

**PID COST ESTIMATE CERTIFICATION (CERT) FORM (V.1—December 31, 2007)**

DIST-UNIT-CO-RTE-PM	04-0696-SM-280-PM 9.1/10.5	1) Initial: <u>LDT</u> Date: <u>9-15-11</u> DDD of Transportation Planning and Local Assistance, Maintenance, or Operations  2) Initial: <u>JL</u> Date: <u>9/15/11</u> DDD of Design
DIST-EA	04-2A970K (PROJECT ID: 0412000161)	
PROJECT DESCRIPTION	CULVERT REHABILITATION (REFRESHER) ✓	
PROGRAM TYPE	<u>201.151</u>	
PROGRAM FISCAL YEAR	SHOPP FY14/15	
ESCALATED PROGRAM COST	\$11.90M (MID CONST YEAR 01/2016)	
NUMBER OF WORKING DAYS	TBD	

PROJECT ROLE	PRINTED NAME	SIGNATURE
Project Engineer (QC)	HOA DANG	<i>Hoang Dang</i>
Design Senior (QA)	ROBERT BLANCO	<i>Robert Blanco</i>
Project Manager <i>for</i>	MUHAMMAD SULEIMAN	<i>Muhammad Suleiman</i>
Design Office Chief (QA)	PATRICK K. PANG	<i>Patrick K. Pang</i>
Design Division Chief (QA) (South, North, East Region)	SKIP SOKOW <i>GARY PURSELL</i>	<i>Gary Pursell</i>

DATE	WBS	PROJECT DELIVERABLE	COST ESTIMATE
9/16/2011	150	PID (Current)	\$10.04M (current year)
<i>9/2005</i>	<i>150</i>	<i>PID (PAST)</i>	<i>7.55M (2005)</i>

		Briefly provide details below.
Quality Control	<b>Assumptions</b> How did assumptions about location (e.g., terrain, distance to construction site, etc.), relative availability of materials, weather conditions, etc. influence the cost estimate? What other elements influenced the estimate?	It is assumed that all materials and labor would be locally available. As the project is located in City of Belmont, San Mateo County, frequent unsettled weather condition is always expected to delay construction. To offset weather delays by doubling shifts and/or working weekends, the project could still be accomplished on time
	<b>Source of Unit Prices</b> What factors were considered to determine unit prices of major items? Provide EAs of projects considered, unit prices and quantities used. Add specialty items and costs as appropriate. Provide TRO cost.	The cost estimate was escalated 4% per annum from approved PSSR dated 11/23/2005. All items from original cost estimate are Lump Sum. Therefore, 4% escalation is used for this project
	<b>Traffic Management Plan Data Sheet (day v. night)</b> Summarize information on the data sheet (e.g., number of signs, public outreach component, night work, etc.).	The Office of Traffic Management provided a TMP cost estimate of \$75,000 in 2005 and was escalated to \$100,000 in current year. This includes press releases to inform the public of upcoming closures or detours. Various TMP elements such as portable CMS and COZEEP will be utilized to minimize delay to the traveling public.
	<b>Risk Management Plan</b> Identify major risks relating to the development and management of the project and mitigation measures.	Risk Management Plan indicates underground utilities verifications, utility relocation is considered low risk. Caltrans Water Quality permit will be reducing the threshold significantly and could impact cost and schedule. <i>NO MATERIALS RECOMMEND</i>
	<b>Escalation Factors Used</b> Justify if escalation rate is less than 5%. Provide mid-year of Construction and escalation rate.	The programming year for this project is FY14/15. Costs shown on PSSR are in current year dollars. A 4% escalation rate was used from 09/2011 to 01/2016 (mid-construction year). The District program advisor committee recommended the 4% escalation rate.
	<b>Contingencies</b> Justify if less than 25%.	A 25% contingency was applied for this project
	<b>DES Structures , Estimate and Quantities</b> From APS provide a name of a preparer of calculations, estimate assumptions (type of structure, cost per square foot), date calculated, name of checker, and date checked.	N/A
Quality Assurance	<b>Constructability Review</b> What is the assumed construction method and what risks are associated with that method? Indicate when reviews occurred and major findings.	Constructability review occurred on 09/22/2005. The scope of work has not changed and Constructability Review has not been requested.
	<b>Value Analysis Required? Yes/No</b> List target date.	No (<\$25M)
	<b>DES Structural Liaison Review</b> List date, conclusions of Review, and name of reviewer.	N/A
Status	<b>Independent Estimate Performed? Yes/No</b> List target date.	It will be requested prior to 90% PS&E circulation (with Specs)
	<b>Next cost estimate update (provide month and year)</b> Annual cost update is required.	September 2012

## Memorandum

*Flex your power!  
Be energy efficient!*

**To:** STANLEY NG  
Program Advisor

**Date:** September 09, 2011  
**File:** 04-SM-280-PM 9.1/10.5  
201.151  
Project ID 0412000161  
(EA 04-2A970K)  
Culvert Rehabilitation

**From:** MOHAMMAD SULEIMAN  
Project Manager

**Subject:** Project Initiation Document (PID) Refresher

### Background

The Project Scope Summary Report (PSSR) for the above-referenced project was approved on November 23, 2005 and has been “refreshed” for cost for programming in the 2012 SHOPP.

### Project Scope

This project proposes to rehabilitate the existing drainage culverts on Route 280 in San Mateo County, in City of Belmont. The culverts are located longitudinally along the southbound median shoulder and northbound right shoulder.

### Preliminary Project Cost Estimate

- Current project cost estimate is \$10.04 M
- RTL cost in November 2014 is \$11.36M
- Mid-year construction cost in January 2016 is \$11.90M.
- District 04 recommended escalation rate of 4% was used for all escalation computations, with 25% contingency.

### Attachments:

- (1) Updated Project Schedule
- (2) Updated Preliminary Project Cost Estimate
- (3) Updated Right of Way Data Sheet
- (4) Updated Categorical Exemption/Exclusion Form
- (5) Risk Management Plan
- (6) Approved PSSR

Section 13 Project Schedule

Refreshed PID	09/16/2011
PA&ED	07/01/2013
PS&E	07/01/2014
R/W CERT	07/01/2014
RTL	11/01/2014
ADV	12/01/2014
BEGIN CONSTRUCTION	04/01/2015
COMPLETE CONSTRUCTION	10/01/2016

Section 8 Cost Estimate Breakdown

	<b>Original Estimate (11/2005)</b>	<b>Refresher Estimate * (09/2011)</b>	
<u>Structure Work:</u>	0	0	
<u>District Work</u>			
Earthwork (include clearing & grubbing)	386,038	486,910	
Pavement (include remove and replace)	395,757	499,168	
Drainage (include excavation)	2,391,339	3,016,196	
Temporary Shoring	820,060	1,034,342	
Erosion Control Measures	50,000	100,000	**
Water Pollution Control	50,000	150,000	**
Treatment BMP's	100,000	150,000	**
Hazardous Waste Mitigation	100,000	126,130	
Environmental Mitigation	100,000	126,130	
Resident Engineer Office	50,000	63,065	
Lead Compliance Plan	10,000	12,613	
Storm Water Diversion	50,000	63,065	
Temporary ESA Fence	28,496	35,942	
Progress Schedule	10,000	12,613	
Traffic Control System	50,000	63,065	
Traffic Management Plan	75,000	94,598	
Temporary Railing	156,728	197,681	
Construction Area Signs	6,000	7,568	
Cash Cushion Module	5,600	7,063	
Maintain Traffic	20,000	25,226	
Traffic Delineation Items	10,000	12,613	
<b>Subtotal</b>	<b>4,865,018</b>	<b>6,283,987</b>	
Minor Item (10%)	486,502	628,399	
Mobilization (10%) - (Subtotal + Minor Item)	486,502	691,239	
Supplemental Work (10%) – (Subtotal + Minor Item)	486,502	691,239	
Contingency (25%) – (Subtotal + Minor Item)	1,216,255	1,728,096	
Right of Way	10,000	10,000	
<b>Total</b>	<b>7,550,778</b>	<b>10,032,960</b>	
<b>Total - Round-up</b>		<b>10,040,000</b>	

\* Total escalation of 26.13% for approximately 5.92 years  
(4% per year)

\*\* Updated Costs from Functional Unit

T0: Office of Advance Planning – PSR II

Date 9/9/2011  
Dist 4 Co SM Rte 280  
PM R9.1/R10.5

Attention: Robert Blanco  
Branch Chief

Project ID: NO EFIS# (EA 2A970K)

From: ENID LAU  
Right of Way Resource Manager

Culvert Rehabilitation

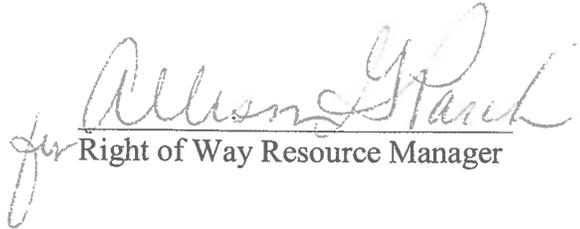
D.S. #5993  
Updated

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 maps we received from you on August 29, 2011 and the following assumptions and limiting conditions.

- 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.
- 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.
- 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.
- 4. This estimate does not include \$ \_\_\_\_\_ right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.
- 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 6 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 4 months prior to the date of certification of the project. 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.

  
for Allison Stark  
Right of Way Resource Manager

Attachments:

- Right of Way Data Sheet – Page One (always required)
- Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
- Utility Information Sheet
- Railroad Information Sheet

**RIGHT OF WAY DATA SHEET**

TO: Office of Advance Planning Date 9/8/11 D.S. # 5993  
 PSR II

Dist 04 Co SM Rte 280 KP 9.1/10.5

ATTN: Robert Blanco EA 2A970K (04 )

Project Description: Rehabilitate Hydraulic Culvert

SUBJECT: Right of Way Data – Alternate No. \_\_\_\_\_

1. Right of Way Cost Estimate:

	Current Value (Future Use)	Escalation Rate	Escalated Value
A. Acquisition, including Excess Lands, Damages, and Goodwill.	\$ <u>0.00</u>	%	\$ <u>0.00</u>
Project Permit Fees			\$ <u>0.00</u>
B. Utility Relocation (State Share)	\$ <u>10,000.00</u>	%	\$ <u>10,000.00</u>
C. Relocation Assistance	\$ <u>0.00</u>	%	\$ <u>0.00</u>
D. Clearance/Demolition	\$ <u>0.00</u>	%	\$ <u>0.00</u>
E. Title and Escrow Fees	\$ <u>0.00</u>	%	\$ <u>0.00</u>
F. <u>TOTAL ESCALATED VALUE</u>			\$ <u>10,000.00</u>
G. Construction Contract Work	\$ <u>0.00</u>		

2. Anticipated Date of Right of Way Certification 9/20/14

3. Parcel Data:

Type	Dual/Appr	Utilities	RR Involvements
X _____		U4-1 _____	None _____ X
A _____		-2 _____	C&M Agrmt _____
B _____		-3 _____	Svc Contract _____
C _____		-4 _____	Design _____
D _____		U5-7 <u>5</u>	Const. _____
E <u>XXXX</u>		-8 _____	Lic/RE/Clauses _____
F <u>XXXX</u>		-9 _____	
			Misc R/W Work
			RAP Displ _____ 0
			Clear Demo _____ 0
			Const. Permits _____ 0
			Condemnation _____ 0
Total <u>0</u>			

Areas: Right of Way \_\_\_\_\_ No. Excess Parcels \_\_\_\_\_ Excess \_\_\_\_\_

Enter PMCS Screens 9 / 8 / 11 by [Signature]

Enter AGRE Screen (Railroad data only) \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ by \_\_\_\_\_

4. Are there any major items of construction contract work?  
Yes  No  (If yes, explain)
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. Is there an effect on assessed valuation?  
Yes  Not Significant  No  (If yes, explain)
7. Are utility facilities or rights of way affected? Yes  No   
(If yes, attach Utility Information Sheet Exhibit 01-01-05)
8. Are railroad facilities or rights of way affected? Yes  No   
(If yes, attach Railroad Information Sheet Exhibit 01-01-06)
9. Were any previously unidentified sites with hazardous waste and/or material found?  
Yes  None evident  (If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)
10. Are RAP displacements required? Yes  No   
(If yes, provide the following information)
- |                      |       |                            |       |
|----------------------|-------|----------------------------|-------|
| No. of single family | _____ | No. of business/non profit | _____ |
| No. of multi-family  | _____ | No. of farms               | _____ |
- Based on Draft/Final Relocation Impact Statement/Study dated \_\_\_\_\_, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.
11. Are there material borrow and/or disposal sites required? Yes  No   
(If yes, explain)
12. Are there potential relinquishments and/or abandonments? Yes  No   
(If yes, explain)
13. Are there any existing and/or potential Airspace sites? Yes  No   
(If yes, explain)

14. 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.)

PYPSCAN lead time (from Regular R/W to project certification) 6 months

15. Is it anticipated that all Right of Way work be performed by CALTRANS staff?  
Yes  No  (If no, discuss)

### Assumptions and Limiting Conditions

1. This data sheet was completed without a hazardous waste/materials report.
2. Information on this data sheet is based on information provided by Robert Blanco in a memo dated August 25, 2011.

Evaluation Prepared By: Renata Frey

Right of Way: Name Renata Frey Date 9/8/11

Railroad: Name Pat G. J. Date 9-8-11

Utilities: Name John. Patton Date 9/8/11

for: Suresh Dharmani

Recommended for Approval:

for Allison G. Pauch  
Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion 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 find this Data Sheet complete and current.

[Signature]  
Chief, R/W Appraisal Services

Date 9/8/11

cc: Program Manager  
Project Manager

**UTILITY INFORMATION SHEET**

1. Utility Owners located within project limits:

PG&E – Gas & Electric  
SBC  
County of San Mateo

2. Facilities potentially impacted by project (if known, include Owner(s) and facility type(s)):

3. Anticipated Workload:

Utility Verification required  
 Positive Identification  
 Utility Relocation  
 Other (Specify)

4. Additional information concerning anticipated utility involvements (include limiting conditions and a narrative addressing likelihood that conflicts will occur);

\_\_\_\_\_ Involves possible relocation of electric transmission facilities  
(If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1 \_\_\_\_\_ Owner Expense Involvements

U4-2 \_\_\_\_\_ State Expense Involvements  
(Conventional, No Fed Aid)

U4-3 \_\_\_\_\_ State Expense Involvements  
(Freeway, No Fed Aid)

U4-4 \_\_\_\_\_ State Expense Involvements  
(Conventional or Freeway, No Fed Aid)

U5-7 5 Verifications-without involvements

U5-8 \_\_\_\_\_ Verifications-50% involvements

U5-9 \_\_\_\_\_ Verifications resulting in involvements

NOTE: The sum of the U-4's must equal the sum of 1/2 of the U5-8's and all of the U5-9's.

**ESTIMATED STATE SHARE OF COSTS \$10,000.00**

Prepared by: Suresh Dharmani

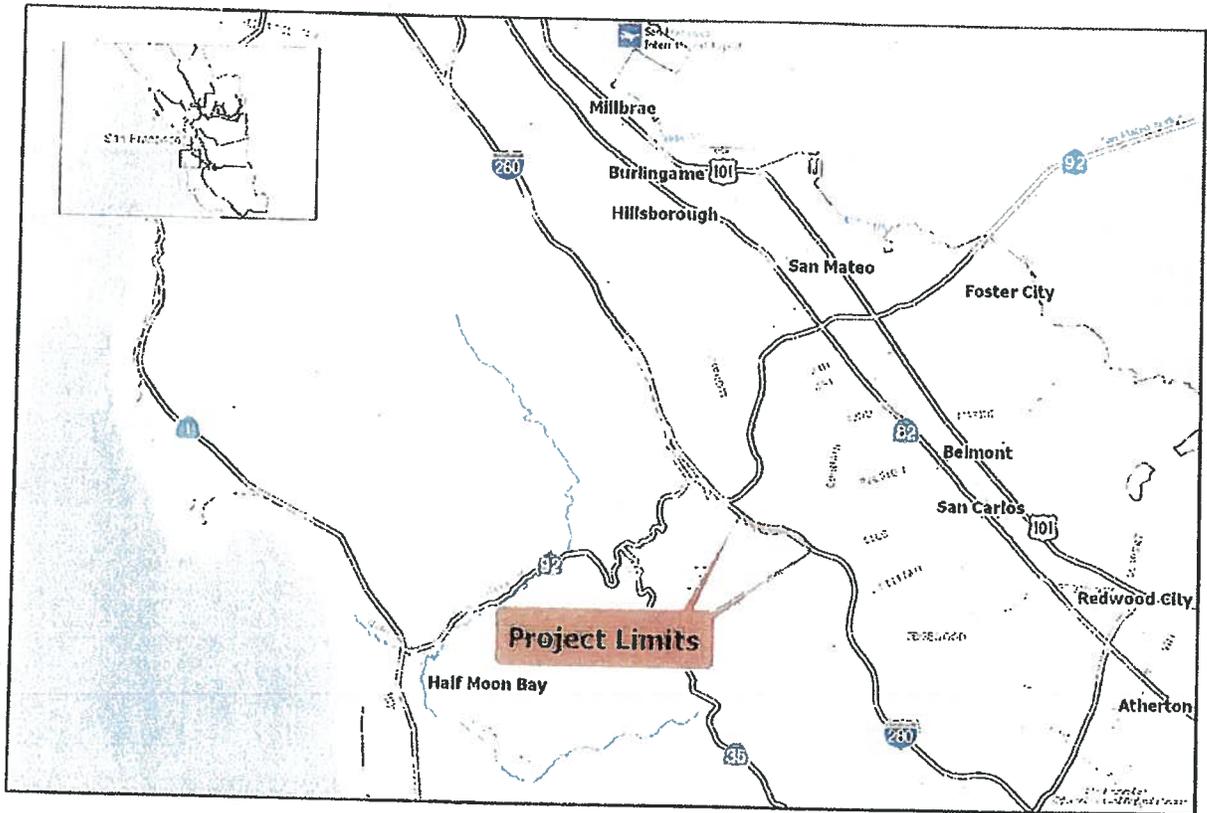
by: Right of Way Utility  
Coordinator

Date 9/8/11

**RISK MANAGEMENT PLAN**  
 Project ID: 0412000161 (EA-24970K)  
 SM-280-FW 9.1/10.5  
**CULVERT REHABILITATION**

		Identification						Qualitative Analysis				Response Strategy			Monitoring and Control		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(16)	(17)	(18)	(19)	(20)	(21)
Status	ID #	Date Identified	Project Phase	Functional Assignment	Threat/Opportunity Event	SMART Column	Risk Trigger	Type	Probability	Impact	Risk Matrix	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
Dormant	1	PID	Program/Project Management	Project not programmed	Funding resources are unavailable due to budget constraints	Resources to deliver project may not be available due to competing priorities	Schedule	Low	High		Acceptance	Elevate issue to management for resolution		Project Manager Program advisor			
Dormant	2	PID	Right of Way	Existing underground utilities relocation(s) and new utilities installation(s) may be required.	Subject to underground utilities verifications, utility relocation(s) may be required.	Utilities verifications indicate need for utility relocation(s).	Cost	Low	Moderate		Acceptance	Determine needs early, factor in costs/impacts		R/W Manager Project Engineer			
Dormant	3	PID	Environmental Engineering wetlands and Waterways	Best Practice Management was not used during the construction	Measures were not taken to prevent sediments and construction generated water or slurries from flowing into creek	Area of potential affect area not studied	Schedule	High	High		Mitigation	Determine need for mitigation early, factor in increased costs/impacts.		Environmental Manager			
Dormant	4	PID	Transportation and Traffic	TMP was not used	A detailed TMP would be developed to maintain efficient and safe movement of vehicles through the construction zone by providing advance notice to residents, motorists, and the media, to achieve public acceptance of the project and traffic relocation.	Lane closure and rerouting traffic increase traffic accident rate	Cost	High	Low		Mitigation	Determine need for mitigation early, factor in increased costs/impacts.		Traffic engineer			
Dormant	5	PID					Cost	Low	Low								
							Schedule										

# PROJECT SCOPE SUMMARY REPORT (Culvert Rehabilitation)



On Route: 280 in San Mateo County

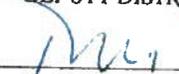
From: 2.3 Miles north of Edgewood Road

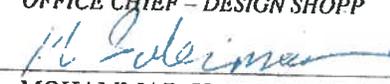
To: 0.4 Mile south of Route 92

*I have reviewed the right of way information contained in this Project Scope Summary Report and the RW Data Sheet attached hereto, and find the data to be complete, current, and accurate.*

  
 \_\_\_\_\_  
 R. A. MACPHERSON  
 DEPUTY DISTRICT DIRECTOR - RIGHT OF WAY

APPROVAL RECOMMENDED:

  
 \_\_\_\_\_  
 PATRICK K. PANG  
 OFFICE CHIEF - DESIGN SHOPP

  
 \_\_\_\_\_  
 MOHAMMAD SULEIMAN  
 PROJECT MANAGER

APPROVED:

  
 \_\_\_\_\_  
 BIJAN SARTIPI  
 DISTRICT DIRECTOR

11-23-05  
 \_\_\_\_\_  
 DATE

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



Tin Shwe  
REGISTERED CIVIL ENGINEER

9/30/05

DATE



**1. Project Limits:**

This project is located on Route 280 near the City of Belmont, in San Mateo County, from 2.3 Miles north of Edgewood Road to 0.4 Mile south of Route 92 Interchange, PM R9.1/R10.5.

**2. Brief Project Description:**

This project proposes to rehabilitate the existing drainage culverts located longitudinally along the southbound median shoulder of Highway 280 between Edgewood Road and Route 92 near the City of Belmont. The scope of work is to replace and remediate the existing corroding culverts along southbound median shoulder, and the placement of underdrain system within the same limits at southbound median shoulder and northbound right shoulder as well as replacement of some cross drains.

The culverts size varies from 33 to 54 inches in diameter. The rehabilitation strategy will involve the complete replacement of portions of the existing culverts; while the other portions remedy will include the lining of the existing culverts in place ( see attachment B for limits of replacement and lining). The lining process involves placing plastic lining inside the existing culverts, and then the annular space between the inside diameter of the plastic liner and outside diameter of the existing culvert will be grouted.

The underdrain system including the 8 inches plastic perforated pipe and down drains will be placed within the above mentioned limits at the toe of the slope for northbound and southbound at a minimum depth of 5 ft.

Proposed culverts size, length, method of rehabilitation is shown as follow:

Item #	Current Pipe Size (in)	Length (ft)	# of DI	Current Pipe Material	New/Liner/Replace Pipe	Remark
1	33	512	2	APC	Replace	Replace Longitudinal Culvert including DI
2	36	480	2	APC & CMP	Liner	Line Longitudinal Culvert with 30" Dia PP Liner
3	39	838	4	CMP	Liner	Line Longitudinal Culvert with 32" Dia PP Liner
4	42	1960	9	RCP & CMP	Liner	Line Longitudinal Culvert with 32" Dia PP Liner
5	45	968	3	CMP	Replace	Replace Longitudinal Culvert including DI
6	48	1734	7	CMP	Replace	Replace Longitudinal Culvert including DI
7	54	574	3	CMP	Replace	Replace Longitudinal Culvert including DI



Other	1	
Total	114	
Wet Accidents	25	(23%)
Dark Accidents	33	(30%)

**SAFETY REVIEW**

The vehicles entering and leaving the median area during construction would interrupt the traffic on southbound Route 280. Temporary K-rails will be required to protect construction personnel.

**5. Roadway Geometric Information:**

The section of Route 280 at the project location is a ten lanes divided interstate highway running five lanes in each direction. This portion of Route 280 is in an un-incorporated rural portion of the county and is bordered by undeveloped land. The posted speed limit is 65 mph. Eight feet left shoulder on the northbound direction is a nonstandard shoulder. Correction of the existing nonstandard shoulder is not in the scope of this project.

Facility	Minimum Curve Radius	Through Traffic Lanes			Paved Shoulder Width		Median Width	Median Barrier
		No. of Lanes	Lane Width	Type (AC, PCC, or AC over PCC)	Left	Right		Yes or No
Exist SB KP 14.6/16.8		5	12 ft	AC	13 ft	10 ft	60 ft & Var	No
Exist NB KP 14.6/16.8		5	12 ft	AC	8 ft	10 ft	60 ft & Var	Yes
Min. 3R Stds.			12 ft		10 ft	10 ft	36 ft	

**6. Structures Information:**

Rancho Pulgas Undercrossing is located within the project limit and the existing 42 inches diameter welded steel pipe culvert is installed inside the deck of the bridge. The existing culvert will be lined with the plastic pipe liner. There are no structures work involved on this project.



(E)	Erosion Control Measures	<u>Yes</u>	<u>\$50,000</u>
(F)	Water Pollution Control	<u>Yes</u>	<u>\$50,000</u>
(G)	Treatment BMPs	<u>Yes</u>	<u>\$100,000</u>
(H)	Hazardous Waste Mitigation	<u>Yes</u>	<u>\$100,000</u>
(I)	Environmental Mitigation	<u>Yes</u>	<u>\$100,000</u>
(J)	Resident Engineer Office	<u>Yes</u>	<u>\$50,000</u>
(K)	Lead Compliance Plan	<u>Yes</u>	<u>\$10,000</u>
(L)	Storm Water Diversion	<u>Yes</u>	<u>\$50,000</u>
(M)	Temporary ESA Fence	<u>Yes</u>	<u>\$28,496</u>
(N)	Progress Schedule	<u>Yes</u>	<u>\$10,000</u>
(O)	Traffic Control System	<u>Yes</u>	<u>\$50,000</u>
(P)	Transportation Management Plan	<u>Yes</u>	<u>\$75,000</u>
(Q)	Temporary Railing	<u>Yes</u>	<u>\$156,728</u>
(R)	Construction Area Signs	<u>Yes</u>	<u>\$6,000</u>
(S)	Crash Cushion Module	<u>Yes</u>	<u>\$5,600</u>
(T)	Maintain Traffic	<u>Yes</u>	<u>\$20,000</u>
(U)	Traffic Delineation Items	<u>Yes</u>	<u>\$10,000</u>
(V)	Signs	<u>No</u>	<u>\$</u>
(W)	Railroad Agreements	<u>No</u>	<u>\$</u>
(X)	Minor Items (10%)	<u>Yes</u>	<u>\$486,500</u>
(Y)	Mobilization (10%)	<u>Yes</u>	<u>\$486,500</u>
(Z)	Supplemental Work (10%)	<u>Yes</u>	<u>\$486,500</u>
(AA)	Contingency (25%)	<u>Yes</u>	<u>\$1,216,000</u>
	<b>DISTRICT COSTS SUBTOTAL</b>		<b><u>\$ 7,540,778</u></b>
	<b>FOR BUDGET PURPOSES SAY</b>		<b><u>\$7,541,000</u></b>
	<b>RIGHT OF WAY COSTS</b>		<b><u>\$10,000</u></b>
	<b>TOTAL PROJECT COST</b>		<b><u>\$ 7,551,000</u></b>

9. Other Agencies Involved:

None

10. **Other Considerations:**

**Hazardous waste disposal site required? If yes, where are sites?**

A soil contamination investigation has been completed in the subject area vicinity under the project development process for a different project. The topsoil up to 2.5 ft deep is known to have elevated level of lead and naturally occurring asbestos; therefore, it is recommended that the top 2.5 ft be removed and stockpiled separately within the State right of way. Then excavate to the required depth for the trench, and once the rehabilitation and replacement of damaged culvert is completed, backfill the trench with the soil excavated from greater depths and place the stockpiled contaminated soil back as the topsoil. There will be one foot minimum layer of clean soil on top of contaminated soil is required. This will eliminate potential of contaminated soil being exposed to the groundwater and preserve the existing soil condition.

**Water Quality**

The drainage improvements for this project will not impact Crystal Springs. The storm water from these culverts discharge into San Mateo Creek via a series of detention basin located approximately one mile north on the west side of Route 280.

**Right of Way**

A Right of Way Data Sheet has been prepared based on the scope of work described and on maps provided by the Design. Estimated cost information is contained in the Right of Way Data Sheet, Attachment E of this report. All proposed work will occur within existing right of way, there is no additional right of way required for this project.

**Railroad** – There is no railroad involvement on this project.

**Utilities** – Verification and potholing of utilities will be required. Utility owners located within the project limits are PG&E, Gas & Electric, SBC and the County of San Mateo.

**Consistency with Other Planning**

This project is consistent with State and Local Agencies plans to maintain the integrity of the highway system and other facilities. There is an on-going project (SM 280 EA 04-270831) Replace Median Barrier in close proximity. RTL for this project is in June 06 and end construction is in December 08.

**Salvaging and recycling of hardware and other non-renewable resources**

There will be no salvaging and recycling of hardware within this project.

**Prolonged temporary ramp closures**

None

**Effects on bicycle traffic**

None

**Transportation Management Plan**

A Transportation Management Plan (TMP) will be required for this project. The Transportation Management Plan is a special program that will be implemented during construction to minimize and prevent delay and inconvenience to the traveling public. The proposed construction and improvements may include roadwork, that require lane closures or detouring.

The TMP for the project will be developed and refined during the PS&E and final design phases, supported by detailed traffic studies to evaluate traffic operations. The need for necessary lane closures during off-peak hours or at night, or short-term detour routes will be identified, as required. The TMP will include press releases to notify and inform motorists, business, community groups, local entities, emergency services, and politicians of upcoming closures or detours. Various TMP elements such as portable Changeable Message Signs and CHP Construction Zone Enhanced Enforcement Program (COZEEP) may be utilized to alleviate and minimize delay to the traveling public.

**Recycling of AC**

None

**Construction Strategy**

Replacing and lining existing culverts will require excavation and shoring along the southbound median shoulder. In order to minimize cut into the median slope, the five south bound lane widths will be temporarily reduced; reducing the lane width temporarily from 12 ft to 11 ft will provide extra 5 ft additional working area. Excavating and shoring the median slope will provide sufficient room for materials storage and equipment during the construction. Excavators, cranes and backhoes will be used for construction. Temporary K-rails will place along the edge of travel way to protect construction personnel. Major work such as excavation and hauling will be done at night. Temporary lane closure of lane No. 1 at night will be required for truck parking outside temporary K-rail (at lane No. 1) for loading.

## **Erosion Control/Water Pollution Control**

Proposed work shall conform with the National Pollutant Discharge Elimination System (NPDES) requirements. The Caltrans Storm Water Quality Handbook – Project Planning and Design Guide (PPDG) will be used to determine the need for Best Management Practices (BMPs) to be considered for incorporation into proposed project. BMPs selection should include consideration for Sediment Control, Tracking Control, Wind Erosion Control, Non-Storm Water Management and Waste Management.

All graded and disturbed soil areas and stage construction areas, will be provided with permanent and temporary erosion control and water pollution control plans, specifications, and estimate, in accordance with design and construction BMPs, as referenced in the Caltrans Storm Water Quality Handbooks—PPDG. Erosion control and water pollution control items will be specified for all disturbed soil areas and applicable drainage facilities, as required to meet water quality discharge requirements under the project Storm Water Pollution Prevention Plan.

Erosion and Water Pollution Control BMPs shall be used to address soil stabilization and reduce the deposition of sediments into adjacent water bodies and storm drain systems. Typical measures include the application of soil stabilizers such as hydroseeding, the placement of mulch over disturbed areas and the installation of fiber rolls. During construction, typical temporary measures include the installation of stabilized construction entrances, providing concrete washout facilities, installation of silt fencing and drain inlet protection may be utilized.

### **Air, Noise and Energy Issues:**

Not applicable.

### **What are the consequences of not doing this entire project?**

The consequences of not doing this entire project are continued deterioration of the drainage facilities due to ground water seepage and thus pavement failure. The result of pavement failure will increase maintenance and major rehabilitation cost in the future. Constant maintenance work and pavement repair will expose maintenance personnel to the traffic along the median shoulder. In addition, constant work at the median will require frequent closure of lane No. 1, thus impacting the freeway traffic. Culverts on the same “run” have already failed, creating sinkholes along the median. These have already been repaired by two emergency contracts.

### **11A. The project has been field reviewed by:**

District Project Development Team 09/07/2005  
See Attachment “F” for the Scoping Team Field Review Attendance List.

**11B. Project Reviewed by:**

SHOPP 151 Program Advisor Stanley Ng Date 09/20/05  
 District Safety Katie Yim Date 08/30/05  
 District Maintenance Stanley Ng Date 09/20/05  
 HQ DD Rebecca Mowry Date 09/21/05  
 FHWA Exempt (N/A) Date (N/A)

**11C. Constructability Reviewed by:**

Office of Construction Sam Kim Date 09/01/05  
 District Constructability Seyed Noorbakhsh Date 09/22/05

**12. Proposed Funding (IM, NH, etc.):**

This project is proposed for the 2006 SHOPP under the SHOPP 151 Program for \$7,551,000 for 07/08 FY.

**13. Project Schedule:**

PA/ED 11/05  
 PS&E 11/07  
 R/W CERT 12/07  
 RTL 2/08  
 ADV 4/08  
 Begin Construction 8/08  
 Complete Construction 11/09

**14. Project Support:**

Proposed Program FY	District PY'S			Engineering Service Center PY'S					FY Total PY'S	Other Costs (\$)
				Structures		METS and Others		Office		
	Design	R/W	Constr	Design	Constr	Design	Constr	Engr		
06/07	.54	.02	0						.56	
07/08	.50	.05	0						.55	
08/09	.01	.05	.34						.40	
09/10		.02	.12						.14	
TOTAL ESTIMATED PROJECT PY'S AND OTHER SUPPORT COSTS:									1.65	\$

Note: The above resource estimate is based on PYPSCAN. It will be updated after the project is programmed and a detailed workplan is established.

**15. List of Attachments**

- A. Location Map
- B. Layout Plan
- C. Typical Sections
- D. Categorical Exemption/Exclusion Form
- E. Right of Way Data Sheet
- F. Scoping Team Field Review Attendance List
- G. Storm Water Data Report
- H. Transportation Management Plan Data Sheet

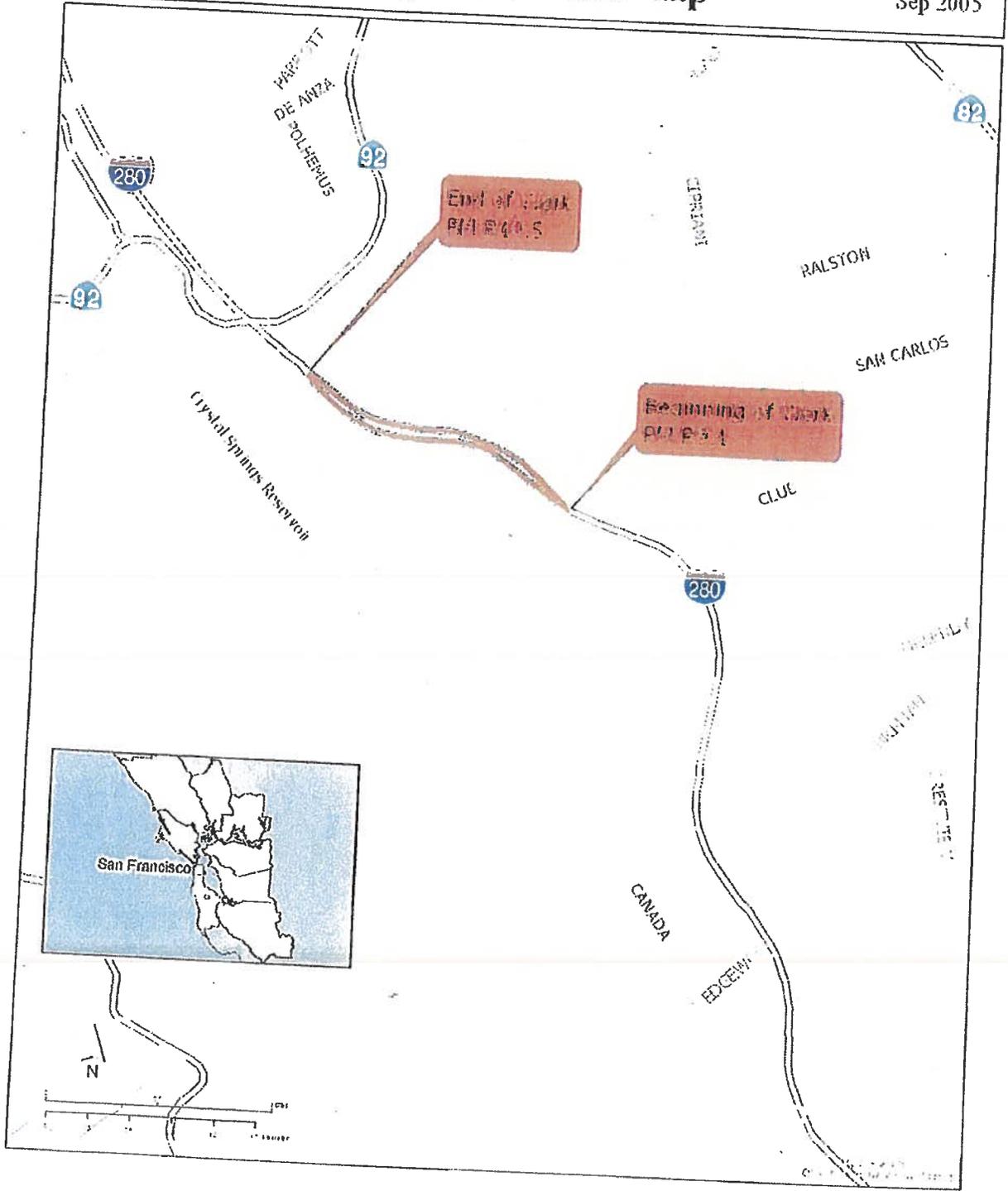
# ATTACHMENT "A"

## LOCATION MAP



# Project Location Map

Sep 2005

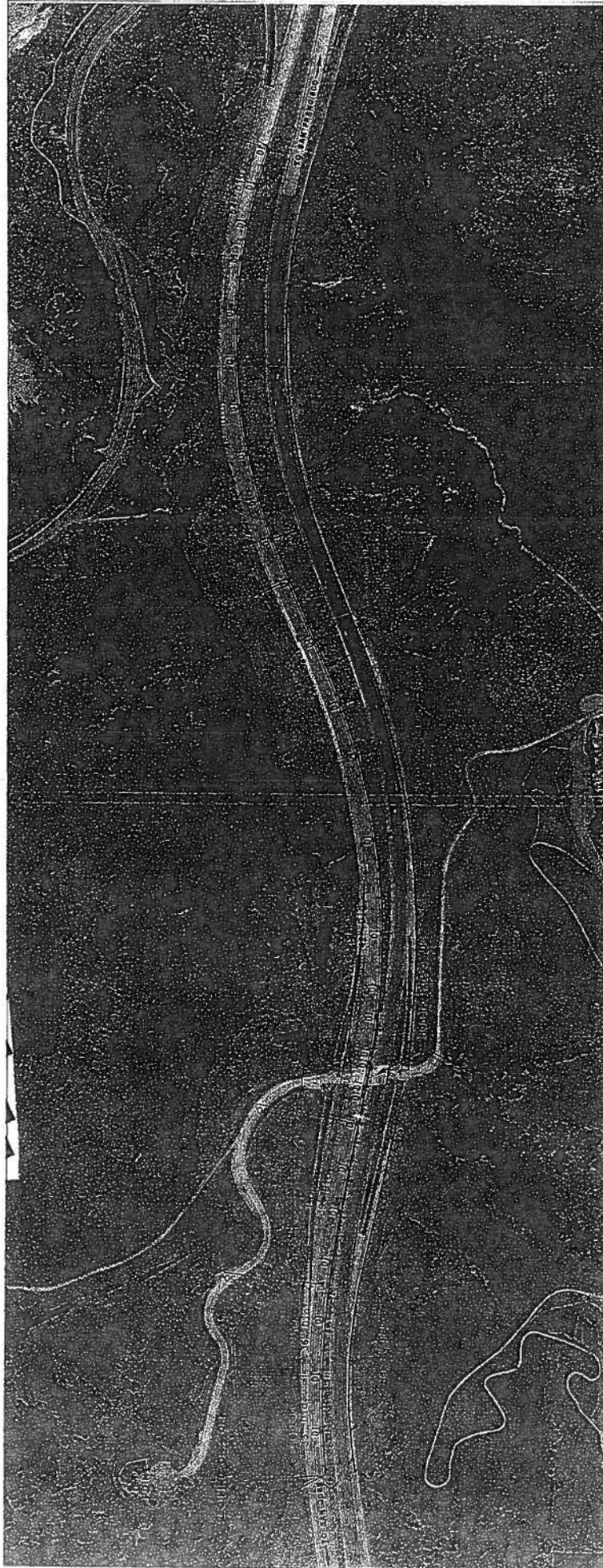


ATTACHMENT "B"  
LAYOUT PLAN

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LAYOUT PLAN

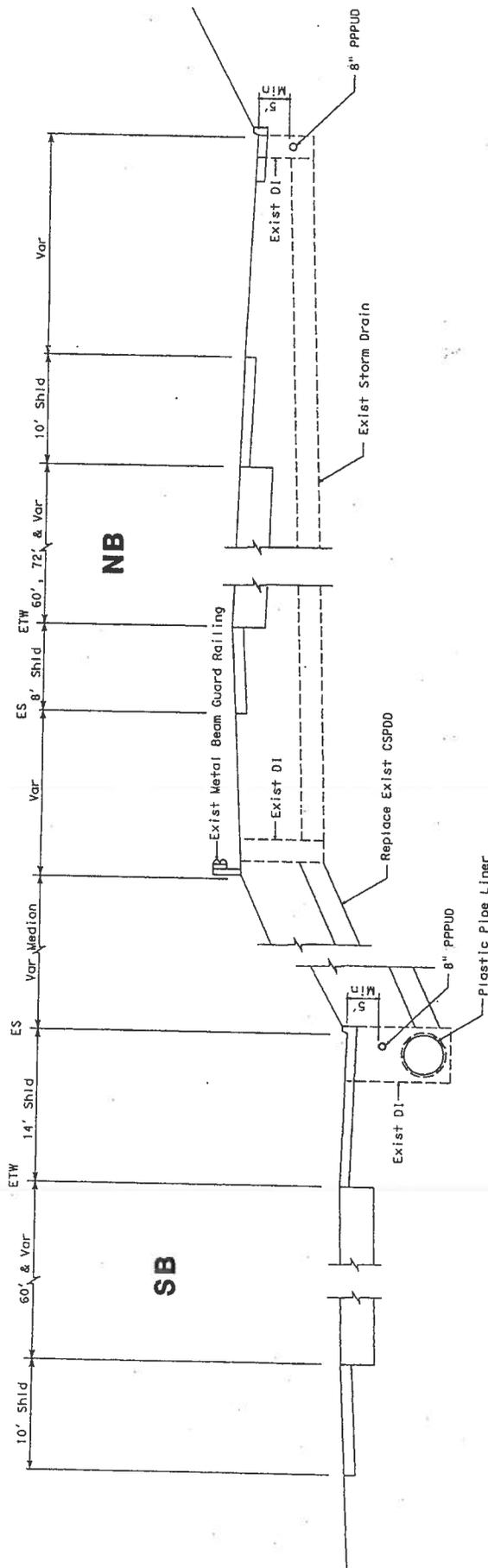
NO SCALE

EA 2A870K

ATTACHMENT "C"  
TYPICAL CROSS-SECTIONS

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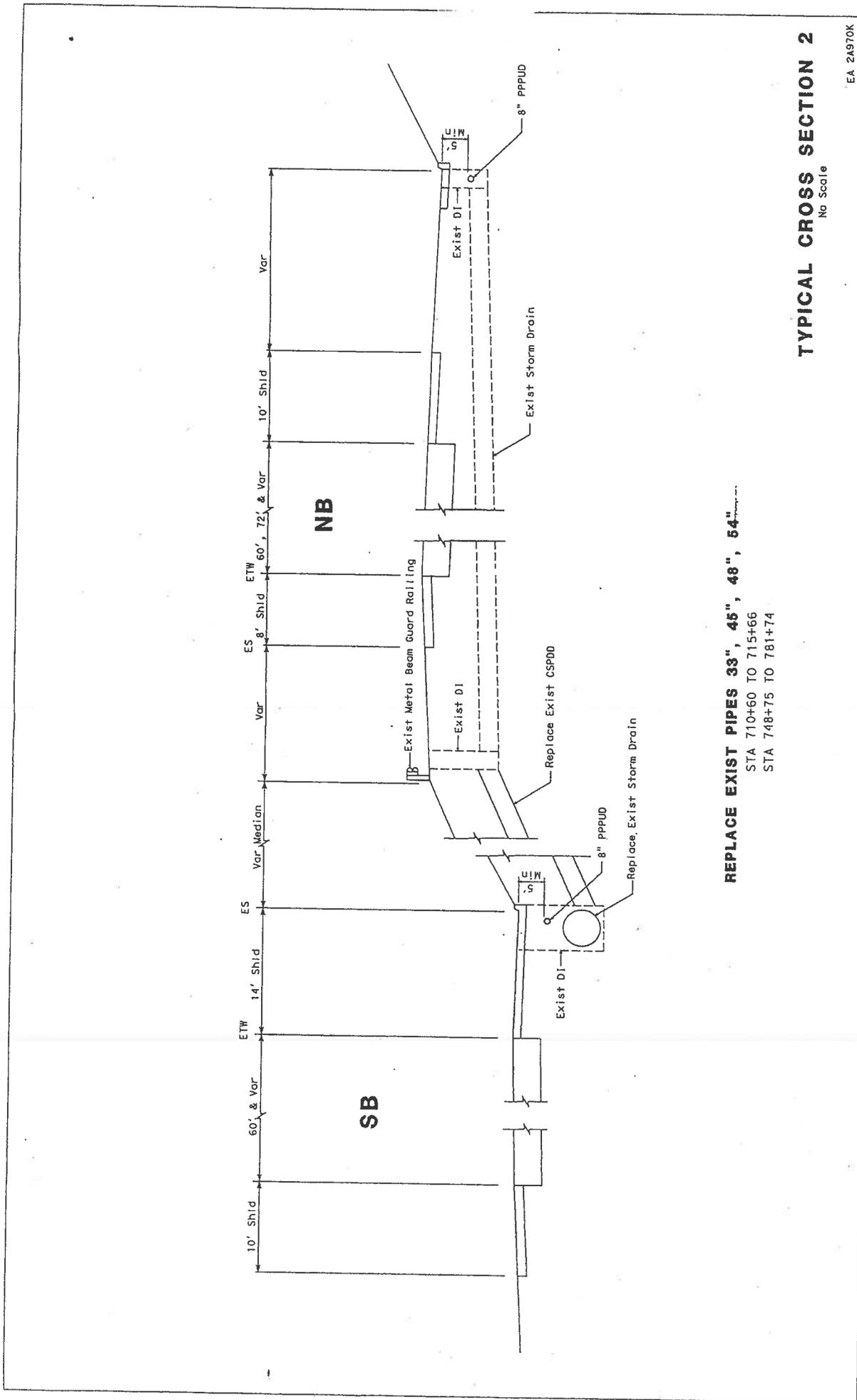


**LINE EXIST PIPES 36", 39", 42"**  
 STA 715+66 TO 748+75

**TYPICAL CROSS SECTION 1**

No Scale

EA 2A970K



**REPLACE EXIST PIPES 33", 45", 48", 54"**  
 STA 710+60 TO 715+66  
 STA 748+75 TO 781+74

**TYPICAL CROSS SECTION 2**  
 No Scale

ATTACHMENT "D"  
CATEGORICAL EXEMPTION/EXCLUSION  
FORM

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**CATEGORICAL EXEMPTION  
CATEGORICAL EXCLUSION/PROGRAMMATIC CATEGORICAL EXCLUSION  
DETERMINATION FORM**

Revised 11/2003

04-SM-280  
Dist.-Co.-Rte. (or Local Agency)

14.6/16.8 (9.1/10.5)  
K.P./K.P.(P.M.P.M.)

2A970K  
E.A. (State project)

                      
Proj. No. (Local project)  
(Fed.Prog. Prefix) Proj. No., Agr. No.)

**PROJECT DESCRIPTION:** (Briefly describe project, purpose, location, limits, right-of-way requirements, and activities involved.)

Replacement of 1.4 miles of corroded hydraulic pipe at a depth of ~10 ft. bgs and located longitudinally along the edge of southbound median shoulder of I-280 near Crystal Springs Reservoir in San Mateo County. Work also includes the addition of 8-in plastic perforated pipe underdrain along the toe of the slope on the eastside of I-280 as well as above existing median storm drain alignment. Specific down drains running latitudinally beneath the median will also be replaced. All work to be within state R-O-W.

**CEQA COMPLIANCE** (for State Projects only)

Based on an examination of this proposal, supporting information, and the following statements (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

**CALTRANS CEQA DETERMINATION**

Exempt by Statute (PRC 21080)

Based on an examination of this proposal, supporting information, and the above statements, the project is:

**Categorically Exempt Class 1c**, or **General Rule exemption** (This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment [CCR 15061(b)(3)])

Ed Pang Coz RLG      9/13/05      M. Bulina      9/19/05  
Signature: Environmental Office Chief      Date      Signature: Project Manager      Date

**NEPA COMPLIANCE** (23 CFR 771.117)

Based on an examination of this proposal, supporting information, and the following statements.

- This project does not have a significant impact on the environment as defined by the NEPA.
- This project does not involve substantial controversy on environmental grounds.
- This project does not involve significant impacts on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act.
- In non-attainment or maintenance areas for Federal air quality standards: this project comes from a currently conforming plan and Transportation Improvement Program or is exempt from regional conformity.
- This project is consistent with all Federal, State, & local laws, requirements or administrative determinations relating to the environmental aspects of this action.

**CALTRANS NEPA DETERMINATION**

Based on an examination of this proposal, supporting information, and the statements above under "NEPA Compliance", it is determined that the project is a:

**PROGRAMMATIC CATEGORICAL EXCLUSION (PCE):** Based on the evaluation of this project and supporting documentation in the project files, all the conditions of the November 18, 2003 Programmatic Categorical Exclusion Agreement have been met.

**CATEGORICAL EXCLUSION (CE):** For actions that do not individually or cumulatively have a significant environmental effect and are excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS). Require FHWA determination.

Ed Pang Coz RLG      9/13/05      M. Bulina      9/19/05  
Signature: Environmental Office Chief      Date      Signature: Project Manager/DLA Engineer      Date

**FHWA DETERMINATION**

Based on the evaluation of this project and the statements above, it is determined that the project meets the criteria of and is properly classified as a Categorical Exclusion (CE).

[Signature]      9/27/2005  
Signature: FHWA Project Development Engineer      Date

**PERMITS, AGREEMENTS AND MITIGATION (PAM) COMMITMENTS ENVIRONMENTAL PHASE**

Sarah Picker, District Branch Chief  
 Design SHOPP  
 Attn: Tin Shwe

DATE: September 13, 2005  
 CO/RTE/KP(PM): SM-280 14.6/16.8 (R9.1/R10.5)  
 RU/EA: 2A970K

Below is a summary of the required permits, and environmental commitments that must be incorporated into the PS&E for this project. Please contact Frances Maroni at 286-5753 for further information.

**PERMITS AND AGREEMENTS**

	Y/N	Mit. Plan Req.?	COMMENTS
CDFG 1601/03 Streambed Alteration Agreement	N	N	
BCDC: Bay Fill Permit:Co. BCDC: Pub. Access Rev.	N	N	
Coastal Dev. Permit: Co. Coastal Dev. Permit: State	N	N	
State Lands Lease Agreement	N	N	
SWQCB: NPDES RWQCB: Water Qual. Cert.	Y N	N	Since this project has a soil disturbance of 0.4 hectares or more (1 acre) or it involves work near an environmentally sensitive area, this project must adhere to the conditions of the National Pollutant Discharge Elimination System (NPDES) Permit Order #99-06-DWQ, CAS000003, issued to Caltrans by the State Water Resources Control Board. Compliance with the NPDES General Permit Order #99-08-DWQ, CAS000002 for Construction Activities is also required. Design to coordinate with Water Quality, prior to construction (DYam).
USACOE 404: Nationwide USACOE 404: Individual	N		
USACOE Section 10 Permit	N	N	
USACOE Section 9 Permit	N		

**ENVIRONMENTAL COMMITMENTS**

Noise Attenuation	N	N	
Erosion Control	N	N	
Hazardous Materials Investigation/Treatment	Y	Y	Aerially deposited lead and serpentine soil (naturally occurring asbestos) likely exist in the state's ROW. This project must adhere to the conditions of the Lead Variance #00-H-VAR-01, issued to Caltrans by the Department of Toxic Substances Control on September 22, 2000 or newer. Design to coordinate with Environmental Engineering, prior to construction (ABaradar).
ESA (Archaeological)	N		

**PERMITS, AGREEMENTS AND MITIGATION (PAM) COMMITMENTS ENVIRONMENTAL PHASE**

Sarah Picker, District Branch Chief  
 Design SHOPP  
 Attn: Tin Shwe

DATE: September 13, 2005  
 CO/RTE/KP(PM): SM-280 14.6/16.8 (R9.1/R10.5)  
 RU/EA: 2A970K

Below is a summary of the required permits, and environmental commitments that must be incorporated into the PS&E for this project. Please contact Frances Maroni at 286-5753 for further information. A copy of the project PS&E must be sent to Environmental for review before finalization

ESA (Biology)	N		Though serpentine soil-specific plants were not identified within the proposed project footprint, the area is environmentally sensitive. Therefore, construction personnel, vehicles, and materials should be excluded from the northeast slopes along SR-280. Design to coordinate with Environmental Analysis, Natural Sciences, prior to construction (JJensen).
ESA (Historical)	N		
ESA (Scenic Resources)	N		
Wetland/Riparian Mitigation	N	N	
Biological Mitigation	N	N	

*Ed Pang for PLC 9/13/05*  
 CHIEF, OFFICE OF ENVIRONMENTAL PLANNING, SOUTH

04-SM-280 PM R9.1/R10.5  
04-246-2A970K  
September, 2005

ATTACHMENT "E"  
RIGHT OF WAY DATA SHEET

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04-SM-280 PM R9.1/R10.5  
04-246-2A970K  
September, 2005

ATTACHMENT "E"  
RIGHT OF WAY DATA SHEET

**RIGHT OF WAY DATA SHEET**

TO: Design SHOPP Date 09/12/05 D.S. # 4985  
 Dist 04 Co SM Rte 280 KP 9.1/10.5  
 ATTN: Sarah Picker EA 2A970K  
 Project Description: Rehabilitate Hydraulic Culvert

SUBJECT: Right of Way Data – Alternate No. \_\_\_\_\_

1. Right of Way Cost Estimate:

	Current Value (Future Use)	Escalation Rate	Escalated Value
A. Acquisition, including Excess Lands, Damages, and Goodwill.	\$ <u>00.00</u>	%	\$ <u>00.00</u>
Project Permit Fees			\$ <u>00.00</u>
B. Utility Relocation (State Share)	\$ <u>10,000.00</u>	%	\$ <u>10,000.00</u>
C. Relocation Assistance	\$ <u>00.00</u>	%	\$ <u>00.00</u>
D. Clearance/Demolition	\$ <u>00.00</u>	%	\$ <u>00.00</u>
E. Title and Escrow Fees	\$ <u>00.00</u>	%	\$ <u>00.00</u>
F. <u>TOTAL ESCALATED VALUE</u>			\$ <u>10,000.00</u>
G. Construction Contract Work	\$ <u>00.00</u>		

2. Anticipated Date of Right of Way Certification \_\_\_\_\_

3. Parcel Data:

Type	Dual/Appr	Utilities	RR Involvements	
X _____		U4-1 _____	None	X _____
A _____		-2 _____	C&M Agrmt	_____
B _____		-3 _____	Svc Contract	_____
C _____		-4 _____	Design	_____
D _____		U5-7 <u>5</u>	Const.	_____
E <u>XXXX</u>		-8 _____	Lic/RE/Clauses	_____
F <u>XXXX</u>		-9 _____	Misc R/W Work	
			RAP Displ	<u>0</u>
			Clear Demo	<u>0</u>
			Const. Permits	<u>0</u>
			Condemnation	<u>0</u>
Total	<u>0</u>			

*Handwritten signature/initials*

Areas: Right of Way \_\_\_\_\_ No. Excess Parcels \_\_\_\_\_ Excess \_\_\_\_\_  
 Enter PMCS Screens 9 1 13 1 05 by MC Hunt  
 Enter AGRE Screen (Railroad data only) 1 1 by \_\_\_\_\_

14. 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.)

PYPSCAN lead time (from Regular RW to project certification) 6 months

15. Is it anticipated that all Right of Way work be performed by CALTRANS staff?  
Yes  No  (If no, discuss)

UTILITY INFORMATION SHEET

1. Utility Owners located within project limits:

PG&E – Gas & Electric  
SBC  
County of San Mateo

2. Facilities potentially impacted by project (if known, include Owner(s) and facility type(s)):

3. Anticipated Workload:

Utility Verification required  
 Positive Identification  
 Utility Relocation  
 Other (Specify)

4. Additional information concerning anticipated utility involvements (Include limiting conditions and a narrative addressing likelihood that conflicts will occur);

\_\_\_\_\_ Involves possible relocation of electric transmission facilities  
(If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1	_____	Owner Expense Involvements	U5-7	<u>5</u>	Verifications-without involvements
U4-2	_____	State Expense Involvements (Conventional, No Fed Aid)	U5-8	_____	Verifications-50% involvements
U4-3	_____	State Expense Involvements (Freeway, No Fed Aid)	U5-9	_____	Verifications resulting in involvements
U4-4	_____	State Expense Involvements (Conventional or Freeway, No Fed Aid)			

NOTE: The sum of the U-4's must equal the sum of 1/2 of the U5-8's and all of the U5-9's.

**ESTIMATED STATE SHARE OF COSTS \$00.00**

Prepared by:

Suresh Dharmani  
Right of Way Utility  
Coordinator

9/8/05  
Date

## FIELD REVIEW ATTENDANCE LIST

<u>NAME</u>	<u>BRANCH</u>	<u>TELEPHONE #</u>
Sarah Picker	Design SHOPP	510-622-1764
Tin Shwe	Design SHOPP	510-622-8785
Ron Moriguchi	Project Management	510-286-5073
Mohammad Suleiman	Project Management	510-385-7105
Dixon Lau	Hydraulics	510-286-4854
Frances Maroni	Environmental Analysis	510-286-5753
Jessica Range	Biology	510-286-6375
Eduardo Ortega	Geotech	510-286-4821
Sam Kim	Constructability	510-286-5739
Fred Booshehri	Construction (RE)	650-222-7241
Keith Bradford	Maintenance	650-369-7840
Earl Sherman	Maintenance	650-369-7840

04-SM-280 PM R9.1/R10.5  
04-246-2A970K  
September, 2005

ATTACHMENT "G"  
STORM WATER DATA REPORT

**APPENDIX E**

*Long Form - Storm Water Data Report*

Dist-County-Route: 04-SM-280  
Kilometer Post (Post Mile) Limits: PM R9.1/R10.5  
Project Type: Drainage Culvert Rehabilitation  
EA: 2A970K  
RU: 04-246  
Program Identification: 2006 SHOPP  
Phase:  PID     PA/ED     PS&E

Regional Water Quality Control Board(s): 2 (San Francisco Bay)

Is the project required to consider incorporating Treatment BMPs?      Yes     No

If yes, can Treatment BMPs be incorporated into the project?      Yes     No

If No, a Technical Data Report must be submitted to the RWQCB  
at least 30 days prior to Advertisement.    List submittal date: \_\_\_\_\_

Total Disturbed Soil Area: 1.4 Ha

Estimated: Construction Start Date: 1/09      Construction Completion Date: 1/10

Notification of Construction (NOC) Date to be submitted: 12/08

Notification of ADL reuse (if Yes, provide date)      Yes     Date 9/08      No

Separate Dewatering Permit (if Yes, permit number)    Yes     Permit # TBD in PSE    No

*This 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.*

*Tin Shwe*      10/12/05  
Tin Shwe, Registered Project Engineer      Date

*I have reviewed the storm water quality design issues and find this report to be complete, current, and accurate:*

*M. Suleiman*      10/12/05  
Mohammad Suleiman, Project Manager      Date

*Robert W. Braga*      10/14/05  
Bob Braga, Designated Maintenance Representative      Date

*Ofer Brender*      10-13-05  
Ofer Brender, Designated Erosion/Sediment Control Representative

STAMP  
[Required for PS&E only]

*Ana Ochoa*      10-13-05  
Ana Ochoa, Distric SW Coordinator      Date

## STORM WATER DATA INFORMATION

### 1. Project Description

- This project proposes to rehabilitate the existing drainage culverts on Rte 280 in San Mateo County near Belmont from 2.3 miles (use 1 constant unit throughout report) north of Edgewood Road to .4 miles south of Route 92. The scope of work is to replace or to remediate corroding longitudinal pipeline along the southbound median shoulder of Route 280. The pipe size varies from 33 inches to 54 inches in diameter. The project consist of removal and replacement of existing pipes with the same size pipes. In addition, a 8" plastic perforated pipe underdrain system will be placed along the southbound median shoulder and northbound right shoulder and cross drains underneath the median will need replacement. Retaining wall are also being proposed to limit cut slopes.
- Total disturb soil area was conservatively estimated at approximately 1.4 hectares. This includes a 20 ft width of construction easement along the length of the project limits where the drainage facilities are being replaced for equipment access which may later be eliminated if it is determined during PS&E that the Contractor can use the existing shoulder and/or lane. There is no net impervious area, since this project will only rehabilitate existing culverts.
- The project limits is within the San Mateo County MS 4 area .

### 2. Define Site Data and Storm Water Quality Design Issues (refer to Checklists SW-1, SW-2, and SW-3)

- The storm water from these culverts discharge to San Mateo Creek via a series of detention basins located approximately one mile north on the west side of Route 280. Crystal Springs is in the vicinity of the project limits. Hydraulics has confirmed that no storm water flows directly discharges to Crystal Springs reservoir which is a high risk facility.
- Receiving Water Bodies is the San Mateo Creek which eventually discharges to San Francisco Bay. San Mateo Creek is 303 (d) listed for Diazinon.
- 401 certification is not required for this project
- There are no TMDLs or effluent limits within the project limits.
- The project area has the climate of warm summer and cold wet winter. Soil underlying the project area consist of Orthents, cut and fill urban land complex 5 to 75 percent slopes. Urban land has highly variable qualities and need to be further studied at specific sites for accurate classification. Surrounding the Orthents for most of the project area is Fagan loam. The ground water depth will be determined later during PS&E. Permeability for this soil is slow 0.06 in/hr to 0.6 in/hr. Erodibility is high. The project area consist of hills and valleys. Immediately adjacent to the project site and topographically lower, is the Crystal Springs Reservoir. No Right-of-way acquisition needed for this project. There is no slope stabilization concerns for this project since disturbing soil on the slope of median is minimal when replacing downdrain pipes. The project is in the rural area with no residential communities.
- Although a soil investigation was conducted and ADL is known to exist within the project limits, testing may also be required to assess the asbestos level. If levels are sufficiently low, soil containing both ADL and asbestos can be reused; however, if the soil is found to have elevated asbestos, the soil will need to be hauled off. The ADL variance will be evoked if the soil will be reused.
- These culverts convey not only surface runoff, but also ground water. Therefore, a dewatering permit is required and will be coordinated with the Water Pollution Control Unit during PS&E.
- There is no Right-of-way costs for BMPs.
- Retaining walls will be used at location where cut slope is greater then 1:2(v:h). Erosion Control Measures and Water Polution Control items will be included for this project. The rainy season is defined as October 15 through April 15.



**3. Regional Water Quality Control Board Agreements**

There are no negotiated understanding or agreements with RWQCB pertaining to this project. 401 certificates with RWQCB is not anticipated due to the fact that all work in median.

**4. Describe Proposed Design Pollution Prevention BMPs to be used on the Project.**

Soil disturbance will occur when trenching to replace existing pipes and placing new under drain pipes.

**Downstream Effects Related to Potentially Increased Flow, Checklist DPP-1, Parts 1 and 2**

- There will be no changes to velocity or volume of downstream flow.

**Slope/Surface Protection Systems, Checklist DPP-1, Parts 1 and 3**

- Erosion control will be provided on all disturb areas.

**Concentrated Flow Conveyance Systems, Checklist DPP-1, Parts 1 and 4**

- There are no protection or velocity dissipation devices needed for this project.

**Preservation of Existing Vegetation, Checklist DPP-1, Parts 1 and 5**

- There are no environmentally sensitive areas or wetlands located within the project limit. Most of existing vegetation will be preserved.

**5. Describe Proposed Permanent Treatment BMPs to be used on the Project****Treatment BMP Strategy, Checklist T-1**

- There are no Targeted Design Constituents for this project thus general purpose pollutant removal will be considered. In order of consideration, the Treatment BMPs include infiltration devices, bio-filtration strips, bio-filtration swales, Austin sand filter, and detention devices. It should be noted that the disturbed soil area may fall under 1.2 ha if the construction easements are reduced or eliminated, therefore Treatment BMPs may not need to be considered during the design phase.

**Biofiltration Swales/Strips, Checklist T-1, Parts 1 and 2**

- Biofiltration strips and swales will be reviewed for feasibility within the project limits during design. In addition, there is an existing biofiltration strip near the Vista Point at the on-ramp to Rte 280 southbound that is currently being reviewed as a possible credit.

**Dry Weather Diversion, Checklist T-1, Parts 1 and 3**

- TBD in PSE

**Infiltration Devices – Checklist T-1, Parts 1 and 4**

- Due to the lack of Right of way, steep terrain, and slow permeability infiltration basins within the project limits are not feasible.

**Detention Devices, Checklist T-1, Parts 1 and 5**

- Due to the lack of Right of way, and steep terrain detention basins within the project limits do not appear feasible. In addition, due to the priority of Treatment BMPs to be considered, Biofiltration strips and swales are preferred over detention basins.

**Gross Solids Removal Devices (GSRDs), Checklist T-1, Parts 1 and 6**

- There are no proposed gross solids removal devices within the project limits because litter is not an impairment or TMDL of San Mateo Creek.



**Traction Sand Traps, Checklist T-1, Parts 1 and 7**

- There are no traction sand traps basins within the project limits being proposed because this area does not receive sand application.

**Media Filters, Checklist T-1, Part 1 and 8**

- Due to the lack of right of way, media filters also appear infeasible; however will be considered during PSE.

**Multi-Chambered Treatment Trains, Wet Basins and Delaware Filters will be not considered due to standing water that result from these treatments and vector control issues.**

**6. Describe Proposed Temporary Construction Site BMPs to be used on Project**

- During construction, typical temporary measures include the installation of stabilized construction entrances, providing concrete washout facilities, installation of silt fencing and drain inlet protection may be utilized. Erosion and Water Pollution Control BMPs shall be used to address soil stabilization and reduce the deposition of sediments into adjacent water bodies and storm drain systems. Construction Site BMPs will be identified during PS&E and coordinated with Hardeep Takhar of Water Pollution Control. During that time dewatering will also be determined.

**7. Maintenance BMPs (Drain Inlet Stenciling)**

- Although this project is in an MS4 area, drainage inlet stenciling is not required due to the inaccessibility of the DIs on Rte 280.

**ATTACHMENTS**

- ⇒ Project Location Map
- ⇒ Evaluation Documentation Form (EDF) project)
- ⇒ Checklist SW-1, Site Data Resources
- ⇒ Checklist SW-2, Storm Water Quality Issues Summary
- ⇒ Checklist SW-3, Measures for Avoiding or Reducing Potential Storm Water Impacts.
- ⇒ Quantities for Construction Site BMPs (required at PS&E only)
- ⇒ Checklist DPP-1, Parts 1-5 (Design Pollution Prevention BMPs)
- ⇒ Checklist T-1, Parts 1-10 (Treatment BMPs)



04-SM-280 PM R9.1/R10.5  
04-246-2A970K  
September, 2005

ATTACHMENT "H"  
TRANSPORTATION MANAGEMENT PLAN  
DATA SHEET

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## TRANSPORTATION MANAGEMENT PLAN DATA SHEET (Preliminary TMP Elements and Costs)

Co/Rte/PM SM-280-R9.1/R10.5 EA 2A970K Project Engineer TIN SHWE  
 Project Limit PM R9.1 TO PM R 10.5  
 Project Description CULVERT REHABILITATION

### 1) Public Information

- |                                     |  |          |
|-------------------------------------|--|----------|
| <input type="checkbox"/>            | a. Brochures and Mailers   | \$       |
| <input checked="" type="checkbox"/> | b. Press Release   | \$ 2,000 |
| <input type="checkbox"/>            | c. Paid Advertising  | \$       |
| <input type="checkbox"/>            | d. Public Information Center/Kiosk   | \$       |
| <input type="checkbox"/>            | e. Public Meeting/Speakers Bureau  |          |
| <input type="checkbox"/>            | f. Telephone Hotline   |          |
| <input type="checkbox"/>            | g. Internet, E-mail  |          |
| <input type="checkbox"/>            | h. Notification to impacted groups<br>(i.e. bicycle users, pedestrians with disabilities, others...) |          |
| <input checked="" type="checkbox"/> | i. Others _____  | \$2000   |

### 2) Traveler Information Strategies

- |                                     |  |        |
|-------------------------------------|--|--------|
| <input type="checkbox"/>            | a. Changeable Message Signs (Fixed)                      | \$     |
| <input checked="" type="checkbox"/> | b. Changeable Message Signs (Portable)                   | \$8000 |
| <input checked="" type="checkbox"/> | c. Ground Mounted Signs                                  | \$1000 |
| <input type="checkbox"/>            | d. Highway Advisory Radio                                | \$     |
| <input type="checkbox"/>            | e. Caltrans Highway Information Network (CHIN)           |        |
| <input type="checkbox"/>            | f. Detour maps (i.e. bicycle, vehicle, pedestrian...etc) |        |
| <input type="checkbox"/>            | g. Revised Transit Schedules/maps                        |        |
| <input type="checkbox"/>            | h. Bicycle community information                         |        |
| <input type="checkbox"/>            | i. Others _____  |        |

\$

### 3) Incident Management

- |                                     |   |          |
|-------------------------------------|---|----------|
| <input checked="" type="checkbox"/> | a. Construction Zone Enhanced Enforcement<br>Program (COZEEP) | \$60,000 |
| <input type="checkbox"/>            | b. Freeway Service Patrol                                     | \$       |
| <input type="checkbox"/>            | c. Traffic Management Team                                    |          |
| <input type="checkbox"/>            | d. Helicopter Surveillance                                    | \$       |
| <input type="checkbox"/>            | e. Traffic Surveillance Stations<br>(Loop Detector and CCTV)  | \$       |
| <input type="checkbox"/>            | f. Others _____   | \$       |

# TMP Data Sheet (cont.)

## 4) Construction Strategies

- a. Lane Closure Chart
- b. Reversible Lanes
- c. Total Facility Closure
- d. Contra Flow
- e. Truck Traffic Restrictions \$ \_\_\_\_\_
- f. Reduced Speed Zone \$ \_\_\_\_\_
- g. Connector and Ramp Closures
- h. Incentive and Disincentive \$ \_\_\_\_\_
- i. Moveable Barrier \$ \_\_\_\_\_
- 
- k. Others \_\_\_\_\_ \$ \_\_\_\_\_

## 5) Demand Management

- a. HOV Lanes/Ramps (New or Convert) \$ \_\_\_\_\_
- b. Park and Ride Lots \$ \_\_\_\_\_
- c. Rideshare Incentives \$ \_\_\_\_\_
- d. Variable Work Hours
- e. Telecommute
- f. Ramp Metering (Temporary Installation) \$ \_\_\_\_\_
- g. Ramp Metering (Modify Existing) \$ \_\_\_\_\_
- h. Others \_\_\_\_\_ \$ \_\_\_\_\_

## 6) Alternative Route Strategies

- a. Add Capacity to Freeway Connector \$ \_\_\_\_\_
- b. Street Improvement (widening, traffic signal... etc) \$ \_\_\_\_\_
- c. Traffic Control Officers \$ \_\_\_\_\_
- d. Parking Restrictions
- e. Others \_\_\_\_\_ \$ \_\_\_\_\_

## 7) Other Strategies

- a. Application of New Technology \$ \_\_\_\_\_
- e. Others \_\_\_\_\_ \$ \_\_\_\_\_

**TOTAL ESTIMATED COST OF TMP ELEMENTS = \$73,000**

PREPARED BY H. PAREKH DATE 11/22/05

APPROVAL RECOMMENDED BY RON HO DATE 11/22/05