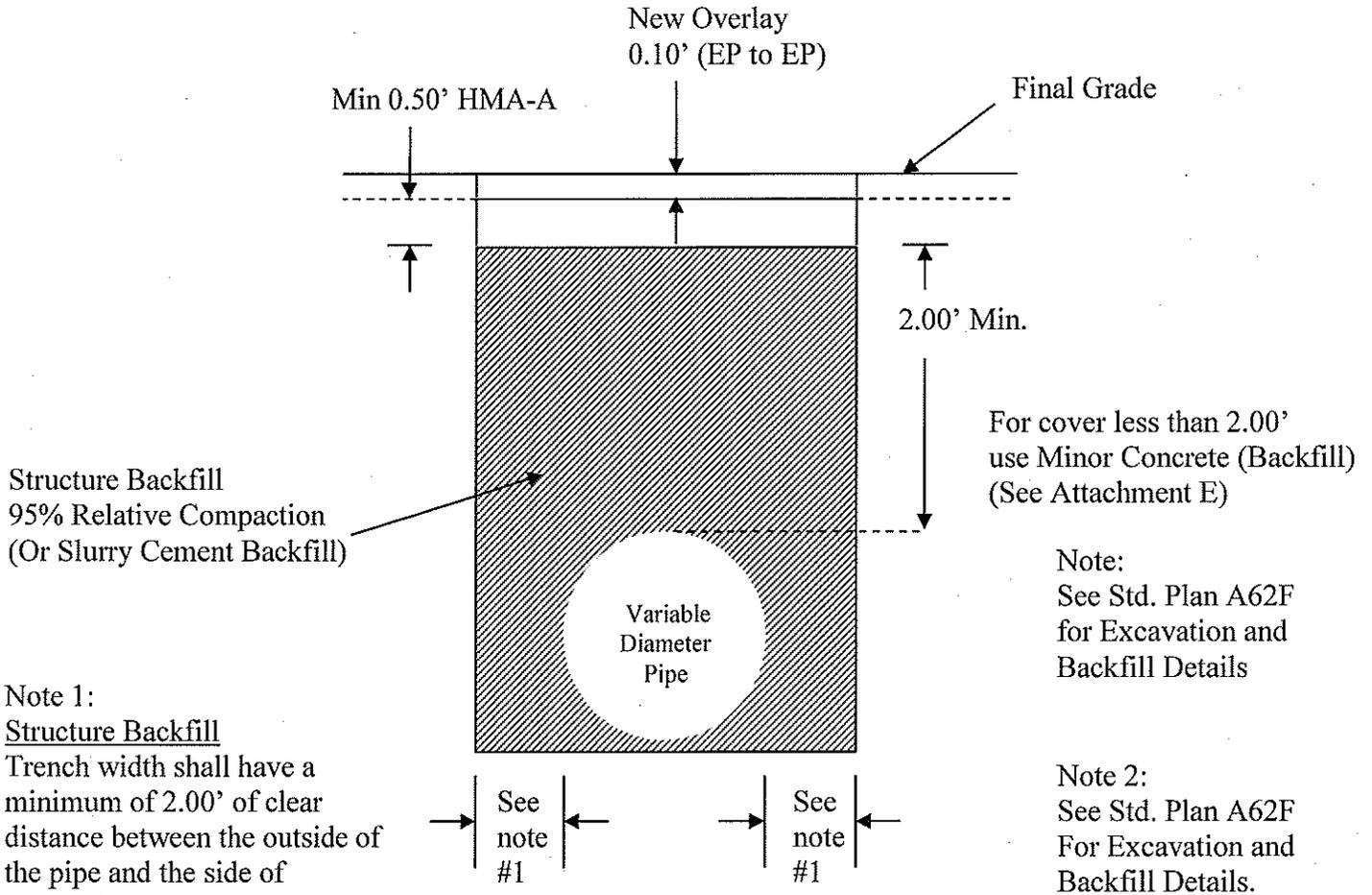
SEAL RANDOM CRACKS

TYPICAL CROSS SECTION

Attachment D

Structure Backfill, or Slurry Cement Backfill

01-HUM-96 PM 11.0/13.0
01-49370K



Structure Backfill
95% Relative Compaction
(Or Slurry Cement Backfill)

Note 1:
Structure Backfill
Trench width shall have a minimum of 2.00' of clear distance between the outside of the pipe and the side of excavation on each side.

Slurry Cement Backfill
Trench width shall be a minimum of 0.50' beyond outside edge of pipe and the side of excavation on each side for pipe diameters up to and including 42", or 1.00' for pipes over 42" in diameter. See Standard Specifications 19-3.062

Note:
See Std. Plan A62F for Excavation and Backfill Details

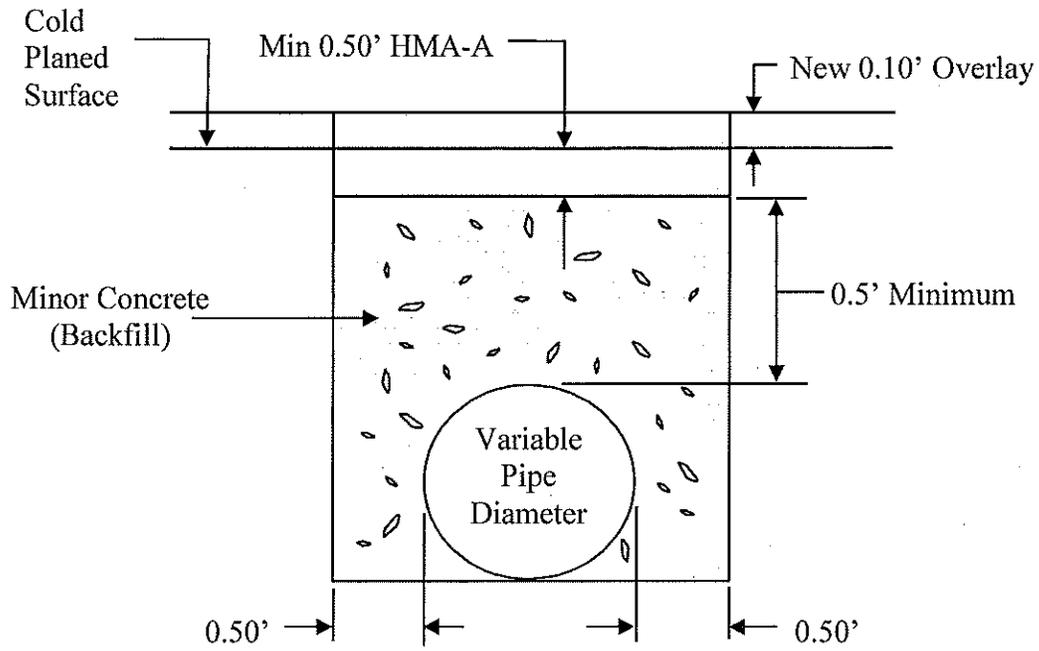
Note 2:
See Std. Plan A62F For Excavation and Backfill Details.

NO SCALE

Attachment E

01-HUM-96 PM 11.0/13.0
01-49370K

Minor Concrete (Backfill)



NO SCALE

ATTACHMENT I

PAVEMENT SELECTION COMMITTEE FORM

District 1 Pavement Selection Committee Review Form

Date: September 30, 2011

Project: Hoopa Safety Project

EA/Contract: 01-49370K

Program: 201.010 Safety

Co-Rte-PM: HUM-096-11.0/13.2

Pavement Objectives: Shoulder Widening (Open Graded)

-CONCURS WITH DISTRICT 1 PAVEMENT GUIDELINES (No further action is needed)

-RECOMMENDATION BY PAVEMENT SELECTION COMMITTEE REQUIRED (Complete remainder of form)

Surface Course:

(Please Circle One)

- Dense Graded Hot Mix Asphalt, Open Graded Friction Course, Rubberized Open Graded Friction Course, Bonded Wearing Course, Polymer Chip Seal, Rubberized Chip Seal, Slurry Seal, or Other: _____
- Aggregate Grading: N/A, 3/8", 1/2", 3/4", 1", or Other: _____
- Reason for Selection of Surface Course: Existing surface is OGFC. Using HMA (Open Graded) material for the shoulder widening will allow the water to drain off the road and not puddle at the joint.

Underlying Layers:

(Please Circle One)

- N/A, Conventional Hot Mix Asphalt, Rubberized Hot Mix Asphalt, or Other: _____
- Aggregate Grading: N/A, 3/8", 1/2", 3/4", or Other: _____

EXPLANATION FOR DEVIATION FROM DISTRICT 1 PAVEMENT GUIDELINES:

District 1 PSC Members: (Initial if Present)

	Present
Royal McCarthy (Maint. Engin.)-----	_____
Ralph Martinelli (Traffic Safety)-----	_____
Friday Ululani (Materials/Construction)-	_____
Ilene Poindexter (Advanced Planning)---	_____
Lena Ashley (Design)-----	_____
Stan Woodman (Field Maintenance)-----	_____
Project Manager:_____	_____
Project Engineer:_____	_____
Guest:_____	_____

District 1 Pavement Selection Committee Chairpersons:

Friday Ululani
District 1 Materials Engineer

Royal McCarthy
District 1 Maintenance Engineer

Routing: _____

_____ Design Eng. _____ Spec. Writer _____ Const. Eng
 ___ Royal McCarthy ___ Ralph Martinelli ___ Friday Ululani ___ Ilene Poindexter
 ___ Lena Ashley ___ Stan Woodman
 Others: _____

ATTACHMENT J

TRANSPORTATION MANAGEMENT PLAN (TMP)

TRANSPORTATION MANAGEMENT PLAN

To: VALENCY LANGTRY
Project Engineer
Advance Planning

Date: 01 August 2011
File: HUM-96 PM 11.0/13.2
EA: 01-49370K
EFIS: 0100000478
Hoopa Safety

From: TROY ARSENEAU, Chief 
District 1 Office of Traffic Operations

Project Information

Location: In Humboldt County near Hoopa, from Loop Rd to 0.1 miles west of Hostler Creek Bridge #4-294.

Type of Work: Widen shoulders, install Light Guard Crosswalk, install radar feedback signs, install crosswalk lighting, restripe traffic stripes, replace pavement markers, possible culvert extension/alteration, bridge widening.

Anticipated Traffic Control: One-way reversible traffic control.
Moving lane closure.
Intermittent closure.
Shoulder closure.
Sidewalk closure.

Estimated Maximum Delay: 15 minutes.

Peak Hour Traffic Volumes: 250 vph.

Lane Requirement Charts : Included.

Work During Night Hours: Prohibited

Number of Working Days: TBD.

Draft PSR Date: August/2011

RTL Date: August/2014

District Traffic Manager/ TMP
Manager: Troy Arseneau (707) 445-6377

TMP Coordinator: Marie Brady (707) 445-6689

Anticipated Traffic Impacts

Significant traffic impacts are not anticipated provided that the following recommendations and requirements are incorporated into the project. In

conformance with Deputy Directive-60, District Lane Closure Review Committee approval is not required for projects with anticipated traffic delay less than 30 minutes.

Recommendation

A request for an updated Transportation Management Plan shall be made during the design phase.

Hours of Work

- See Chart No. 1 “Conventional Highway Lane Requirements” for work hour restrictions.
- The full width of the traveled way shall be open for use by public traffic for the following Special Days:

Event	Event Date	Special Days
Sovereign Days	Second Weekend in August	Friday through Sunday And August 15th

The contractor shall verify the actual dates for this Special Event. See Chart No. 2 “Lane Closure Restrictions for Designated Legal Holidays and Special Days” for work day restrictions.

Public Notice

- Upon receipt of notice that the roadway width, including paved shoulder, for a direction of travel will be narrowed to less than 16 ft, the Resident Engineer shall promptly notify the HQ Construction Liaison Jay Horton at (916) 322-4957.
- The District Public Information Office, (707) 445-6444, shall be contacted two weeks in advance of the start of construction.
- Any emergency service agency whose ability to respond to incidents will be affected by any lane closure must be notified prior to that closure.
- Impacts to reservation land during the construction phase shall be coordinated with the affected local tribal government and other entities during the design phase. Contact Kathleen Sartorius, District 1 Native American Liaison, (707) 441-5815.

- Work shall be coordinated with the local busing system (including school buses and public systems) to minimize impact on their bus schedules.
- The Resident Engineer shall provide information to residents and businesses before and during project work that may represent a negative impact on commerce and travel surrounding the zone of construction. Funding shall be included in supplemental funds for public information.
- Consider incorporating supplemental funds into the cost estimate for this project for an open house public meeting prior to the construction phase.
- Include in a memo to the Resident Engineer that at least 5 days in advance of excavation work in the vicinity of possible Caltrans facilities, that Maintenance-Electrical Supervisor (825-0590) shall be contacted to locate existing Caltrans underground electrical facilities.

Traffic Control

- One closure is permitted within the project limits.
- The W11-1 vehicular traffic sign (bicycle symbol) and the W16-1 supplemental plaque (SHARE THE ROAD) shall be placed, in each direction of travel, prior to the construction zone.
- One-way traffic control shall be in conformance with the Caltrans Standard Plan T-13, “TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS.”
 - A minimum of 11 ft of paved roadway shall be open for use by public traffic.
 - The maximum length of one-way traffic control closure is 2000 ft.
- Work that occurs within 6 ft of the edge of traveled way, on a conventional highway, shall require a shoulder closure in conformance with “Figure 6H-3. Work on Shoulders (TA-3)” in the January 21, 2011 CA MUTCD for Streets and Highways (Pg. 6H-11/12).
- Work that requires a moving lane closure shall be in conformance with the Caltrans Standard Plan T-17, “TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURES ON TWO LANE HIGHWAYS.”
- During culvert placement, when one-way control is in effect, the road may be closed and public traffic stopped for periods not to exceed 5 min. After each

closure, all accumulated traffic shall be allowed to pass through the work before another closure is made.

- A minimum of one PCMS in advance of both ends of the construction site shall be required to notify the public of the closures related to this project.
- Access to businesses, side roads and residences shall be maintained at all times. When work or traffic queues extend through an intersection, additional traffic control will be required at the intersection.
- During reversing traffic control, bicyclists shall be instructed to join the vehicle queue.
- Crosswalks shall be maintained through the work zone until the tack coat has been placed. Barricades or caution tape shall be placed along work area to keep pedestrians from crossing the highway where the tack coat has been placed.
- Pedestrian detours shall be required when sidewalks are not available for public travel and shall be in conformance with “Figure 6H-28. Sidewalk Detour or Diversion (TA-28)” in the January 21, 2011 CA MUTCD for Streets and Highways (Pg. 6H-68/69).
- Pedestrian detours shall be required when sidewalks and/or crosswalks are not available for public travel and shall be in conformance with “Figure 6H-29. Crosswalk Closures and Pedestrian Detour (TA-29)” in the January 21, 2011 CA MUTCD for Streets and Highways (Pg. 6H-70/71).
- If persons with disabilities (e.g. hearing, visual, or mobility) are found to use this facility, the temporary traffic control measures mentioned in the January 21, 2011 CA MUTCD Chapter 6D shall be incorporated to accommodate disabled pedestrians through the work zone.
- COZEEP is not recommended for this project. According to the CA DOT Construction Manual Section 2-215A (9), lane closures on two-lane highways/daytime closures on multilane highways do not require COZEEP.

Signal System Requirements

- A temporary traffic-actuated signal system may be used to provide one-way control during construction, provided the signal controller location can be such

that the distance between the detector loops and the signal controller is 1000 feet or less.

- The temporary signal system shall provide an adequate parking location for a signal-maintenance vehicle. This pull-off location will allow proper access of the signal controller and the generator.
- During the use of a temporary signal system, 12-inch flashing beacons shall be installed on the three advance construction signs (W20-1, W20-4, and W3-3) shown in “Figure 6H-12 (CA). Lane Closure on Two-Lane Road Using Traffic Control Signals (TA-12)” in the September 26, 2006 CA MUTCD for Streets and Highways (Pg. 6H-33 and 6H-35). Also, include either the W1-4L warning sign or the W1-4R warning sign to guide the traveling public back into their lane.
- In the event work is suspended or the Contractor will not be actively working for over a 4 week duration, the Temporary Signal System shall be turned off and overhead signal heads removed.
- The time of day of the initial turn-on shall be prior to 1:00 p.m. The Initial turn-on shall not be allowed to take place on Thursdays, Fridays, Saturdays, Sundays, designated legal holidays and within 48 hours preceding designated legal holidays.
- Each signal system shall be thoroughly and satisfactorily tested by the contractor prior to scheduling turn-on. Upon successful completion of the preliminary functional field test Traffic Electrical (445-6338 or 445-6339) and Electrical Maintenance (825-0590) shall be contacted 5 days in advance of each of the anticipated traffic signal turn-on.
- Traffic signal system all red flash operations shall be limited to periods allowed for lane closures listed or specified in “Maintaining Traffic” of this project’s special provisions.
- Electrical Maintenance (825-0590) shall be contacted 15 days in advance of picking up State-furnished Traffic Signal Controller Assemblies, and 5 days in advance of the preliminary functional field-test of the signal.
- Electrical Maintenance shall be contacted 5 days in advance if any signal loop detectors will be damaged by construction activities, if signals will be put on all red flash operation or shut down. Signal Operations shall be notified if any temporary signal timing adjustments are needed. Any loop detectors that are damaged by the Contractor’s operations shall be replaced within 24 hours.

Contingency Plan

The contractor shall prepare a contingency plan for reopening closures to public traffic. The Contractor shall submit the contingency plan for a given operation to the Engineer within one working day of the Engineer's request. Contingencies for unanticipated delays, emergencies, etc. shall be coordinated between the RE and the Contractor.

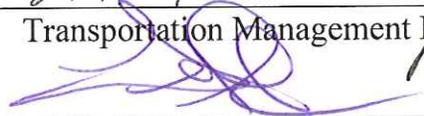
Approval

Approved by:



Transportation Management Plan Coordinator

Approved by:



District Traffic/ TMP Manager

TAA/pwh

- CC: 1)TAArseneau, 2)JCandalot
1)RMMartinelli, 2) JZimmerer, 3)File
BTFinck
IPoindexter
RMullen
JMcGee
AJones

Chart No. 1 Conventional Highway Lane Requirements																									
County: HUM							Route/Direction: 96 EB/WB							PM: 11.0/13.2											
Closure Limits:																									
FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays									1	1	1	1	1	1	1	1	1	1	1						
Fridays									1	1	1	1	1	1	1										
Saturdays																									
Sundays																									
Legend:																									
<input type="checkbox"/> R Provide at least one 11 ft through traffic lane for use by both directions of travel (Reversing Control).																									
<input type="checkbox"/> No lane/shoulder closures allowed.																									
REMARKS: The full width of the traveled way shall be open for use by public traffic when construction operations are not actively in progress.																									

Chart 2: Lane Closure Restrictions for Designated Legal Holidays and Special Days										
Thu	Fri	Sat	Sun	Mon	Tues	Wed	Thu	Fri	Sat	Sun
xx	H xx									
	SD xx									
	xx	H xx								
		SD xx								
	xx		H xx	xx						
			SD xx							
	xx			H xx						
				SD xx						
				xx	H xx					
					xx	H xx				
						xx	H xx	xx		
							SD xx			
Legends:										
	Refer to lane closure charts									
xx	Except during stage construction/the use of a temp. signal system, The full width of the traveled way shall be open for use by public traffic.									
H	Designated Legal Holiday									
SD	Special Day									

ATTACHMENT K

TRAFFIC SAFETY ANALYSIS MEMORANDUM

Memorandum

*Flex your power!
Be energy efficient!*

To: Valency Langtry, Project Engineer
District 1 Advance Planning

Date: October 11, 2011

File: 01-HUM-96
PM11.05/13.2
01-49370K
Hoopa Safety Project



From: Matt Smith
District 1, Traffic Safety Office

Subject: Collision Analysis Request

District 1 Traffic Safety Office received a request for a collision analysis for a 2.2 mile segment of State Route 96 as established above. A review of the collision history was completed for the 5-year time period of 10/01/2002 thru 9/30/2007. The collision analysis dates reflects the data used to originally initiate the project.

Upon a cursory review, District 1 Traffic Safety offers the following comments:

- This segment of highway has experienced 26 collisions, which resulted in one fatal, 15 injury, and 10 property damage only (PDO) type of collisions. The “Actual” collision rates “F+I” (Fatal plus Injury) and “Tot” (Total) for this segment of highway are approximately 1.72 and 1.43 times the statewide average for similar facilities, respectively.
- The primary traffic patterns are as follows: twenty-seven percent of collisions are attributed to Improper Turn, twenty-seven percent are Speeding, and twenty-three percent are Failure to Yield. Eleven percent are a result of Run-Off-Road collisions and sixty-nine percent are coded as proceeding straight. Overall, eighty percent involved collisions with other vehicles.
- Four percent (1 of 26) of collisions involved a pedestrian. The pedestrian collision resulted in a fatality at PM 12.72. No collisions involved bicycles. Eighty percent of the collisions occurred during dry conditions and Eighty percent of the collisions occurred during daylight hours. There are no collisions, pedestrian related or otherwise, associated with the bridge between postmiles 12.26 to 12.38.

Collision Data Summary (10/1/2002-9/30/2007)					
Total	Fatal	Injury	PDO	Wet	Dark
26	1	15	10	5	6

PDO= Property Damage Only

Collision Rates* (10/1/2002-9/30/2007)					
Actual			State Average		
Fatal	F+I	Total	Fatal	F+I	Total
0.096	1.53	2.50	0.044	0.89	1.75

* Rates expressed as per million vehicle miles. Rates adjusted for those collisions occurring on the highway system only

If you have any questions or need additional information please contact me at 707-445-6443.

cc: File

ATTACHMENT L

STORM WATER DATA REPORT



Dist-County-Route: 01-HUM-096
 Post Mile Limits: 11.0/13.2
 Project Type: Shoulder Widening/Light Guard Crosswalk
 Project ID (or EA): 01-49370K
 Program Identification: 201.010 Safety
 Phase: PID
 PA/ED
 PS&E

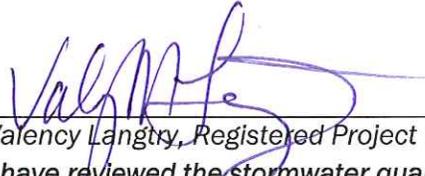
Regional Water Quality Control Board(s): NC-RWOCB

- | | | |
|---|------------------------------|--|
| 1. Is the project required to consider incorporating Treatment BMPs? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 2. Does the project disturb 5 or more acres of soil? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 3. Does the project disturb more than 1 acre of soil and not qualify for the Rainfall Erosivity Waiver? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 4. Does the project potentially create permanent water quality impacts? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 5. Does the project require a notification of ADL reuse | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |

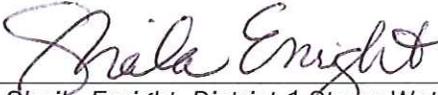
If the answer to any of the preceding questions is "Yes", prepare a Long Form – Storm Water Data Report.

Estimate Construction Start Date: _____ Construction Completion Date: _____
 Separate Dewatering Permit (if yes, permit number) Yes Permit # _____ No
 Erosivity Waiver Yes Date: _____ No

This Short Form – Storm Water Data Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.



 Valency Langtry, Registered Project Engineer
 I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:
 Date 9/21/2011



 Sheila Enright, District 1 Storm Water Coordinator
 Date 9/21/2011

1. Project Description

- The Hoopa Safety Project is located in Humboldt County on Route 96, from 0.6 miles west of the Supply Creek Bridge (01-0136) to 0.3 miles west of the Hostler Creek Bridge (04-0138). The project proposes to widen shoulders to 4 feet, install radar feedback signs, install Light Guard crosswalk, upgrade metal beam guard railing and install lighting.
- The total disturbed soil area (DSA) for the project is approximately 1.7 acres, which includes all cut/fill slopes, and highway and drainage construction areas. The shoulder widening work results in 0.9 acres of new impervious area. Per consultation with Wes Faubel on August 24, 2011, the increased impervious area is spread over two miles and the drainage flows into existing vegetated ditches. The cumulative impact will be negligible.
- The project lies within the Lower Trinity River watershed. The project area drains into channels confluent to the Trinity River. The distance to the Trinity River from the project is less than 0.1 miles. Some of the hydrologic attributes of the Trinity River watershed are shown below:

Hydrologic Unit: Trinity River

Hydrologic Area: Lower Trinity River

Hydrologic Sub-Area: Hoopa

Watershed Area: 151,710 acres

Average Annual Rainfall: 59 inches

303 (d) Listed Water Bodies/Pollutants of Concern: The Trinity River is 303(d) listed and has TMDL's for Sedimentation/Siltation. The USEPA is developing a Sedimentation/Siltation TMDL for the Lower Trinity River.

- The project is located in the Hoopa Indian Reservation and falls under the jurisdiction of the Hoopa Valley Tribal Environmental Protection Agency (TEPA) and the United States Environmental Protection Agency (USEPA). Soil disturbance activities must comply with requirements of the Hoopa Valley Indian Reservation Water Quality Control Plan prepared by the TEPA. In addition, the project will be regulated under the Department's Statewide Storm Water Management Plan.

2. Construction Site BMPs

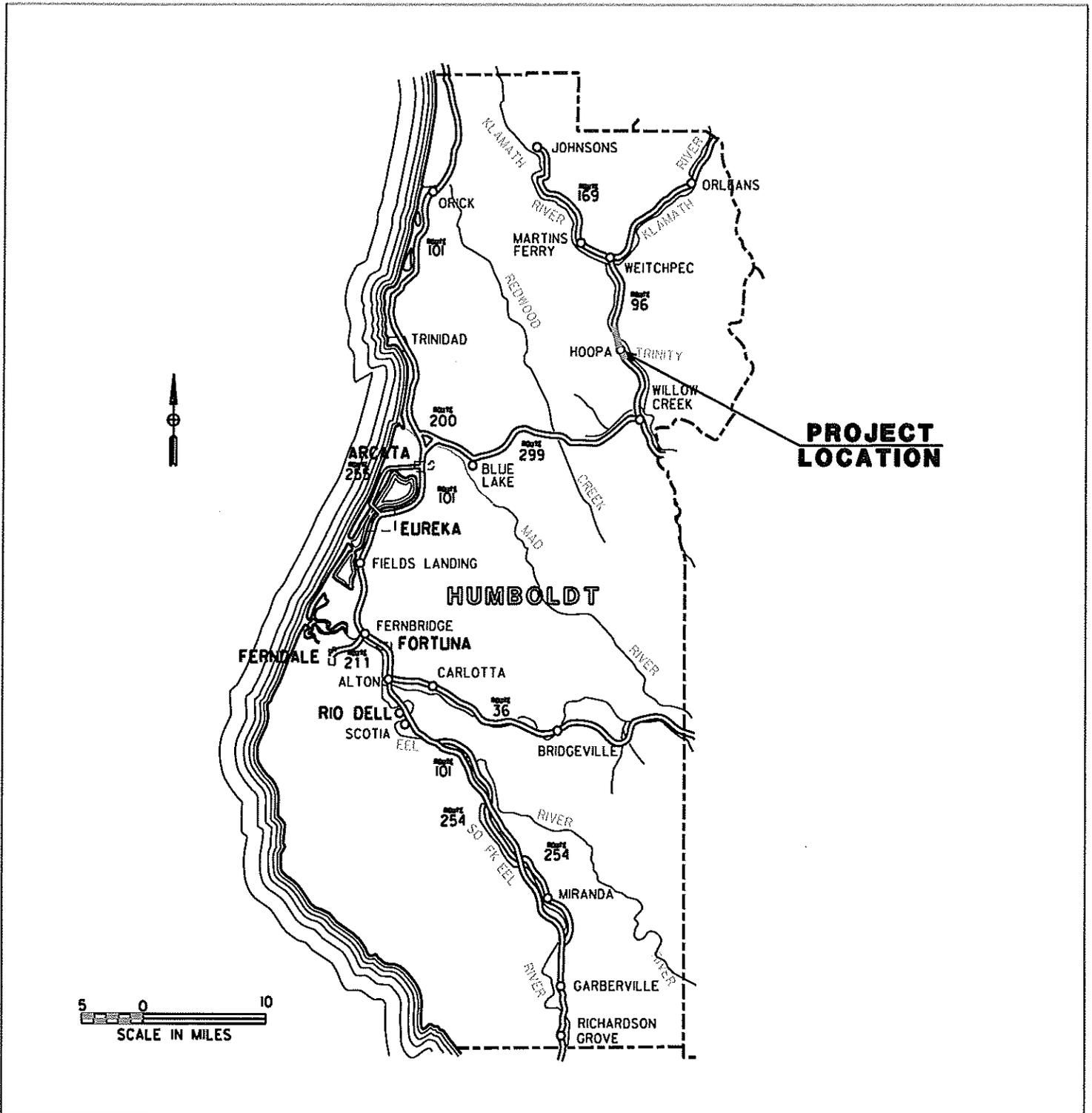
- This is a Risk Level 2 project determined by GIS mapping method.
- Potential construction site best management practices (BMPs) applicable to this project include: Prepare SWPPP, Construction Site Management, Temporary Concrete Washout (Portable), Temporary Mulch, Temporary Fiber Rolls, Temporary Check Dams, Temporary Silt Fence, REAP, Stormwater Annual Report, and Stormwater Sampling and Analysis Day. The project SWPPP will be prepared and approved by the United States EPA and the Hoopa Tribe.
- The attached Construction Site BMP Consideration Form documents construction concurrence in accordance with North Region Directives.

3. Required Attachments

- Vicinity Map
- Evaluation Documentation Form



- Construction Site BMP Consideration Form
- Risk Level Determination



LOCATION MAP

01-HUM-96-PM 11.0/13.2

Evaluation Documentation Form

DATE: July 19, 2011

Project ID (or EA): 01-49370K

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EVALUATION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs. Go to 2
2.	Is this an emergency project?		✓	If Yes, go to 10. If No, continue to 3.
3.	Have TMDLs or other Pollution Control Requirements been established for surface waters within the project limits? Information provided in the water quality assessment or equivalent document.	✓		If Yes, contact the District/Regional NPDES Coordinator to discuss the Department's obligations under the TMDL (if Applicable) or Pollution Control Requirements, go to 9 or 4. <u>SEE</u> (Dist./Reg. SW Coordinator initials) If No, continue to 4.
4.	Is the project located within an area of a local MS4 Permittee?		✓	If Yes. (<u>write the MS4 Area here</u>), go to 5. If No, document in SWDR go to 5.
5.	Is the project directly or indirectly discharging to surface waters?	✓		If Yes, continue to 6. If No, go to 10.
6.	Is it a new facility or major reconstruction?		✓	If Yes, continue to 8. If No, go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?	✓		If Yes, continue to 8. If No, go to 10.
8.	Does the project result in a net increase of one acre or more of new impervious surface?		✓	If Yes, continue to 9. If No, go to 10. <u>0.9</u> (Net Increase New Impervious Surface)
9.	Project is required to consider approved Treatment BMPs.			See Sections 2.4 and either Section 5.5 or 6.5 for BMP Evaluation and Selection Process. Complete Checklist T-1 in this Appendix E.
10.	Project is not required to consider Treatment BMPs. <u>SEE</u> (Dist./Reg. Design SW Coord. Initials) <u>JML</u> (Project Engineer Initials) <u>9/21/11</u> (Date)	✓		Document for Project Files by completing this form, and attaching it to the SWDR.

1 See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs



Construction Site BMP Consideration Form

DATE: 09/12/11

Project ID (or EA): 01-49370K

Project Evaluation Process for the Consideration of Construction Site BMPs

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION
1.	Will construction of the project result in areas of disturbed soil as defined by the Project Planning and Design Guide (PPDG)?	✓		If Yes, Construction Site BMPs for Soil Stabilization (SS) will be required. Complete CS-1, Part 1. Continue to 2. If No, Continue to 3.
2.	Is there a potential for disturbed soil areas within the project to discharge to storm drain inlets, drainage ditches, areas outside the right-of-way, etc?	✓		If Yes, Construction Site BMPs for Sediment Control (SC) will be required. Complete CS-1, Part 2. Continue to 3.
3.	Is there a potential for sediment or construction related materials and wastes to be tracked offsite and deposited on private or public paved roads by construction vehicles and equipment?	✓		If Yes, Construction Site BMPs for Tracking Control (TC) will be required. Complete CS-1, Part 3. Continue to 4.
4.	Is there a potential for wind to transport soil and dust offsite during the period of construction?	✓		If Yes, Construction Site BMPs for Wind Erosion Control (WE) will be required. Complete CS-1, Part 4. Continue to 5.
5.	Is dewatering anticipated or will construction activities occur within or adjacent to a live channel or stream?	✓		If Yes, Construction Site BMPs for Non-Storm Water Management (NS) will be required. Complete CS-1, Part 5. Continue to 6.
6.	Will construction include saw-cutting, grinding, drilling, concrete or mortar mixing, hydro-demolition, blasting, sandblasting, painting, paving, or other activities that produce residues?	✓		If Yes, Construction Site BMPs for Non-Storm Water Management (NS) will be required. Complete CS-1, Parts 5 & 6. Continue to 7.
7.	Are stockpiles of soil, construction related materials, and/or wastes anticipated?	✓		If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Complete CS-1, Part 6. Continue to 8.
8.	Is there a potential for construction related materials and wastes to have direct contact with precipitation; stormwater run-on, or stormwater runoff; be dispersed by wind; be dumped and/or spilled into storm drain systems?	✓		If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Complete CS-1, Part 6. Continue to 9.
9.	End of checklist.	✓		Document for Project Files by completing this form, and attaching it to the SWDR.

PE to initialize after concurrence with Construction (PS&E only)

Date



Risk Determination Worksheet

- Step 1** Determine Sediment Risk via one of the options listed:
1. GIS Map Method - EPA Rainfall Erosivity Calculator & GIS map
2. Individual Method - EPA Rainfall Erosivity Calculator & Individual Data
- Step 2** Determine Receiving Water Risk via one of the options listed:
1. GIS map of Sediment Sensitive Watersheds provided (in development)
2. List of Sediment Sensitive Watersheds provided
- Step 3** Determine Combined Risk Level

EA: 01-49370K
01-HUM-96-PM 11.0 - 13.2
Hoopa Safety

Lat 41.074
Long 123.687

Const Start 5/1/2013 Assumed Contract Approval plus 30 days.
CCA Date 8/1/2013
Project
Combined
Risk 2

Sediment Risk Factor Worksheet		Entry
A) R Factor		
<p>Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.</p> <p>http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm</p>		
R Factor Value		10.05
B) K Factor (weighted average, by area, for all site soils)		
<p>The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.</p> <p>Site-specific K factor guidance</p>		
K Factor Value		0.15
C) LS Factor (weighted average, by area, for all slopes)		
<p>The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.</p> <p>LS Table</p>		
LS Factor Value		3.6
Watershed Erosion Estimate (=R _x K _x LS) in tons/acre		5.427
Site Sediment Risk Factor Low Sediment Risk: < 15 tons/acre Medium Sediment Risk: >=15 and <75 tons/acre High Sediment Risk: >= 75 tons/acre		Low

Combined Risk Level Matrix

		<u>Sediment Risk</u>		
		Low	Medium	High
<u>Receiving Water Risk</u>	Low	Level 1	Level 2	
	High	Level 2		Level 3

Project Sediment Risk: **Low**

Project RW Risk: **High**

Project Combined Risk: **Level 2**

ATTACHMENT M

LANDSCAPE ASSESSMENT SHEET



**NORTH REGION
LANDSCAPE ARCHITECTURE ASSESSMENT SHEET**
03-LAND-0002 (Rev. 3/03)

TO: Valency Langtry, Project Engineer FROM: Laura Lazzarotto, Landscape Architecture Unit/Senior TE Name: Adv. Planning, Ilene Poindexter Project Manager: Richard Mullen	CO: HUM DISTRICT: 01 DATE: Sept. 21, 2011 EA: 01-40730K 49370K	RTE: 96	PM: 11.0/13.0
PROJECT SEPARATION: <input checked="" type="checkbox"/> Landscape as part of roadway work EA <input type="checkbox"/> Landscape under separate EA (Follow-up)	PROJECT: Hoopa Safety Shoulder Widening TYPE: SHOPP PROJECT MILESTONE: PID		

PROJECT DESCRIPTION: This project proposes to construct a safety improvement project along Route 96 in Humboldt County. The work will consist of installing a Light Guard Crosswalk (PM 12.54), radar feedback signs (PM 12.44 and 12.66), lighting for two crosswalks, restriping, and rumble strips. Work will also consist of shoulder widening where necessary to obtain a minimum 4-foot paved shoulder.

AREA (FT2) FOR HIGHWAY PLANTING: N/A
AREA (FT2) FOR EROSION CONTROL: 92,300 SQFT

LANDSCAPE FREEWAY STATUS: Yes No
HIGHWAY PLANTING IS: Warranted Not Warranted
SCENIC HIGHWAY STATUS: Officially Designated Eligible
 Big Foot Scenic Byway

REVEGETATION REQUIRED: Permit Required Offset of Visual Impact
BIOLOGIST CONTACT: not assigned
DATE OF CONTACT:

ADJACENCY TO BILLBOARDS:
 Project area is adjacent to outdoor advertising. Project area is not adjacent to outdoor advertising.

IS THERE (E) IRRIGATION THAT WILL BE IMPACTED BY THIS PROJECT: Yes No

CONTEXT SENSITIVITY:
 It is determined that the project will involve consideration of highway aesthetics: Face of proposed retaining wall to match existing wall at corner of Boatyard Drive.
 No foreseen issues with highway aesthetics. Other

COOPERATIVE MAINTENANCE AGREEMENTS:

Project may involve additional tasks indicated	<input type="checkbox"/> Visual Simulation <input type="checkbox"/> Highway Planting <input type="checkbox"/> Contour Grading	<input checked="" type="checkbox"/> Erosion Control <input checked="" type="checkbox"/> Field Visit <input checked="" type="checkbox"/> Cost Estimate	<input checked="" type="checkbox"/> SWPPP/NPDES <input type="checkbox"/> Context Sensitive Solutions/Aesthetics <input type="checkbox"/> Landscape Evaluation
--	---	---	---

COST INFORMATION: <input type="checkbox"/> Highway Planting <input type="checkbox"/> Irrigation System, temporary or drip <input type="checkbox"/> Revegetation commitments w/ Plant Establishment <input checked="" type="checkbox"/> Erosion Control <input type="checkbox"/> Slope Protection <input type="checkbox"/> Aesthetic Treatment:	\$ 32,000.00
---	--------------

PREPARED BY: Laura Lazzarotto **DATE:** 9/21/11 **CONCURRED BY:** Richard Mullen **DATE:** 9/26/11
 (Project Manager)
APPROVED BY: [Signature] **DATE:** 9/21/11
 (Landscape Architecture or Engineering Services Branch Chief)
Richard Mullen

ATTACHMENT N

PROGRAMMING SHEET

PROGRAMMING SHEET - 2011/2012

EA: 01-49370
 Proj Name: Hoopa Safety

Project Manager: Richard Mullen
 Co-Rte-PM: HUM-096- 011.0/ 013.2

Date: 11/09/2011
 Type: SHOPP

PROJECT SCHEDULE

MILESTONE		DATE (STATUS)
Begin Environmental Document	M020	03/01/2012 (T)
Begin Project Report	M040	01/01/2012 (T)
Circulate Environmental Document (DED)	M120	09/01/2013 (T)
Project Approval & Environmental Document (PA&ED)	M200	11/01/2013 (T)
District Submits Bridge Site Data to Structures	M221	
Right of Way Maps	M224	02/01/2014 (T)
Regular Right of Way	M225	04/01/2014 (T)
District Plans, Specifications & Estimates to DOE	M377	05/01/2014 (T)
Draft Structures Plans, Specifications & Estimates	M378	
District Plans, Specifications & Estimates (PS&E)	M380	07/01/2014 (T)
Right of Way Certification	M410	08/01/2014 (T)
Ready to List (RTL)	M460	09/01/2014 (T)
Headquarters Advertise (HQ AD)	M480	11/01/2014 (T)
Approve Construction Contract	M500	02/01/2015 (T)
Contract Acceptance (CCA)	M600	03/01/2016 (T)
End Project	M800	05/01/2017 (T)

ESTIMATE	DATE	AMOUNT
ROADWAY	10/24/11	\$ 1119
BRIDGE		\$ 0
Subtotal Const		\$ 1119
RIGHT OF WAY	08/18/11	\$ 151
MITIGATION		\$ 0
Subtotal RW		\$ 151
GRAND TOTAL		\$ 1270

EXISTING PROGRAMMING	
PAED	\$
PS&E	\$
RW - Sup	\$
RW - Cap	\$
Const - Sup	\$
Const - Cap	\$

*Does not apply to RW Capital + Not Escalated ++ Only Escalated to 1 year into Future

PROJECT COSTS BY SB45 CATEGORY

CAPITAL COST ESTIMATE (Escalation Factor)	Prior Yrs+	11/12+	12/13 (3.5%)	13/14 (3.5%)	14/15 (3.5%)	15/16 (3.5%)	Future++ (3.5%)	Total	
Right of Way				134	17			\$ 151	
Construction					1240			\$ 1,241	
CAPITAL COSTS TOTAL								\$ 1,392	
SUPPORT COSTS (Escalation Factor)			(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)		Sup/Cap
PAED		59	123	89				\$ 271	19.46%
PS&E				379	87			\$ 466	33.51%
Right of Way				18	13	12	10	\$ 53	3.82%
Construction					91	186	9	\$ 287	20.61%
SUPPORT COSTS TOTAL								\$ 1,077	77.40%
TOTAL PROJECT COSTS								\$ 2,469	

PROJECT SUPPORT IN PYS

	Prior Yrs	11/12	12/13	13/14	14/15	15/16	Future	Total	PY %
Environmental	0.00	0.06	0.16	0.46	0.01	0.02	0.00	0.71	8.80%
Design	0.00	0.14	0.29	1.22	0.06	0.05	0.01	1.77	21.93%
Engineering Services	0.00	0.05	0.13	0.57	0.21	0.25	0.00	1.21	14.99%
Surveys	0.00	0.01	0.02	0.14	0.03	0.05	0.01	0.26	3.22%
Right of Way	0.00	0.02	0.04	0.25	0.10	0.08	0.06	0.55	6.82%
Traffic	0.00	0.04	0.08	0.46	0.06	0.11	0.00	0.75	9.29%
Construction	0.00	0.00	0.01	0.09	0.35	0.61	0.00	1.06	13.14%
Project Management	0.00	0.08	0.12	0.17	0.07	0.05	0.04	0.53	6.57%
District Units*	0.00	0.07	0.19	0.51	0.05	0.07	0.01	0.90	11.15%
Subtotal Dist/Region Resources	0.00	0.47	1.04	3.87	0.94	1.29	0.13	7.74	95.91%
59-DES Project Development	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.62%
59-DES Structures Foundation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-Office Engineer	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.28	3.47%
59-DES Project Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-DES Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-DES Other Units**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
Subtotal DES Resources	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.33	4.09%
TOTAL PYS	0.00	0.47	1.04	3.87	1.27	1.29	0.13	8.07	

*Admin, Plng, Maintenance

**DES Admin, DES Plng, DES Maintenance

HRS/PYS = 1758

Comments: