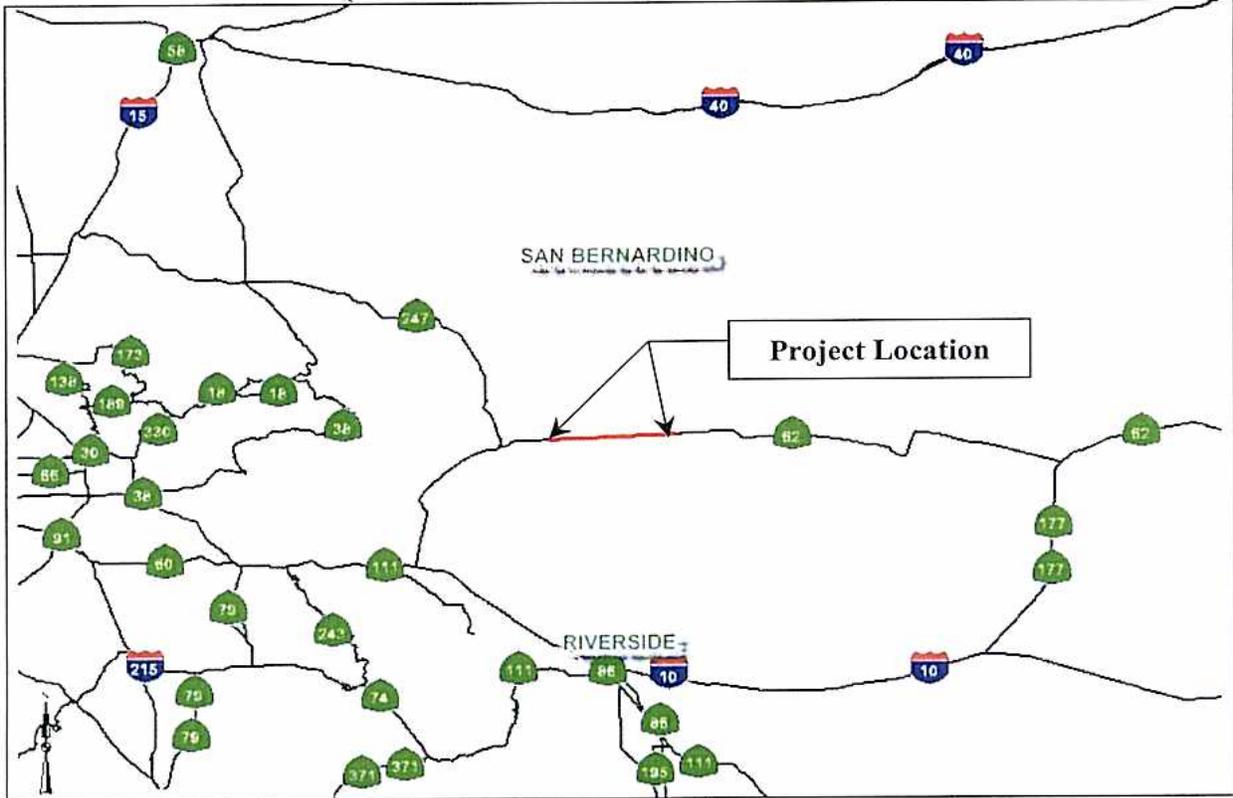
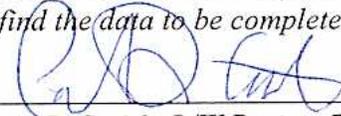


SUPPLEMENTAL PROJECT SCOPE SUMMARY REPORT (Pavement Rehabilitation)

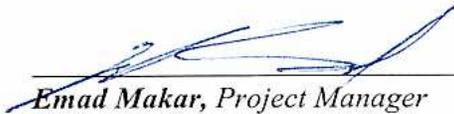


On Route 62 in San Bernardino County from Balsa Avenue in Yucca Valley to Valley View Circle in Joshua Tree

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

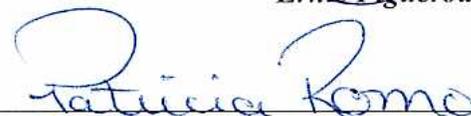

8/31/05
Patricia L. Smith, R/W Project Delivery Manager

APPROVAL RECOMMENDED:


8/31/05
Emad Makar, Project Manager


Ernie Figueroa, Environmental Planning

APPROVED:


9/1/05
DATE
PATRICIA ROMO, Acting District Director

cc

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.



GEORGE MORHIG, REGISTERED CIVIL ENGINEER

8-31-2005
DATE



Reviewed by:



Cristina Paredes, Transportation Engineer

8/31/05
DATE

SUPPLEMENTAL PROJECT SCOPE SUMMARY REPORT (Pavement Rehabilitation)

Project Limits:

On State Route 62 in San Bernardino County from Valley View Circle (PM18.5) to Utah Trail in Twentynine Palms (PM34.2).

Project Description:

This is a supplement to the Project Scope Summary Report approved on October 7, 1993. The original pavement strategy was predicated on a deflection study performed in late 1991. Since this study was performed more than 18 months earlier, it is no longer valid. This supplemental report addresses updated cost estimates based on the strategy developed by the Office of Design and Local Programs and stated in a memorandum dated June 7, 1999.

It is proposed to rehabilitate the existing four-lane highway of Route 62 in San Bernardino County from Valley View Circle to Utah Trail. The project primarily consists of an asphalt concrete overlay and will include digging out and repairing localized areas of severe failure and widening shoulders where necessary. Striping for a continuous two way left turn lane (CTWLTL) will be provided where existing pavement is wide enough.

Environmental Status:

A Categorical Exemption was approved on September 16, 1993. Due to the time that has elapsed, a Preliminary Environmental Assessment Report (PEAR) was completed on August 24, 2005.

Traffic Data:

	2005 (Existing)	2030 (Forecast)
ADT	13,300	29,700
DHV	1,330	2,970
Directional Split	60/40	60/40
Percent Trucks in Peak Hour	4%	4%
Level of Service (LOS)	B	D
V/C Ratio	0.29	0.61
Traffic Index	Mainline	Shoulder
10-year	10.0	6.0
20-year	11.0	7.0

Three-year Accident Data: (January 1, 2002 to December 31, 2004)

Type	Actual	Average
Fatal	0.045	0.033
Fatal and Injury	0.29	0.94
Total	0.76	2.03

Roadway Geometric Information:

Facility	Limits (PM)	Minimum Curve Radius (ft.)	Through Traffic Lanes (each direction)		Paved Shoulder Width		Median Width
			No. of Lanes	Lane Width	Left	Right	
Existing	18.50/20.06		2	12	2-8	2-8	0-12
Proposed			2	12	8	8	0-12
Min. 3R Stds.					12	8	8
Existing	20.06/25.30		2	12	2-10	4-10	0-12
Proposed			2	12	8-10	8-10	0-12
Min. 3R Stds.					12	8	8
Existing	25.30/29.00		2	12	4-10	4-10	0-12
Proposed			2	12	4-10	4-10	0-12
Min 3R Stds.					12	4-10	4-10
Existing	29.00/30.19		2	12	0-4	0-4	0-12
Proposed			2	12	8	8	0-12
Min. 3R Stds.					12	8	8
Existing	30.19/32.70		2	12	0-2	0-4	12
Proposed			2	12	8	8	12
Min. 3R Stds.					12	8	8
Existing	32.70/33.50		2	12	0-10	0-4	0-12
Proposed			2	12	0-10	0-4	0-12
Min. 3R Stds.					12	8	8
Existing	33.50/34.20		1	12	0-10	0-10	0
Proposed			1	12	8-10	8-10	0
Min. 3R Stds.					12	8-10	8-10

Structures Information:

There are two structures within the project limits. The Quail Wash Bridge (Br# 54-1054) has a lateral curb to curb width of 79-feet (24.1-meters). This structure meets design standards and needs no modification.

The 29 Palms Flood Channel (Br# 54-0880) has a curb to curb width of 71-feet (21.6-meters) and will require widening to meet design standards. The Division of Structures has supplied an advanced planning study for the lengthening (increasing curb to curb clearance) of this triple

concrete box structure five feet to achieve the proposed 76-foot (23.2-meters). All widening would be accomplished on the north side to minimize cost and to avoid extensive utility relocations and Right-of-Way acquisition to the south. Bridge rail upgrades are included in this widening.

Condition of Existing Facility:

PMS Category (1-29): 8
Ride Score: 42 (maximum)

Priority Classification (0.1 - 0.4): 0.2

Pavement Condition	
Alligator B Cracking (%)	100% (maximum)
Patching (%)	No
Rutting	Yes
Bleeding	Yes
Raveling	No

There are no known locations of subsurface water problems. Surface water ponds in several locations along the east bound edge of travel way.

Deflection Study Data:

A deflection study was performed in late 1991. Since this deflection study was performed more than eighteen months ago, it is no longer valid. As directed from Design and Local Programs, all rehabilitation work shall be assumed to require a 0.45' (135-mm) thick overlay during the PSSR stage. A deflection study will be performed at the Design Phase of the project. Recommendations from this deflection study will be incorporated into the final design. In addition, the mainline will have to be cold planed 0.10' (30-mm). This will remove any surface treatments such as chip seals or open graded asphalt concrete (OGAC). The expected type of asphalt concrete will be Type A with lime treatment.

Cost Estimate Breakdown:

Rehabilitation Work	Yes/No	Cost
AC Overlay of AC Pavement	Yes	\$14,793,080
Reconstruct Lane(s)	No	
Ramps and OC/UC Approaches	No	
Edge Drains	No	
Bridge Approaches (ground, replaced)	No	\$42,138
Total Lane-Miles of Rehabilitation	61.4	
STRAIN Work	No	
	Subtotal	\$14,835,218

Roadwork	Yes/No	Cost
Main Line Widening (lanes and/or shoulders)	Yes	\$4,092,980
Bridge Rail Upgrade	No	
Vertical Clearance Adjustment	No	
Drainage Items	Yes	\$768,600
Pedestrian Facilities	No	
Minor Items	Yes	\$87,507
Structures	Yes	\$440,000
Alternations Required (List):		
	Subtotal	\$5,389,087

Other Items	Yes/No	Cost
Vertical Alignment	No	
Horizontal Alignment	No	
Left/Right-Turn Storage/Widening/Lengthening	No	
Signal Upgrade	No	
Median Barrier	No	
Metal Beam Guardrails (New)	No	
Concrete Guardrail (New)	No	
Roadside Cleanup	No	
Gore Cleanup	No	
Electrical Items	Yes	\$36,000
Traffic Striping, Markings and Markers	Yes	\$1,175,975
Traffic Control	Yes	\$405,000
Storm Water	Yes	\$855,145
	Subtotal	\$2,485,458

Safety Items	Yes/No	Cost
Utility Relocation		\$10,000,000
Railroad Agreements		
Right of Way		\$230,600
Environmental Mitigation		\$797,620
	Subtotal	\$11,028,220

Subtotals	\$33,738,014
Contingency (25%)	\$5,677,449
Supplemental Funds (10%)	\$2,270,979
TOTAL PROJECT COSTS	\$41,686,442

Other Agencies Involved (Permits/Approvals from Fish & Game, Corps of Engineers, Coastal Commission, etc.):

1602 California Department of Fish and Game
401 Regional Water Quality Control Board
404 Army Corps of Engineers

Other Considerations:

Hazardous waste disposal site:

None

Materials and or disposal site needs and availability:

Contractor will be responsible for disposal of excess material.

Utility Involvement:

There is a significant number of utilities within the Right of Way. Approximately 375 power or telecommunications poles will be approximately fifteen feet from the proposed edge of travel way. Additionally, there are water, high-pressure gas, and other underground utilities, which may need relocation. Right of Way Utilities has provided an estimate of \$10,000,000 for relocation of affected utilities, this estimate would be lowered upon approval of a Design Exception for a clear recovery zone

Railroad Involvement:

None

Consistency with other planning:

This rehabilitation project is consistent with the long-term regional plans and with contiguous rehabilitation projects on State Route 62.

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

Metal beam guardrailing at the approach to structure 29-palms flood channel (54-0880) may be recyclable.

Prolonged temporary ramp closures:

None

Effects on bicycle traffic:

Bicycle traffic will be impacted during construction operations. However, Bicycle safety will be greatly enhanced once the roadway shoulders are upgraded to the current standard width of eight-feet.

Recycling of AC:

Asphalt concrete recycling is not a viable alternative due to the variability of the underlying asphalt concrete. As an option, AC grindings could be donated to San Bernardino County Road Department for use on unpaved county roads.

Environmental Issues:

In compliance with the environmental processing requirements in Division 13, Public Resources Code (State) and 42 U.S.C 4332(2)(C) (Federal), an Initial Study/Environmental Assessment (IS/EA) will be required. A Mitigated Negative Declaration and Finding of No Significant Impact (ND/FONSI) is anticipated. If further study reveals that unmitigable impacts will occur, an Environmental Impact Report/Environmental Impact Study (EIR/EIS) would be required. A PEAR is attached.

What are the consequences of not doing this entire project?

If the project is not completed, the existing pavement will continue to deteriorate and will require significant additional maintenance cost.

Field reviewed by:

District: Yes
ESC-METS: Yes

Date: May 13, 1993
Date: May 13, 1993

Project Reviewed by:

District Maintenance: No
District Safety: Yes
District Materials: No
HQ DLP: No
HQ Maintenance Program: No
FHWA: No

Date: May 25, 1993

Proposed Funding (IM, NH, etc.):

The proposed funding for this project will be National Highway System funds.

Project Support:

Proposed Program FY	District PY's				DES PY's			FY Total PY's
	Enviro	Design	R/W	Construction	Structures		Office Engr.	
					Design	Construction		
06/07	1.83		0.50					2.33
07/08	0.68	5.65	2.67		0.33			9.33
08/09		2.82	0.91		0.33			4.06
09/10		0.14	0.32	2.58		0.25	0.26	3.55
10/11			0.10	5.09		0.43		5.62
Sub Total	2.51	8.61	4.50	7.67	0.66	0.68	0.26	24.89
TOTAL ESTIMATED PROJECT PY's AND OTHER SUPPORT COSTS:								24.89

Remarks:

Dividing the project into two or three shorter segments at logical breaking points may provide programming alternatives.

List of Attachments:

- A. Typical Cross Sections
- B. PMS Inventory Data
- C. TASAS
- D. Memo from Design and Local Programs
- E. Preliminary Environmental Analysis Report (PEAR)
- F. Right of Way Data Sheet
- G. Storm Water Data Report
- H. Preliminary Cost Estimate

Collection Date: 05/21/2003
 Printed: 06/22/2005

Caltrans Maintenance Program 2003 Pavement Cong. on Survey Inventory Caltrans Drive Order

District 8
 County SBD
 Route 062
 Begin PMI 17.276

District 8 County SBD Route 062

Begin PM - End PM	Length	LaneMi. (Est.)	Type	AADT (,000)	MSL	Alligator Cracking		Ruttings, Bleeding	Faulthing		Patching Area %	Ride, IRI	Priority	Skid	Defect
						A %	B %		C (Y/N)?	1st %					
17.276 -	18.026	0.750	3.000	MLU	16	2									
L1	F-OG	0	20									11	109	10	MOD ABC
L2	F-OG	3	16									9	102	10	MOD ABC
R1	F-OG	7	41									5	81	8	HIGH ABC
R2	F-OG	0	84									9	104	8	HIGH ABC
18.026 -	18.726	0.700	2.800	MLD	16	2									
L1	F-CS	0	0									20	145		
L2	F-CS	0	75				Bleeding					30	187	8	HIGH ABC
R1	F-CS	0	18									19	141	10	MOD ABC
R2	F-CS	0	86				Rut./ Bldng					29	183	8	HIGH ABC
18.726 -	19.226	0.500	2.000	MLD	16	2									
L1	F-CS	0	21									32	191	10	MOD ABC
L2	F-CS	0	100				Rut./ Bldng					26	170	8	HIGH ABC
R1	F-CS	0	52									27	173	8	HIGH ABC
R2	F-CS	0	100									35	203	8	HIGH ABC
19.226 -	19.726	0.500	2.000	MLD	16	2									
L1	F-CS	0	13									24	163	10	MOD ABC
L2	F-CS	0	100				Bleeding					21	150	8	HIGH ABC
R1	F-CS	0	43									24	163	8	HIGH ABC
R2	F-CS	0	100	Yes			Rut./ Bldng					20	145	8	HIGH ABC
19.726 -	20.206	0.480	1.920	MLU	16	2									
L1	F-CS	0	49									16	131	8	HIGH ABC
L2	F-CS	0	100				Bleeding					16	130	8	HIGH ABC
R1	F-CS	0	88									18	138	8	HIGH ABC
R2	F-CS	0	64				Bleeding					20	147	8	HIGH ABC
20.206 -	20.726	0.520	2.080	MLD	16	2									
L1	F-CS	0	84	Yes			Bleeding					22	152	8	HIGH ABC
L2	F-CS	0	100	Yes			Bleeding					18	137	8	HIGH ABC
R1	F-CS	0	78	Yes								22	155	8	HIGH ABC
R2	F-CS	0	100	Yes			Rut./ Bldng					25	166	8	HIGH ABC

Collection Date: 06/20/2003
 Printed: 06/22/2005

Caltrans Maintenance Program 2003 Pavement Cong. on Survey Inventory Caltrans Drive Order

District 8
 County SBD
 Route 062
 Begin PM 20.726

District 8 County SBD Route 062

Begin PM - End PM	Lane	Surface Type	Alligator Cracking		Length	LaneMi. (Est.)	Type	AADT (,000)	MSL	Faulding	Patching Area %	Ride, IRI	Priority	Skid	Defect
			A %	B %											
20.726 - 21.226	L1	F-CS	0	54	Yes	2.000	MLD	16	2			20	146	8	HIGH ABC
	L2	F-CS	0	100	Yes					Rut./ Bldg		19	141	8	HIGH ABC
	R1	F-CS	0	82	Yes							21	148	8	HIGH ABC
	R2	F-CS	0	98	Yes							21	148	8	HIGH ABC
21.226 - 21.726	L1	F-CS	0	50		2.000	MLD	16	2			18	138	8	HIGH ABC
	L2	F-CS	0	100								18	137	8	HIGH ABC
	R1	F-CS	0	61								24	160	8	HIGH ABC
	R2	F-CS	0	100								21	149	8	HIGH ABC
21.726 - 22.226	L1	F-CS	0	50		2.000	MLD	16	2			20	147	8	HIGH ABC
	L2	F-CS	0	100								24	161	8	HIGH ABC
	R1	F-CS	34	0								20	146	10	AA&C & RUTTING
	R2	F-CS	0	100								24	160	8	HIGH ABC
22.226 - 22.726	L1	F-OG	0	0		2.000	MLU	11	2			11	111		
	L2	F-OG	0	100								16	131	8	HIGH ABC
	R1	F-OG	0	0								16	129		
	R2	F-OG	0	59								24	163	8	HIGH ABC
22.726 - 23.226	L1	F-OG	22	0		2.000	MLD	11	2			11	109		
	L2	F-OG	0	100								18	138	8	HIGH ABC
	R1	F-OG	34	0								19	141		
	R2	F-OG	0	50								22	154	8	HIGH ABC
23.226 - 23.726	L1	F-OG	0	0		2.000	MLD	11	2			18	136		
	L2	F-OG	0	100								16	131	8	HIGH ABC
	R1	F-OG	0	50								22	155	8	HIGH ABC
	R2	F-OG	31	22								24	161	10	MOD ABC

Collection Date: 06/20/2003
 Printed: 06/22/2005

District 8
 County SBD
 Route 062
 Begin PM 23.726

Caltrans Maintenance Program 2003 Pavement Conc. on Survey Inventory Caltrans Drive Order

District 8 County SBD Route 062

Begin PM - End PM	Length	LaneMi. (Est.)	Type	AADT (,000)	MSL	Alligator Cracking		Rutting, Bleeding	Slab Cracking		Faulting Area %	Patching Area %	Ride, IRI	Priority	Skid	Defect
						A %	B %		C (Y/N)?	1st %						
23.726	0.700	2.800	MLD	11	2											
L1	F-OG	50	0										13	117		
L2	F-OG	0	100										15	126	8	HIGH ABC
R1	F-OG	41	9										16	130		
R2	F-OG	0	82										24	161	8	HIGH ABC
24.426	0.800	3.200	MLU	11	2											
L1	F-OG	22	9										11	112		
L2	F-OG	0	78										10	107	8	HIGH ABC
R1	F-OG	0	0										5	87		
R2	F-OG	0	66										17	132	8	HIGH ABC
25.226	1.000	4.000	MLU	11	2											
L1	F-OG	25	0										5	54		
L2	F-OG	0	50										5	64	8	HIGH ABC
R1	F-OG	31	0										5	46		
R2	F-OG	0	50										5	69	8	HIGH ABC
26.226	1.300	5.200	MLD	11	2											
L1	F-OG	19	0										5	62		
L2	F-OG	0	0	Yes									5	82		
R1	F-OG	57	0	Yes									5	48		
R2	F-OG	0	0	Yes									5	74	8	HIGH ABC
27.526	0.900	3.600	MLD	11	2											
L1	F-OG	0	25	Yes									5	68	10	MOD ABC
L2	F-OG	25	50	Yes									6	91	8	HIGH ABC
R1	F-OG	0	13	Yes									5	62	10	MOD ABC
R2	F-OG	0	50	Yes									5	66	8	HIGH ABC
28.426	0.900	3.600	MLD	11	2											
L1	F-CS	0	19	Yes									13	117	10	MOD ABC
L2	F-CS	13	63	Yes									14	120	8	HIGH ABC
R1	F-CS	0	69	Yes									5	87	8	HIGH ABC
R2	F-CS	13	19	Yes									14	123	10	MOD ABC

Collection Date: 06/20/2003
 Printed: 06/22/2005

Caltrans Maintenance Program 2003 Pavement Condition Survey Inventory Caltrans Drive Order

District 8
 County SBD
 Route 062
 BegIn PM 29.326

District 8 County SBD Route 062

Lane	Surface Type	Alligator Cracking		Length	LaneMi. (Est.)	Rutting, Bleeding	Type	AADT (,000)	MSL	Fauling	Patching Area %	Poor Cond.?	Ride, IRI	Priority	Skid	Defect
		A %	B %													
29.326	-	29.826	0.500		2.000		MLU	11	2							
L1	F-CS	0	50	Yes									16	131	8	HIGH ABC
L2	F-CS	0	100	Yes									23	159	8	HIGH ABC
R1	F-CS	0	100	Yes									20	147	8	HIGH ABC
R2	F-CS	0	0										21	149		
29.826	-	30.726	0.900		3.600		MLD	11	2							
L1	F-CS	0	0	Yes									17	134		
L2	F-CS	25	50	Yes									22	153	8	HIGH ABC
R1	F-CS	0	0	Yes									22	152		
R2	F-CS	0	13	Yes									31	188	10	MOD ABC
30.726	-	31.226	0.500		2.000		MLD	13	2							
L1	F-CS	0	25	Yes									12	116	10	MOD ABC
L2	F-CS	0	69	Yes									24	162	8	HIGH ABC
R1	F-CS	0	50										20	146	8	HIGH ABC
R2	F-CS	0	100	Yes									30	186	8	HIGH ABC
31.226	-	32.476	1.250		5.000		MLD	13	2							
L1	F-CS	21	14										10	106	10	MOD ABC
L2	F-CS	10	71										32	192	8	HIGH ABC
R1	F-CS	0	4										12	114		
R2	F-CS	0	66										27	172	8	HIGH ABC
32.476	-	32.726	0.250		1.000		MLU	11	2							
L1	F-CS	40	15										16	131	10	MOD ABC
L2	F-CS	5	51										19	140	8	HIGH ABC
R1	F-CS	0	4										18	136		
R2	F-CS	0	66										42	231	2	HIGH ABC, RIDE
32.726	-	32.987	0.261		1.044		MLU	10	2							
L1	F-CS	40	15										14	121	10	MOD ABC
L2	F-CS	5	51										12	116	8	HIGH ABC
R1	F-DG	0	11										13	119	10	MOD ABC
R2	F-DG	5	23										24	163	10	MOD ABC

Collection Date: 06/20/2003
 Printed: 06/22/2005

District 8
 County SBD
 Route 062
 Begin PM 32.987

Caltrans Maintenance Program 2003 Pavement Condition Survey Inventory Caltrans Drive Order

District 8 County SBD Route 062

Begin PM - End PM	Length	LaneMi. (Est.)	Type	Alligator Cracking		Rutting, Bleeding	Slab Cracking		Faulting	Patching		Ride, IRI	Priority	Skid	Defect
				A %	B %		C (Y/N)?	1st %		3rd %	Corner %				
32.987 -	33.747	0.760	MLU	10	2	3.040									
L1	F-DG	5	3									12	114		
L2	F-DG	28	23									18	136	10	MOD ABC
R1	F-DG	0	11									13	119	10	MOD ABC
R2	F-DG	5	23									15	125	10	MOD ABC
33.747 -	34.954	1.207	2LNU	6	2	2.414						5	84	10	MOD ABC
L1	F-DG	34	16									5	74		
R1	F-DG	29	5												
34.954 -	35.693	0.739	2LNU	2	2	1.478						5	75		
L1	R		0	0	0							5	75		
L1	F-DG	9	5									5	75		
R1	F-DG	6	3									5	51		
35.693 -	36.885	1.192	2LNU	2	2	2.384						5	73		
L1	F-DG	0	0									5	73		
R1	F-DG	0	0									5	52		

Memorandum

To: ALL REGION/DISTRICT DIRECTORS
Attention: Regional/District Design Chiefs
& Regional/District Materials Engineers

Date: June 7, 1999

File:

From: DEPARTMENT OF TRANSPORTATION
DESIGN AND LOCAL PROGRAMS
MAIL STATION 28

Subject: Revised Cost Estimating Procedure for the Scoping of Projects that Include Asphalt Pavement Rehabilitation Work

As a result of a significant increase in the pavement rehabilitation workload, the following procedure to provide cost estimates for project scoping purposes has been developed in coordination with the Maintenance Program and the Pavement Branch in the Engineering Service Center (ESC)- Office of Materials and Foundations (OMF). Effective immediately, for project cost estimating purposes at the project scoping stage (PSSRs and PSRs only), all AC rehabilitation work shall be assumed to require a 135-mm thick overlay. Deflection studies are no longer required for scoping purposes. The use of this estimated thickness for cost estimating purposes is based upon a review of the 1996, 1997 and 1998 OMF overlay design recommendations for asphalt pavement rehabilitation projects. All other written guidance on this subject in the Project Development Procedures Manual (PDPM) or other sources is superseded until this memorandum is rescinded.

Deflection studies are still mandatory to determine all final pavement structural section designs for asphalt pavement rehabilitation work whether that is on major rehabilitation (HA22) projects, CAPM projects or other types of SHOPP or STIP programmed projects. All requests for deflection studies must be made by the Region/District Materials Engineer. In addition, as currently is the procedure, all final designs are to be based on deflection studies that are less than 1-1/2 years old. Follow-up pavement deflection studies, performed approximately one year prior to the submittal of the PS&E to Headquarters (the ESC Office of Office Engineer), should be requested only as necessary. These follow-up studies are only to be requested after a review of the existing pavement condition has been made and it is determined that a follow-up study is necessary because a significant amount of additional pavement deterioration has occurred or other significant changes have occurred since the previous study.

The adequacy of this cost estimating procedure will be reviewed periodically by the OMF Pavement Branch. In order to help them perform their analysis, one copy of all approved scoping documents (PSSRs or PSRs) that involve pavement rehabilitation shall be sent to the OMF Pavement Branch (Mail Station #5). In addition, for monitoring and planning purposes, one copy of all approved CAPM PRs shall be sent to the OMF Pavement Branch.

original signed by Robert L. Buckley
ROBERT L. BUCKLEY
Program Manager
Design and Local Programs

original signed by Randell H. Iwasaki
RANDELL H. IWASAKI
Program Manager
Maintenance Program

To: GEORGE MORHIG

Date: August 5, 2005 UPDATE

08-SBd-62-KP 29.8/55 .0

PM 18.3/34.2

EA: 35930K

Project Description: Rehab existing pavement, widen shoulders/add two lane left turn land (CTWLTL)

From: MICHAEL S. ROMO
RW Project Delivery

Subject: Current Estimated Right of Way Costs

We have completed an updated ROW data sheet for estimate of the right of way costs for the above-referenced project based on maps we received from you July 19, 2005, 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 that the 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. We have determined there are no right of way functional involvement in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 19 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. 225), we will require a minimum of 12 months prior to the date of certification of the project. Either of these actions may reflect adversely on the District's other programs or our public image generally.

*TOTAL PROJECT HOURS FOR RW: 6,200

*NOTE: THESE HOURS ARE PRELIMINARY BASED ON THE INFORMATION PROVIDED WITH THE DATA SHEET REQUEST. HOURS ARE SUBJECT TO CHANGE AS NEW INFORMATION IS PROVIDED.

Attachments:

- [XX] Right of Way Data Sheet
- [XX] Utility Information Sheet
- [XX] Railroad Information Sheet

EVNT RW	8/3/05
COST RW1-6	8/3/05
TEXT TI	8/3/05
SCAN	8/3/05
CLASS	_____
AGRE	_____
TPRC	_____

Date: August 5, 2005 **UPDATE**
 08-SBd-62-KP 29.8/55 .0
 PM 18.3/34.2
 EA: 35930K
 Project Description: Rehab existing
 pavement, widen shoulders/add two lane left
 turn land (CTWLTL)

Subject: Updated Request for ROW data sheet.

1. Right of Way Cost Estimate:

	Value
A. Acquisition, including Excess Lands Damages, Goodwill, Major Rehabilitation, and Environmental Permits to Enter	\$ 173,000.00
B. Acquisition of Offsite Mitigation. None Requested.	\$ 00.00
C. Utility Relocation (State share)	\$ 10,000,000.00
D. RAP	\$ 00.00
E. Clearance/Demolition	\$ 00.00
F. Title and Escrow Fees	\$ 23,000.00
G. Project Permit Fees	\$ 00.00
H. Condemnation Costs	\$ 34,600.00
I. Total R/W Estimate:	\$ <u>10,230,600.00</u>
J. Construction Contract Work	\$ 00.00
1a. Real Property Services:	
A. Routine Maintenance (Object Code 058)	\$ 00.00
B. Advertising Costs (Object Code 039)	\$ 00.00
C. Utility Costs (Object Code 002)	\$ 00.00
D. Total Real Property Services Estimate:	<u>\$ 00.00</u>

2. Anticipated Pypscan Date of Right of Way Certification 10/2003

3. Parcel Data:

Type	Dual/Appr	Utility Involvement	RR Involvement	No
X _____	_____	U4-1 <u>2</u>	C&M Agrmt	<u>-</u>
A _____	_____	-2 _____	Svc Contract	<u>-</u>
B <u>23</u>	_____	-3 _____	Lic/RE/Clauses	<u>0</u>
C _____	_____	-4 <u>5</u>	Government Lands	<u>0</u>
D _____	_____	U5-7 <u>2</u>	Number of Parcels	<u>0</u>
E _____	_____	-8 <u>8</u>	Misc. R/W Work	<u>0</u>
F _____	_____	-9 <u>6</u>	RAP Displ	<u>0</u>
Total <u>23</u>			Clear/Demo	<u>0</u>
			Const Permits	<u>0</u>
			Condemnation	<u>0</u>
			Permits to Enter-ENV	<u>0</u>

Areas: Right of Way: S.F. 345650 M² 32111
 Excess: S.F. 0 M² _____
 No. Excess Land Parcels: 0

Date: August 5, 2005 **UPDATE**

08-SBd-62-KP 29.8/55 :.0

PM 18.3/34.2

EA: 35930K

Project Description: Rehab existing pavement,
widen shoulders/add two lane left turn land
(CTWLTL)

4. Are there major items of construction contract work?

Yes ___ No x (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.** _____

Type and Number of Parcels: Fee 23
Partial 23
Full _____
Easements _____
Temporary _____
Permanent _____

6. Is there an effect on assessed valuation?

Yes ___ Not Significant ___ No x (If yes, explain.)

7. Are utility facilities or rights of way affected? Yes x No ___
(If yes, attach Utility Information Sheet, Exhibit 4-EX-5.)

8. Are railroad facilities or rights of way affected? Yes ___ No x
(If yes, attach Railroad Information Sheet, Exhibit 4-EX-6.)

9. Were any previously unidentified sites with hazardous waste and/or material found? Yes ___ None Evident x (If yes, attach memorandum per Procedural Handbook Chapter 4, Section 4.01.10.00.)

10. Are RAP displacements required? Yes ___ No x (If yes, provide the following information.)

No. of single family _____ No. of business/nonprofit _____

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 x (If yes, explain.)

12. Are there potential relinquishments and/or abandonments?

Yes ___ No x (If yes, explain.)

13. Are there existing and/or potential Airspace sites?

Yes ___ No x (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 Maps to R/W to project certification) 19 months.

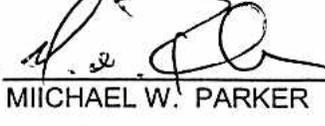
Date: August 3, 2005 UPDATE
08-SBd-62-KP 29.8/55 .0
PM 18.3/34.2
Project Description: Fr Valley View Circle TO
Utah Trail in Sbd County
EA: 35930K

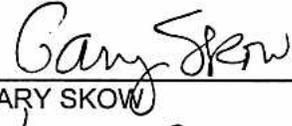
15. Is it anticipated that all Right of Way work will be performed by CALTRANS staff?
Yes x No (If no, discuss.)

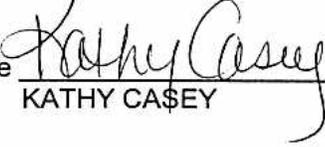
Evaluations prepared by:

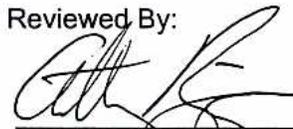
Right of Way: Name  Date 8/4/05
VITO SANTAMATO

Railroad: Name  Date 8/4/05
BETTY BOBOSIK

Utilities: Name  Date 8/8/05
MICHAEL W. PARKER

Government Lands: Name  Date 8/4/05
GARY SKOW

Property Management: Name  Date 8/4/05
KATHY CASEY

Reviewed By: 
MICHAEL S. POMO
Senior Right of Way Agent
Project Coordinator
San Bernardino Office
Southern Right of Way Region

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 complete and current.


PATI SMITH
Right of Way Project Delivery Manager
San Bernardino Office
Southern Right of Way Region
Date 8/9/05

cc: Program Manager
Project Manager

Date: August 5, 2005 **UPDATE**
08-SBd-62-KP 29.8/55 .0
PM 18.3/34.2
EA: 35930K
Project Description: Rehab existing pavement,
widen shoulders/add two lane left turn land
(CTWLTL)

This utility estimate was prepared using "project specific" data and unit values as of this date. This information is not to be utilized for any future updates of this cost estimate. Also, this information is not to be utilized for the preparation or updating of any other project cost estimate.

UTILITY INFORMATION SHEET

1. Name of utility companies involved in project:

**SCE-Transmission and Distribution
Southern California Gas
Verizon**

**Adelphia Cable TV
Twentynine Palms Water**

2. Types of facilities and agreements required:

Underground: electric, gas, fiber optic, telephone, water, sewer and cable TV.

Overhead: electric, telephone and cable TV.

Fire hydrants, vaults, manholes, valves, monitoring and ETS devices, air relief valves, pedestals and pumping station(s).

REQUIRED: Notice to Owner (Pothole & Relocation), Utility Agreements, Replacement Easements.

3. Additional information concerning utility involvement on this project. Is there any special circumstances/facilities requiring additional lead time?

Design has provided very limited and vague information for the completion of this data sheet. Based upon the information that was provided, this Utility Coordinator must assume the worst case scenario for the proposed project. The project consists of widening existing Right of Way to accommodate a continuous turn lane, rehabilitation of existing pavement and the widening of shoulders. The amount of widening is essentially unknown at this time. A large number of overhead and underground facilities exist in the proposed work area, as all are adjacent to the existing Right of Way.

The following numbers are based on a field review: An estimated 375 poles which include facilities for Verizon, SCE & Adelphia. An estimated 11 fire hydrants and 19 telephone/fiber pedestals will need to be relocated. There is also a high-pressure gas pipeline with a pump station that is believed to be in conflict with proposed construction. SCE also has a significant amount of underground electrical facilities in the area, which include the relocation of utility vaults. This project could require the acquisition of numerous, costly utility easements. Liability responsibility is not clear at this time. It is not known if utilities are in easement or State right of way. It is thought that the poles are in easement. Utility owners have been contacted for an assessment of their occupancy rights. The utility owners may require preliminary plans first. Other facilities will require relocation. Major positive location (potholing) will need to be performed. There is high risk UG gas running throughout the project. This project could be extremely expensive from a utility standpoint. A recent RT 62 project in Yucca Valley has approximately 85 SCE pole relocations costing \$2,300,000. Based on current available information, this project cost estimate is \$10,000,000.

Design must provide the Utility Coordinator (UC) with geometric base maps and a written request for utility verification [see Design Task D282 (220.D)]. The UC will then contact all appropriate Utility Owners (UO's) for verifications and corrections. The UC will then provide Design with the updated information and/or UO As-Builts and Design can then prepare accurate utility location maps or U-Sheets. Design will then determine all utility conflicts that require positive location and/or relocation [see Design Task D283 (220.D)].

Date: August 5, 2005 **UPDATE**
08-SBd-62-KP 29.8/55 .0
PM 18.3/34.2
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Project Description: Rehab existing pavement,
widen shoulders/add two lane left turn land
(CTWLTL)

4. Potholing costs: Phase 1 funding:

\$200,000

5. PMCS Input Information

Total estimated cost of State's obligation for utility relocation on this project:
(Phase 9 funding) **\$10,000,000**

Utility Involvement

U4-1	<u>2</u>	U5-7	<u>2</u>
-2	<u> </u>	-8	<u>2</u>
-3	<u> </u>	-9	<u>6</u>
-4	<u>5</u>		

Prepared By: 

Michael W. Parker
Right of Way Utility Estimator

Date 7/27/05

Date: August 3, 2005 UPDATE
08-SBd-62-KP 29.8/55 .0
PM 18.3/34.2
Project Description: Fr Valley View Circle TO
Utah Trail in Sbd County
EA: 35930K

RAILROAD AND GOVERNMENT LANDS INFORMATION SHEET

1. Describe railroad facilities or rights of way affected.

None

2. When branch lines or spurs are affected, would acquisition and/or payment of damages to businesses and/or industries served by the railroad facility be more cost effective than construction of a facility to perpetuate the rail service? Yes ___ No x (If yes, explain.)

3. Discuss types of agreements and rights required from the railroads. Are grade crossings requiring service contracts, or grade separations requiring construction and maintenance agreements involved?

None

4. Remarks (non-operating railroad right of way involved?):

5. Is Government Lands involved? Yes ___ No X

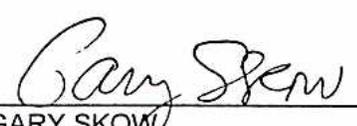
If yes, number of parcels 0
Agency Name and Explanation:

6. PMCS Input Information

RR Involvement	<u>No</u>
C&M Agreement	<u>-</u>
SVC Contract	<u>-</u>
LIC/RE/Clauses	<u>-</u>
Government Lands	<u>0</u>
Number parcels	<u>0</u>

Prepared By: 
BETTY BOBOSIK
Right of Way Railroad Coordinator

Date: 8/4/05

Prepared By: 
GARY SKOW
Right of Way Government Lands Coordinator

Date: 8/4/05

Date: August 3, 2005 UPDATE
08-SBd-62-KP 29.8/55 .0

PM 18.3/34.2

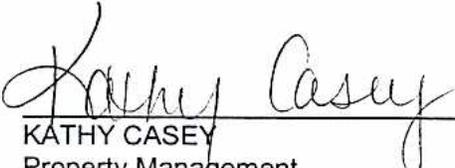
Project Description: Fr Valley View Circle TO
Utah Trail in Sbd County

EA: 35930K

PROPERTY MANAGEMENT/EXCESS LAND INFORMATIONAL SHEET

<u>WBS CODE</u>	<u>WBS ACTIVITY</u>	<u>NUMBER OF PARCELS</u>	<u>HOURS</u>	<u>COST</u>
	<u>PROPERTY MANAGEMENT</u>		<u>NOT APPLICABLE</u>	<u>_____</u>
195.40.05	Fair Market Rent Determinations (Residential)	_____	_____	_____
195.40.10	Fair Market Rent Determinations (Non-Residential)	_____	_____	_____
195.40.15	Regular Rental Property Management Historic House	_____	_____	_____
195.40.20	Property Maintenance and Rehabilitation (Rental Property) Historic House	_____	_____	_____
195.40.25	Property Maintenance and Rehabilitation (Non-Rental Property)	<u>23</u>	<u>600</u>	<u>2000</u>
195.40.30	Hazardous Waste and Hazardous Materials	_____	_____	_____
195.40.35	Transfer of Property to Clearance Status	_____	_____	_____
270.25.03	Secure Lease for Resident Engineer's Office Space or Trailer	<u>1</u>	<u>40</u>	_____
	Subtotal		<u>640</u>	<u>2000</u>

	<u>EXCESS LAND</u>		<u>NOT APPLICABLE</u>	<u>x</u>
195.45.05	Excess Land Inventory	_____	_____	_____
195.45.10	Excess Land Appraisal and Public Sale Estimate	_____	_____	_____
195.45.15	Excess land Inventory ("Roberti Bill)	_____	_____	_____
195.45.20	Excess Land Sales to \$15,000	_____	_____	_____
195.45.25	Excess Land Sales from \$15,001 to \$500,000	_____	_____	_____
195.45.30	Excess Land Sales over \$500,000	_____	_____	_____
195.45.35	CTC and AAC Coordination	_____	_____	_____
	Subtotal		_____	_____


KATHY CASEY
Property Management
Excess Land

TOTAL HOURS (ONLY) _____
Date: 8/4/05



Preliminary Environmental Analysis Report

Project Information

District 08 County SBd Route 62 Kilometer Post (Post Mile) 29.8/55.0 (18.3/34.2) EA 35930

Project Title: Rehabilitate pavement, widen shoulders and add a continuous two-way left-turn lane in and near Twentynine Palms in San Bernardino County

Project Manager Emad Makar Phone # Ext. 4978

Project Engineer Mike Ristic Phone # (951) 232-3507

Environmental (Manager) Office Chief Boniface Udotor Phone # Ext. 1387

Environmental Planner Generalist Carelia Arora Phone # Ext. 7068

Project Description

Description of work: Rehabilitate pavement, widen shoulders and add a continuous two-way left-turn lane from Valley View Circle (PM 18.5) in Joshua Tree to Utah Trail in Twentynine Palms (PM 34.2)

Alternatives: No-build alternative. The No-build alternative would not include the proposed improvements. This project would not do anything to improve areas with regard accidents or enhance safety for the traveling public by bringing the road up to Caltrans current design standards.

Anticipated Environmental Approval

- | <u>CEQA</u> | <u>NEPA</u> |
|---|--|
| <input type="checkbox"/> Categorical/Statutory Exemption | <input type="checkbox"/> Categorical Exclusion |
| <input checked="" type="checkbox"/> Negative Declaration / focused ND | <input checked="" type="checkbox"/> Finding of No Significant Impact |
| <input type="checkbox"/> Environmental Impact Report | <input type="checkbox"/> Environmental Impact Statement |

Environmental Doc. type - the Dept. anticipates that under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) the appropriate environmental document for this project will be an Initial Study/Environmental Assessment (IS/EA). The environmental documentation determination and required technical studies/reports determination will be made when the project is environmentally scoped. Bio - all required Biological studies shall be completed. Cultural - all required Cultural studies shall be completed. Env. Eng. - need to do a Haz. Waste Investigation (ISA), and Noise/Air/Water studies may be required.

PSR Summary Statement

An initial Study/Environmental Assessment (IS/EA) will be required in compliance with Division 13, Public Resources Code (State), and 42 U.S.C. 4332(2) (Federal). A Mitigated Negative Declaration and Finding of No Significant Impact (ND/FONSI) is anticipated.

Anticipated Environmental constraints on this project include but are not limited to those in the following table:

Resource	Study Area / Impact
Endangered Species	This project may affect desert tortoise and/or Little San Bernardino Mountains Gilia within the project limits and will require formal Section 7 consultation with USFWS and 2080.1 concurrences from CA DFG. Approximate mitigation costs have been provided in Attachment A.
Right of Entry Permits	Permission to enter to do environmental surveys needs to be obtained prior to initiating environmental field surveys. Coordination with the Biology unit is necessary to develop the appropriate parcel list in accordance with protocol surveys.
Permits	1602, 401 and 404 permits will be required from the CA DFG, Regional Water Quality Control Board and the Arm Corps of engineers, respectively.
Migratory Bird Treaty Act	No Vegetation can be removed from February 15-September 15. All vegetation removal must be completed outside of the nesting season to avoid project delays associated with nesting birds.

Special Considerations

Permission to enter must be obtained prior to initiating environmental studies. Protocol Tortoise surveys require ½ mile on both sides of the center line and due to the project length could involve many parcels. Coordination with the Biology unit is necessary and should cover all environmental functional unit needs regarding permission to enter. Protocol surveys have to be completed during the appropriate survey season, if permission to enter is not obtained in a timely manner it could result in at least in a one year project delay.

The proposed project may affect the federally and state threatened desert tortoise and the federal candidate species Little San Bernardino Mountains Gilia. A plant survey will be required (one survey between March and April). Desert tortoise presence/absence survey will be required (one survey between March 25 and May 31). Temporary desert tortoise fencing will need to be installed for the length of the project. A desert tortoise monitor will be required for pre-construction sweeps and fence installation/removal.

The project may also impact Waters of the State and Waters of the US, which will require water related permits. Vegetation removal will also be required for the project, which may include the removal of Joshua Trees. Joshua trees will need to be replanted within the proposed right-of-way. Removal of any trees should occur outside the bird nesting season (February 15 to September 1).

Anticipated Project Mitigation (for standard PSR only)

Desert tortoise presence/absence survey (if performed by consultant) = \$20,000

Plant survey (if performed by consultant) = \$10,000

28 acres desert tortoise habitat @ 1:1 = 28 acres @ \$1000/acre = \$28,000

Enhancement/Endowment fees for desert tortoise @ \$295/acre for 28 acres = \$8,260

Temporary desert tortoise fence for 22.4 miles (118,272 feet) @ \$5 a linear foot = \$591,360

Desert tortoise monitor: pre-sweep and fence installation/removal @ \$1000/day for 90 days = \$90,000

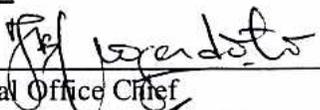
If no fence, a monitor may be required for a longer period of time

Water related permits and other mitigation costs (revegetation) = \$50,000

Disclaimer

This report is not an environmental document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in this report. The estimates and conclusions provided are approximate and are based on cursory analysis of probable effects. This report is to provide a preliminary level of environmental analysis to supplement the Project Study Report. Changes in project scope, alternatives, or environmental laws will require a re-evaluation of this report.

Reviewed by:



Environmental Office Chief

Date: 8-24-05



Project Manager

Date: 8/24/05

Environmental Technical Reports or Studies Required

	Study	Document	N/A
Community Impact Study	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Farmland	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Section 4(f) Evaluation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Visual Resources	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floodplain Evaluation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noise Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air Quality Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paleontology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wild and Scenic River Consistency	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cumulative Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Storm Water Data Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cultural			
ASR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
HRER-Archaeology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HRER-Architecture	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HPSR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Section 106 / SHPO	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Native American Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Paleontology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 4(f) Evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visual Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other			
Finding of Effect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data Recovery Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Waste			
ISA (Additional)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PSI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biological			
Endangered Species (Federal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Endangered Species (State)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Species of Concern (CNPS, USFS, BLM, S, F)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Biological Assessment (USFWS, NMFS, State)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Invasive Species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural Environment Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NEPA 404 Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
Permits			
401 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
404 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1601 Permit Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
City/County Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NPDES Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
US Coast Guard (Section 10)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Caltrans Permit (NPDES)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Already issued)			
General Permit (NPDES)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Already issued)			

Discussion of Technical Review

Socio-economic and Community Effects. Based on the information provided for the PEAR not impacts to the community are anticipated at this time. If after further design/project development it is determined that detours and/or road closures are required a community impact assessment may be required.

Farmlands. Based on the information provided for the PEAR no impacts to farmlands or Williamson Act lands are anticipated at this time.

4(f) Impacts. Based on the information provided for the PEAR no 4(f) resources have been identified at this time. If after further design/project development 4(f) resources are identified a 4(f) evaluation will be required and may require the development of another alternative that avoids all 4(f) resources.

Visual Effects. The route within project limits is eligible for designation as a State Scenic Highway. All alternatives are anticipated to have similar visual effects. A brief visual analysis will be required to evaluate visual effects of widening, drainage improvements and utility pole relocation, as well as determine whether there is a cumulative visual impact from an adjacent project with a similar scope (EA 08-35910). Removal of Joshua trees may be a sensitive issue; they are prominent visual markers for this region. [50 hours should be requested for this project for landscape under WBS Code 165]

Water Quality and Erosion. The Caltrans Statewide Storm Water Management Plan (SWMP) requires Project Development personnel to assess the need for storm water Best Management Practices (BMPs) and incorporate these BMPs as appropriate during the initial planning and design phases for all Caltrans projects. A Storm Water Data Report (SWDR) is a planning document to aid in determining if Treatment or Design Pollution Prevention BMPs should be incorporated into a project. The SWDR form in Appendix E of the Storm Water Project Planning and Design Guide should be completed; if it is determined that Treatment or Design Pollution Prevention BMPs are appropriate and feasible, preliminary design should be performed to determine size and location. Costs and additional R/W (for BMPs) will also be considered at this time. This information should be included in the Preliminary Environmental Analysis Report (PEAR).

The site should be evaluated for potential water quality impacts associated with the project. If site dewatering is required for new construction, a dewatering plan is required. Site access for construction must be included in any water quality analysis.

Floodplain. A portion of the proposed construction lies within a Flood Plain Zone A, as shown on FEMA Plate 8145, San Bernardino County Unincorporated Areas. This flood plain is shown as approximately one-half mile width, and centered around the Quail Wash Bridge at Post Mile 18.94. The proposed construction crosses the flood plain transversely, and should have no impact on the water surface elevation. Even so, if any of the regulatory agencies should require a flood plain study, probably 150 to 200 staff hours should be budgeted for its preparation, submittals, and revisions to comply with plan check comments.

Air. The project scope includes pavement rehabilitation and shoulders widening and adding a continuous two-way left turn lane. Based on the discussions regarding continuous left turn lane with the Design Engineer it was clarified that the left turn lane will be provide at needed intersections and consequently this project falls under the category "Intersection Channelization

Projects” Table 2 of CO Protocol. This project is exempt from Regional Emissions Analysis but needs Project-level Air Quality Analysis per Transportation Conformity Rule requirements (40 CFR Parts 51 and 93, as amended August 15, 1997 and July 1, 2004).

Noise. This project was reviewed by the District 8 Environmental Engineering Branch on July 27, 2005. Since this project is not a “Type 1 project,” no noise study is required.

Wild and Scenic River. A review of the National Wild and Scenic Rivers System Database and the California Wild and Scenic Rivers Database indicate there are no designated rivers within the project limits as of 7/7/2006. The databases should be reviewed again during the environmental process to ensure no new rivers within the project are have been designated.

Cultural Resources. An archeological survey will be required for the project. The proposed Area of Potential Effect (APE) must include all access roads, work areas and staging areas beyond the existing paved highway. Any subsequent changes in project scope may require additional archaeological or historical review. It is assumed that all work will be performed within the right of way. Time and cost estimates are assuming only minimal archaeological findings.

Native American Coordination. Native American coordination will be necessary for this project.

Hazardous Waste/Materials. An Initial Site Assessment (ISA) completed 7/27/05. The risk ranking for this project is low risk. When the new right of way is defined additional ISA work needed to determine if there is a need to perform an Environmental Site Assessment due to the acquisition of new right of way. May need to perform an Environmental Site Assessment to determine if new right of way acquisition will impact potential hazardous waste areas.

Biological Resources.

Assumptions made:

- All right-of-way to be acquired is desert tortoise habitat
- No detours off the existing pavement required
- All parking and staging areas are within the proposed footprint
- 10 feet of widening (eight foot shoulders and two feet of grading for side slopes) in each direction throughout length of project

The proposed project may affect the federally and state threatened desert tortoise and the federal candidate species Little San Bernardino Mountains Gilia. A plant survey will be required (one survey between March and April). Desert tortoise presence/absence survey will be required (one survey between March 25 and May 31). Temporary desert tortoise fencing will need to be installed for the length of the project. A desert tortoise monitor will be required for pre-construction sweeps and fence installation/removal.

The project may also impact Waters of the State and Waters of the US, which will require water related permits. Vegetation removal will also be required for the project, which may include the removal of Joshua Trees. Joshua trees will needed to be replanted within the proposed right-of-way. Removal of any trees should occur outside the bird nesting season (February 15 to September 1).

Wetlands. There are no wetlands anticipated to occur within the footprint of this project.

Invasive Pest Plant Species. Executive Order 13112 requires that any Federal action may not cause or promote the spread or introduction of invasive species. Measures need to be implemented to ensure that the spread of invasive species is avoided.

Right-of-Way Relocation or Staging Area. New Right-of-Way is indicated for this project. New right of way, construction easements/access, material sites or disposal sites required for the proposed project must be identified prior to initiating environmental studies. All of these areas will require complete environmental evaluation as part of this project.

Mitigation. Mitigation for temporary and permanent effects to desert tortoise will be required for this project. The following is a preliminary mitigation cost estimate for the project using the information that is currently available.

Area of disturbance is assumed to be 10 feet on each side (includes 8 foot shoulders and 2 feet of grading for side slopes) for the length of the project, excluding two areas where no widening will occur. The areas from PM 25.3 to 29.0 and PM 32.7 to 33.5 were not included in the area of disturbance calculation. The total length of project included is approximately 11.2 miles. For this PEAR, it has to be assumed that all of the area that will be disturbed is desert tortoise habitat.

11.2 miles (59,136 feet) x 20 feet = 1,182,720 square feet = 27.2 acres

Desert tortoise presence/absence survey (if performed by consultant) = \$20,000

Plant survey (if performed by consultant) = \$10,000

28 acres desert tortoise habitat @ 1:1 = 28 acres @ \$1000/acre = \$28,000

Enhancement/Endowment fees for desert tortoise @ \$295/acre for 28 acres = \$8,260

Temporary desert tortoise fence for 22.4 miles (118,272 feet) @ \$5 a linear foot = \$591,360

Desert tortoise monitor: pre-sweep and fence installation/removal @ \$1000/day for 90 days = \$90,000 *If no fence, a monitor may be required for a longer period of time*

Water related permits and other mitigation costs (revegetation) = \$50,000

Total cost = \$797,620

Permits.

Water related permits:

1602 Streambed Alteration Agreement – California Department of Fish and Game

401 Water Certification – Lahontan Regional Water Quality Control Board

Section 404 of the Clean Water Act Permit– Army Corps of Engineers

Species Related Permits:

Endangered Species Act Section 7 Consultation– United States Fish and Wildlife Service

Section 2080.1 Consistency Determination – California Department Fish and Game

Coastal Zone. The proposed project is not within any coastal zone.

List of Preparers

Hazardous Waste Review by	Rosanna Roa	Date 7/27/05
Biological Review by	Lindsay Leichtfuss	Date 8/12/05
Cultural Review by	Kurt Heidelberg	Date 8/12/05
Community Impact Review	Jason Walsh	Date 8/23/05
Visual Review by	Cathy Jochai	Date 7/18/05
Floodplain Review by	Roy King	Date 7/19/05
Water Quality and Erosion by	Alan Nakano	Date 7/21/05
Air Quality Review by	Edison Jaffery	Date 8/19/05
Noise Review by	Mike Goodhue	Date 7/26/05

Attachment A - PEAR Mitigation and Compliance Cost Estimate

Dist.-Co.-Rte.-KP/PM:08-Sbd-62-29.8/55.0 (18.3/34.2) EA: 35930K

Project Description: Rehabilitate pavement, widen shoulders and add a continuous two-way left-turn lane in and near Twentynine Palms in San Bernardino County

Person completing form/Dist. Office.: Jason Walsh

Project Manager: Emad Makar Phone number: Ext. 4978

Date: 8/24/05

	Mitigation			Compliance
	Project Feature ¹	Enviro. Obligation ²	Statutory Require. ³	Permit & Agreement ⁴
Fish & Game 1601 Agreement				5
Coastal Development Permit				
State Lands Agreement				
NPDES Permit				
COE 404 Permit- Nationwide				5
COE 404 Permit- Individual				
COE Section 10 Permit				
COE Section 9 Permit				
Other:				
BMPS		400		
Noise attenuation				
Special landscaping				
Archaeological				
Biological		800		
Historical				
Scenic resources				
Wetland/riparian				
Other:				
Visual	100			
TOTAL (Enter zeros if no cost)	100	1,200	0	10

- Costs are to be reported in \$1,000's.
- Costs are to include all costs to complete the commitment including: 1) capital outlay and staff support; 2) cost of right-of-way or easements; 3) long-term monitoring and reporting; and 4) any follow-up maintenance.

¹ Mitigation that Caltrans would normally do if not required by a permit or environmental agreement.

² Mitigation that Caltrans would not normally do but is required by conditions of a permit or environmental agreement.

³ Mitigation that Caltrans would not normally do and is not required by a permit or Enviro. Agreement, but is required by a law.

⁴ Non-mitigation Caltrans would not normally do but is required by conditions of a permit or agreement.

*Prepare a separate form for each practicable alternative in the PSR.

WBS Task Activity Code	Senior/Gen	Env. Mgt.	Senior/ Biology	Senior/ Cultural	Noise/Air/Haz Waste	NPDES Work by Design	Storm Water	Hydrology	Land scape	Total
160.10.20 - Prepare Draft Project Report	10									10
160.15.05 - Prepare Cost Est. for Alternatives						10	5			15
160.15.25 - Circ. Rev & App Draft PR	10	5	10							25
160.30 - Dev Env. Study Request/Obtain Rights	5	10								15
Total Perf Pre Eng Studies	85	15	10	-	-	150	35	-	-	295
Perform Environmental Studies and Prepare Draft Environmental Document										
165.05 - Perform Env. Scoping & Select Alter. Fx	50									50
165.05.05 - Rev Project Information	10	25	10							45
165.05.10 - Pub & Agency Scoping	10	5								15
165.05.15 - Select Alt for Fut Study	15	5								20
165.05.20 - Maps for Env Evaluation	5									5
165.10 - Perform General Env. Studies	10									10
165.10.05 - Surveys & Map for Study										-
165.10.10 - Obtain Rights of Entry	10									10
165.10.15 - CIA, Land Use & Growth	50									50
165.10.20 - Perform Visual Impact Analysis	10								50	60
165.10.25 - Noise Study	10									10
165.10.30 - Air Quality Study	10				350					360
165.10.35 - Water Quality Studies	10					10	20			40
165.10.40 - Energy Studies	10									10
165.10.45 - Sum Geotech Report	20									20
165.10.50 - Site Investigation HW	10				100					110
165.10.60 - Prepare Floodplain Evaluation	10							200		210
165.10.65 - Paleontology Study										-
165.15 - Perform Biological Studies	5									5
165.15.05 - Biological Assessment	20		720							740
165.15.05 - Update Preliminary Project Cost Est. (Stormwater)										-
165.15.10 - Wetlands Study	10									10
165.15.15 - Resource Agency Coord	10		240							250
165.15.20 - NES Report	10		480							490
165.20 - Perform Cultural Resource Studies										-
165.20.05 - Archaeology Survey				300						300
165.20.05.05 - Prepare APE/Study Area Map										-
165.20.05.10 - Conduct NA Consultation										-
165.20.05.15 - Perform Records Search										-
165.20.05.20 - Conduct Field Survey										-
165.20.05.25 - Prepare ASR										-
165.20.10 - Perform Extended Phase 1 Archy Studies				300						300
165.20.10.05 - Conduct NA Consultation										-
165.20.10.10 - Prepare Extended Phase I Proposal										-
165.20.10.15 - Conduct Field Investigation										-
165.20.10.20 - Analyze Materials										-
165.20.10.25 - Prepare Report										-
165.20.15 - Phase II Archy Studies										-
165.20.15.05 - Conduct NA Consultation										-
165.20.15.10 - Prepare Phase II Proposal										-
165.20.15.15 - Conduct Field Investigation										-
165.20.15.20 - Analyze Materials										-
165.20.15.25 - Prepare Report										-
165.20.20 - Hist & Architect Studies				240						240
165.20.20.05 - Prepare Prelim APE/SAM										-
165.20.20.10 - Prep Hist Res Eval Rpt - Archy										-
165.20.20.15 - Prep Hist Res Eval Rpt - Arct										-
165.20.20.20 - Prepare Bridge Evaluation										-
165.20.25 - Cultural Res Comp Docs										-
165.20.25.05 - Prepare Final APE Maps										-
165.20.25.10 - Perform PRC 5024.5 Consult										-
165.20.25.15 - Prep HPSR/Det Eltg/HRCR										-
165.20.25.20 - Prep Finding of Effect										-
165.20.25.25 - Prep Archy Data Recovery Plan										-
165.20.25.30 - Prepare MOA										-
Perform Environmental Studies and Prepare Draft Environmental Document (Continued)										
165.25 - Prepare & Approve DED	50									50
165.25.05 - Prepare DED	800	10								810
165.25.10 - 4(f) Evaluation	75									75
165.25.15 - CE/CE Determination										-
165.25.20 - Peer & Other Reviews	100		40	40						180
165.25.25 - Obtain Approval to Circ	100									100
165.25.30 - Perform Env Coordination	100									100
Total Env Studies & Prep DED	1,530	45	1,490	880	450	10	20	200	50	4,675
Circulate Draft Environmental Document and Select Preferred Project Alternative										
175.05 - Circulate DED	300									300
175.05.05 - Master Dist & Inv Lists	20		4							24
175.05.10 - Not Pub Hear & Avail	10		4							14

WBS Task Activity Code	Senior/Gen	Env. Mgt.	Senior/ Biology	Senior/ Cultural	Noise/Air/Haz Waste	NPDES Work by Design	Storm Water	Hydrology	Land scape	Total
175.05.15 - Pub & Circulate DED	150	10								160
175.05.20 - Fed Const Del (Coastal)										-
175.10 - Public Hearing	40									40
175.10.05 - Need for Pub Hearing	10									10
175.10.10 - Pub Hearing Logistics	50									50
175.10.15 - Displays for Pub Hearing	50		30							80
175.10.20 - Not Pub Hear & Avail	20									20
175.10.25 - Review Map Displays	10		5							15
175.10.30 - Display Pub Hear Maps	10									10
175.10.35 - Hold Public Hearing	10		10							20
175.10.40 - Dist Rec or Pub Hearing	100									100
175.15 - Res to Pub Hear Comments	200									200
175.20 - Select Preferred Alternative	20									20
Total DED & Preferred Alt	1,000	18	45	-	-	-	-	-	-	1,063
Prepare and Approve Project Report and Final Environmental Document										
180.05 - Prepare and Approve PR						30	10			40
180.05.05 - Update Draft PR										-
180.05.10 - Rev & App Project Rep	5	6	10			30	10			61
180.10.05 - Prep & Approve FED	300	4								304
180.10.05.05 - Circulate for Review	110		20							130
180.10.05.10 - Rev due to Review Comments	75									75
180.10.05.15 - Section 4(f) Evaluation	50									50
180.10.05.20 - Findings Report										-
180.10.05.25 - Statement of Overriding Consid										-
180.10.05.30 - Prepare CEQA Certification	20									20
180.10.05.35 - FHWA and Approval	300									300
180.10.05.40 - Section 106 Cons & MOA										-
180.10.05.45 - Conduct Section 7 Consult			40							40
180.10.05.50 - Finalize Section 4(f) Statement	40									40
180.10.05.55 - Prep Floodplain Only PAF										-
180.10.05.60 - Prep Wetlands Only PAF										-
180.10.05.65 - Coord Section 404 Permit										-
180.10.05.70 - Finalize Mitigation Measures			40							40
180.10.10 - Public Dist of FED										-
180.10.10.05 - Resp to Comments on FED										-
180.15 - Complete Environmental Compliance										-
180.15.05 - Prep & App ROD (NEPA)	50									50
180.15.10 - Prep & File NOD (CEQA)	40									40
180.15.20 - Prep/Update Env Commitments	40	10	15							65
185.05 - Review/Update Information (30% Const	20									20
185.05.05 - 30% Constructability Review	10									10
185.05.10 - Rev. and Appr Project Report	10									10
185.15 - Perform Preliminary Design						100	50			150
185.20 - Obtain Engineering Reports						20	10			30
Total App PR & FED	1,070	20	125	-	-	180	80	-	-	1,475
Coordinate Utilities										
200.00 - Obtain Necessary Storm Water Permits	10									10
200.15 - Utility Conflict Resolution										-
Total Coordinate Utilities	10	-	-	-	-	-	-	-	-	10
Obtain Permits, Agreements and Route Adoptions										
205.00 - Obtain Necessary SW Permits/Agmts		15				20	20			55
205.05 - Determine Required Permits										-
205.10 - Obtain Permits										-
205.10.05 - Army Corp Permit (404)										-
205.10.10 - USFS Permit										-
205.10.15 - US Coast Guard Permit										-
205.10.20 - DFG Permit (1601/1603)										-
205.10.25 - Coastal Dev Permit										-
205.10.30 - Loc Agcy Concurrence										-
205.10.40 - Waste Dischg (NPDES)										-
205.10.45 - USFWS Approval										-
205.10.50 - RWQCB Permit (401)										-
205.10.60 - Update Summary of Env Commit										-
205.10.95 - "Other" Permits										-
205.15 - Railroad Agreements										-
205.20.05 - Draft Fwy Agreement										-
205.20.10 - Review Draft Fwy Agree										-
205.20.15 - Prep Final Fwy Agree										-
205.20.20 - Execute Fwy Agreement										-
205.25 - Prep Agreement for Material Sites	10									10
205.35.05 - Prep & Exc Coop for Env	20	8								28
205.40.10 - New Conn & Rte Adopt										-
205.45 - MOU from TERO										-
Total Permits, Agree & Rte	30	23	-	-	-	20	20	-	-	93

WBS Task Activity Code	Senior/Gen	Env. Mgt.	Senior/ Biology	Senior/ Cultural	Noise/Air/Haz Waste	NPDES Work by Design	Storm Water	Hydrology	Land scape	Total
Prepare Draft PS&E										
230.05 - Prepare Draft Roadway Plans										-
230.00 - Prepare Draft PS & E	20		20			200	40			280
230.05.85 - Prepare Water Pollution Control Plans (SWPPP)										-
230.10.05 - Prepare Hwy Planting Plans										-
230.10.15 - Prepare Plant List										-
230.35 - Prepare Draft Specifications	20		20			40	10			90
230.35.10 - Dev Hwy Planting Specs										-
230.35.35 - Dev Water Poll Ctrl Specs										-
230.35.40 - Dev Erosion Control Specs										-
230.30.60 - Rev & Updt Proj Info Draft PS&E										-
230.40 - Prepare Draft Estimate						10	5			15
230.60 - Storm Water Data Report						40	20			60
Total Prepare Draft PS&E	40	-	40	-	-	290	75	-	-	445
Mitigate Environmental Impacts and Clean-up Hazardous Waste										
235.05 - Perform Env. Mitigation										-
235.05.05 - Hist Structures Mig										-
235.05.10 - Archy & Cult Mitigation (Phase III/HRHP)										-
235.05.15 - Biological Mitigation			240							240
235.05.20 - Perform Env Mit R/W		6								6
235.05.25 - Paleontology Mitigation										-
235.10.10 - Surveys to Locate HW					70					70
235.10.15 - Conduct Detailed Invest					70					70
235.15 - Dev HW Management Plan					70					70
235.20 - Prepare HW PS&E					10					10
235.25 - Perform HW Clean-up					70					70
235.30 - Certify Freedom of HW										-
235.35 - Long Term Mitigation Mon										-
Mitigate Environmental Impacts and Clean-up Hazardous Waste (Continued)										
235.40 - Update Summary of Env Commit	10									10
Total Mitigation & HW Clean-up	10	6	240	-	-	-	-	-	-	546
Circulate, Review and Prepare Final District PS&E Package										
255.05 - Circ & Rev Draft Dist PS&E	10	4	10							24
255.10.25 - Update Technical Reports										-
255.15 - Env Reevaluation	100	6	40							146
255.20 - Final District PS & E						10	10			20
255.20.05 - Rev Plans for Stds Comp										-
255.40 - Prep Res Envs File	10		10							20
Total PG&E	120	10	60	-	-	10	10	-	-	210
Prepare Contract Documents										
260.15.15 - Env Cert of RTL	10	4	10							24
Total Prepare Contract Documents	10	4	10	-	-	-	-	-	-	24
Perform Construction Engineering and General Contract Administration										
270.05 - Prepare Resident Engineer's File						40	10			50
270.20.XX.50 - Technical Support		4								4
270.50 - Cert of Comp with Mit Req		4								4
270.55 - Perf Final Inspect & Rec Accept										-
270.70 - Update Summary of Env Commit	-	2								2
Total Const Engineering		10	-	-	-	40	10	-	-	60
Prepare and Administer Contract Change Orders										
285.05.XX.05 - Det Need for CCO										-
285.10.XX.95 - Prov Other Func Support	-									-
Total CCOs		-	-	-	-	-	-	-	-	-
Resolve Contract Claims										
290.35 - Provide Technical Support	-									-
Total Contract Claims		-	-	-	-	-	-	-	-	-
Accept Contract, Prepare Final Construction Estimate & Prepare Final Report										
295.35 - Prep Cert of Env Compliance	-	4								4
Total Final Construction		4	-	-	-	-	-	-	-	4
Total Project Hours	4,000	388	2,050	880	470	1,040	500	200	50	9,848

Long Form - Storm Water Data Report



Dist-County-Route: 08-SBD-62
Kilometer Post (Post Mile) Limits: KP 29.8/55.0
(PM 18.5/34.2)
Project Type: Pavement Rehab and Widen Shoulders
EA: 35930K
RU: 08-228
Program Identification: HA22 (201.120)
Phase: X PID PA/ED PS&E

Regional Water Quality Control Board(s): Colorado River Basin

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: 11.0 Hectares

Estimated: Construction Start Date: 2010/2011 Construction Completion Date: 2010/2011

Notification of Construction (NOC) Date to be submitted: 30 days prior to construction (minimum)

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

Separate Dewatering Permit (if Yes, permit number) Yes Permit # 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.

S. Cristina Paredes
S. Cristina Paredes, Registered Project Engineer

8/23/05
Date

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

E. Makar, Project Manager 8/24/05 Date

Jim Dodd, Designated Maintenance Representative 8/24/05 Date

Ray Desselle, Designated Landscape Architect Representative 8/24/05 Date

Paul Lambert, District/Regional SW Coordinator or Designee 8/24/05 Date

STAMP
[Required for PS&E only]

STORM WATER DATA INFORMATION

1. Project Description

- This project is located on State Route 62 in San Bernardino County from Valley View Circle (PM18.5) to Utah Trail in Twentynine Palms (PM34.2). It is proposed to rehabilitate the existing four-lane highway of Route 62 in San Bernardino County from Valley View Circle to Utah Trail. The project primarily consists of an asphalt concrete overlay and will include digging out and repairing localized areas of severe failure and widening shoulders where necessary. Striping for a continuous two way left turn lane (CTWLTL) will be provided where existing pavement is wide enough.
- Total disturbed soil area (DSA) will be approximately 11.0 hectares. DSA was calculated by accounting for the new paved area. This assumes 2.5m (8 feet) shoulders on each side and 0.61m (2 feet) of grading side slopes.
- The project limits do not fall within an urban MS4.

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

- There are no receiving water bodies within the project limits that may be affected by the project. There are no 303(d) listed water bodies within the project limits. The project does not cross a "high risk area".
- The Colorado River Basin Regional Quality Control Board (RWQCB) has jurisdiction within the project limits. There are no RWQCB special requirements, TMDLs or effluent limits.
- There are no seasonal construction dates or construction work restrictions. A 401 certification is not required. The "Rainy Season" is defined by Caltrans Statewide Storm Water Management Plan as being from August 1 through October 1st and November 1st through May 1st. The annual rainfall is 10.9 cm/year (4.3 in/year). The average maximum temperature is 84°F, the average minimum temperature is 52°F (see climate summary). There are no contaminated or hazardous soils within the project area. Total disturbed area is 11.0 hectares.
- The topography of the site is nearly level to gentle sloping. There are no slope stabilization concerns since slopes will be 1:2 or flatter.
- No additional right of way will be required to construct this project or will be required to design, construct or maintain BMPs.
- A right-of-way certification will be required.
- A determination of additional costs for right-of-way will not be required.
- Land use adjacent to the project area is open space.
- There is no dry weather flows.
- There are no existing treatment BMPs.
- Due to the scope of work, the project cannot be realigned or relocated. There are no structures being built over live streams. Erosion will be minimized by only disturbing slopes when necessary and collecting concentrated flows into stabilized drains or channels. Since no slopes are being constructed, minimizing of cuts or fills, constructing retaining walls, acquiring grading easements, flattening slopes, constructing benches, slope rounding will not be necessary. The design will allow for ease of maintenance of BMPs. The project will not be phased to minimize soil-disturbing activities during the rainy season. Permanent BMPs will be installed early in the construction process to provide additional protection during construction.

3. Regional Water Quality Control Board Agreements

- There are no negotiated understandings or agreements with the Colorado River Basin RWQCB pertaining to this project. As stated on the Evaluation Documentation Form, this project is not required to consider permanent treatment BMPs.



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

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

- The project will not increase the velocity and volume of downstream flow within the project limits.
- Existing condition has minimal effect on downstream flow.
- Project will not discharge to unlined channels.
- There will be no hydraulic changes.

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

- The project does not require measures to provide slope and surface protection.

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

- This project does not require installation of concentrated flow conveyance systems.

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

- Project will maximize preservation of existing vegetation by minimizing clearing and grubbing. There are no environmentally sensitive areas.

5. Describe Proposed Permanent Treatment BMPs to be used on the Project

- This project is not required to consider Treatment BMPs. See attached Evaluation Documentation form.

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

- It is anticipated that a Storm Water Pollution Prevention Plan (SWPPP) will be required.
- Coordination with Construction will be done to determine the appropriate Construction Site BMPs to implemented into the contract.
- Construction BMPs will be designated as a separate bid line item at the PS&E phase.
- No pertinent details are known that will impact the strategy used for estimating Construction Site BMPs.
- The SWDR for the PS&E phase will be reviewed by the Construction NPDES unit for their concurrence.

7. Maintenance BMPs (Drain Inlet Stenciling)

- Not applicable to the proposed project.

ATTACHMENTS

- ⇒ Vicinity Map
- ⇒ Evaluation Documentation Form (EDF)
- ⇒ United States Geological Survey Quad Map
- ⇒ Intensity-Duration Frequency Curve and Table
- ⇒ Climate Summary
- ⇒ Checklist SW-1, Site Data Sources
- ⇒ Checklist SW-2, Storm Water Quality Issues Summary
- ⇒ Checklist SW-3, Measures for Avoiding or Reducing Potential Storm Water BMPs
- ⇒ Checklists DPP-1, Parts 1& 5



APPENDIX E

Evaluation Documentation Form

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

DATE: 08/17/05

EA: 35930K

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EXEMPTION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	✓		Go to 2
2.	Is this an emergency or Safety project?		✓	If Yes , go to 12. (Safety Projects must be funded from the 010 SHOPP Program). If No , continue to 3.
3.	Have TMDLs been established for surface waters within the project limits?		✓	If Yes , contact the District/Regional NPDES coordinator to discuss the Department's participation in the TMDL (if Applicable), go to 11 or 4 (as determined by the NPDES Coordinator). _____ (Dist./Reg. SW Coordinator initials) If No , continue to 4.
4.	Is the project within an urban MS4?		✓	If Yes , continue to 5. (<u>write the MS4 Area here</u>) If No , go to 12.
5.	Is the project directly or indirectly discharging to surface waters?			If Yes , continue to 6. If No , go to 12.
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.	Is the Disturbed Soil Area (DSA) created by the project <u>greater than or equal to 1.2 hectares?</u>			If Yes , continue to 11. If No , go to 9. _____ (Total DSA quantity)
9.	Is the project part of a Common Plan of Development?			If Yes , continue to 11. If No , go to 10.
10.	Are there any Pollution Control Requirements within the project limits? (<i>Contact your Dist./Reg. SW Coordinator</i>)			If Yes , continue to 11. If No , go to 12.
11.	Consider approved Treatment BMPs for the project.			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.
12.	Project is not required to consider Treatment BMPs. <i>[Signature]</i> (Dist./Reg. SW Coord. Initials) <i>[Signature]</i> (Project Engineer Initials) <i>8/23/05</i> (Date)	✓		Document for Project Files by completing this form, and attaching it to the SWDR.
13	End of checklist	✓		



Checklist SW-1, Site Data Sources

Prepared by: Cristina Paredes Date: 08/18/05 District-Co-Route: 08-SBd-62
 KP (PM): 29.8/55.0 (PM 18.5/34.2) EA: 35930K
 RWQCB: Colorado

Information for the following data categories should be obtained, reviewed and referenced as necessary throughout the project planning phase. Collect any available documents pertaining to the category and list them and reference your data source. For specific examples of documents within these categories, refer to Section 5.5 of this document. Example categories have been listed below; add additional categories, as needed. Summarize pertinent information in Section 2 of the SWDR.

DATA CATEGORY/SOURCES	Date
Topographic	
• United States Geological Survey (USGS) Quad Maps	8/18/05
•	
•	
Hydraulic	
• Rainfall Intensity Curves	8/18/05
• United States Geological Survey (USGS) Quad Maps	8/18/05
• http://wdl.water.ca.gov/gw/admin/main_menu_gw.asp	8/18/05
Soils	
• Hydrologic Soil Map	8/18/05
•	
•	
Climatic	
• http://www.wrcc.dri.edu/CLIMATEDATA.html	8/18/05
•	
•	
Water Quality	
• http://www.stormwater.water-programs.com	8/18/05
• Basin Plan-Colorado RWQCB	8/18/05
•	
Other Data Categories	
•	
•	
•	
•	
•	
•	
•	

Checklist SW-2, Storm Water Quality Issues Summary

Prepared by: Cristina Paredes Date: 08/18/05 District-Co-Route: 08-SBd-62
 KP (PM): 29.8/55.0 (PM 18.5/34.2) EA: 35930K
 RWQCB: Colorado

The following questions provide a guide to collecting critical information relevant to project storm water quality issues. Complete responses to applicable questions, consulting other Caltrans functional units (Environmental, Landscape Architecture, Maintenance, etc.) and the District/Regional NPDES Coordinator as necessary. Summarize pertinent responses in Section 2 of the SWDR.

- | | | |
|--|--|--|
| 1. Determine the receiving waters that may be affected by the project throughout the project life cycle (i.e., construction, maintenance and operation). | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> NA |
| 2. For the project limits, list the 303(d) impaired receiving water bodies and their constituents of concern. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 3. Determine if there are any High Risk Areas (municipal or domestic water supply reservoirs or groundwater percolation facilities) within the project limits. Consider appropriate spill contamination and spill prevention control measures for these new areas. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 4. Determine the RWQCB special requirements, including TMDLs, effluent limits, etc. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 5. Determine regulatory agencies seasonal construction and construction exclusion dates or restrictions required by federal, state, or local agencies. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 6. Determine if a 401 certification will be required. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 7. List rainy season dates. | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> NA |
| 8. Determine the general climate of the project area. Identify annual rainfall and rainfall intensity curves. | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> NA |
| 9. If considering Treatment BMPs, determine the soil classification, permeability, erodibility, and depth to groundwater. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 10. Determine contaminated or hazardous soils within the project area. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 11. Determine the total disturbed soil area of the project. | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> NA |
| 12. Describe the topography of the project site. | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> NA |
| 13. List any areas outside of the Caltrans right-of-way that will be included in the project (e.g. contractor's staging yard, work from barges, easements for staging, etc.). | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 14. Determine if additional right-of-way acquisition or easements and right-of-entry will be required for design, construction and maintenance of BMPs. If so, how much? | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 15. Determine if a right-of-way certification is required. | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> NA |
| 16. Determine the estimated unit costs for right-of-way should it be needed for Treatment BMPs, stabilized conveyance systems, lay-back slopes, or interception ditches. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |
| 17. Determine if project area has any slope stabilization concerns. | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> NA |
| 18. Describe the local land use within the project area and adjacent areas. | <input checked="" type="checkbox"/> Complete | <input type="checkbox"/> NA |
| 19. Evaluate the presence of dry weather flow. | <input type="checkbox"/> Complete | <input checked="" type="checkbox"/> NA |



Checklist SW-3, Measures for Avoiding or Reducing Potential Storm Water Impacts

Prepared by: Cristina Paredes Date: 08/18/05 District-Co-Route: 08-SBd-62
 KP (PM): 29.8/55.0 (PM 18.5/34.2) EA: 35930K
 RWQCB: Colorado

The PE must confer with other functional units, such as Landscape Architecture, Hydraulics, Environmental, Materials, Construction and Maintenance, as needed to assess these issues. Summarize pertinent responses in Section 2 of the SWDR.

Options for avoiding or reducing potential impacts during project planning include the following:

1. Can the project be relocated or realigned to avoid/reduce impacts to receiving waters or to increase the preservation of critical (or problematic) areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions? Yes No NA
2. Can structures and bridges be designed or located to reduce work in live streams and minimize construction impacts? Yes No NA
3. Can any of the following methods be utilized to minimize erosion from slopes:
 - a. Disturbing existing slopes only when necessary? Yes No NA
 - b. Minimizing cut and fill areas to reduce slope lengths? Yes No NA
 - c. Incorporating retaining walls to reduce steepness of slopes or to shorten slopes? Yes No NA
 - d. Acquiring right-of-way easements (such as grading easements) to reduce steepness of slopes? Yes No NA
 - e. Avoiding soils or formations that will be particularly difficult to re-stabilize? Yes No NA
 - f. Providing cut and fill slopes flat enough to allow re-vegetation and limit erosion to pre-construction rates? Yes No NA
 - g. Providing benches or terraces on high cut and fill slopes to reduce concentration of flows? Yes No NA
 - h. Rounding and shaping slopes to reduce concentrated flow? Yes No NA
 - i. Collecting concentrated flows in stabilized drains and channels? Yes No NA
4. Does the project design allow for the ease of maintaining all BMPs? Yes No
5. Can the project be scheduled or phased to minimize soil-disturbing work during the rainy season? Yes No
6. Can permanent storm water pollution controls such as paved slopes, vegetated slopes, basins, and conveyance systems be installed early in the construction process to provide additional protection and to possibly utilize them in addressing construction storm water impacts? Yes No NA

**Design Pollution Prevention BMPs
Checklist DPP-1, Part 1**

Prepared by: Cristina Paredes Date: 08/18/05 District-Co-Route: 08-SBd-62
 KP (PM): 29.8/55.0 (PM 18.5/34.2) EA: 35930K
 RWQCB: Colorado

Consideration of Design Pollution Prevention BMPs

1. Consideration of Downstream Effects Related to Potentially Increased Flow [to streams or channels]?

- (a) Will project increase velocity or volume of downstream flow? Yes No NA
- (b) Will the project discharge to unlined channels? Yes No NA
- (c) Will project increase potential sediment load of downstream flow? Yes No NA
- (d) Will project encroach, cross, realign, or cause other hydraulic changes to a stream that may affect downstream channel stability? Yes No NA

If Yes was answered to any of the above questions, consider **Downstream Effects Related to Potentially Increased Flow**, complete the DPP-1, Part 2 checklist.

2. Slope/Surface Protection Systems

- (a) Will project create new slopes or modify existing slopes? Yes No NA

If Yes was answered to the above question, consider **Slope/Surface Protection Systems**, complete the DPP-1, Part 3 checklist.

3. Concentrated Flow Conveyance Systems

- (a) Will the project create or modify ditches, dikes, berms, or swales? Yes No NA
- (b) Will project create new slopes or modify existing slopes? Yes No NA
- (c) Will it be necessary to direct or intercept surface runoff? Yes No NA
- (d) Will cross drains be modified? Yes No NA

If Yes was answered to any of the above questions, consider **Concentrated Flow Conveyance Systems**; complete the DPP-1, Part 4 checklist.

4. Preservation of Existing Vegetation

- a) It is the goal of the Storm Water Program to maximize the protection of desirable existing vegetation to provide erosion and sediment control benefits on all projects. Complete

Consider **Preservation of Existing Vegetation**, complete the DPP-1, Part 5 checklist.



Design Pollution Prevention BMPs**Checklist DPP-1, Part 5**

Prepared by: Cristina Paredes Date: 08/18/05 District-Co-Route: 08-SBd-62
KP (PM): 29.8/55.0 (PM 18.5/34.2) EA: 35930K
RWQCB: Colorado

Preservation of Existing Vegetation

1. Review Preservation of Property, Standard Specifications 16.1.01 and 16-1.02 (Clearing and Grubbing) to reduce clearing and grubbing and maximize preservation of existing vegetation. Complete

2. Has all vegetation to be retained been coordinated with Environmental, and identified and defined in the contract plans? Yes No

3. Have steps been taken to minimize disturbed areas, such as locating temporary roadways to avoid stands of trees and shrubs and to follow existing contours to reduce cutting and filling? Complete

4. Have impacts to preserved vegetation been considered while work is occurring in disturbed areas? Yes No

5. Are all areas to be preserved delineated on the plans? Yes No



TWENTYNINE PALMS, CALIFORNIA (049099)

Period of Record Monthly Climate Summary

Period of Record : 7/ 1/1948 to 3/31/2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	63.1	68.0	74.2	82.2	91.1	100.7	105.5	103.5	97.5	86.1	71.8	63.3	83.9
Average Min. Temperature (F)	35.6	38.8	43.0	49.2	57.0	64.8	71.5	70.3	63.5	52.4	41.4	35.3	51.9
Average Total Precipitation (in.)	0.50	0.45	0.36	0.13	0.09	0.01	0.57	0.76	0.47	0.23	0.26	0.40	4.24
Average Total SnowFall (in.)	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record.

Max. Temp.: 97.6% Min. Temp.: 97.6% Precipitation: 97.7% Snowfall: 97.7% Snow Depth: 97.4%

Check [Station Metadata](#) or [Metadata graphics](#) for more detail about data completeness.

Western Regional Climate Center, wrcc@dri.edu

Intensity-Duration-Frequency Curves based on the San Bernardino County Hydrology Manual

Calculated by: Fernando Manzanera

Date: 8/22/2005

The equation used is: $Int = e^{(E \cdot (\ln(Dur) - 4.0943) + \ln(P(1hr)))}$

where P(1hr) is the 1 hour precipitation for the design return period and E is the slope from the San Bernardino County Hydrology Manual (the application range is from 5 minutes to 90 minutes, intended to be used with the Rational Method).

EA# and Location: Route 62 PM 13.6/34.2

Latitude: 34 deg, 8. min, 24 sec, or: 34.140 deg

Longitude: 116 deg, 20. min, 60 sec, or: 116.350 deg

Datum: WGS84 Elevation: 2500

Rainfall characteristics of the project site

(from isohyetal maps or recording stations):

10-yr, 1-hr precipitation: 0.45 in

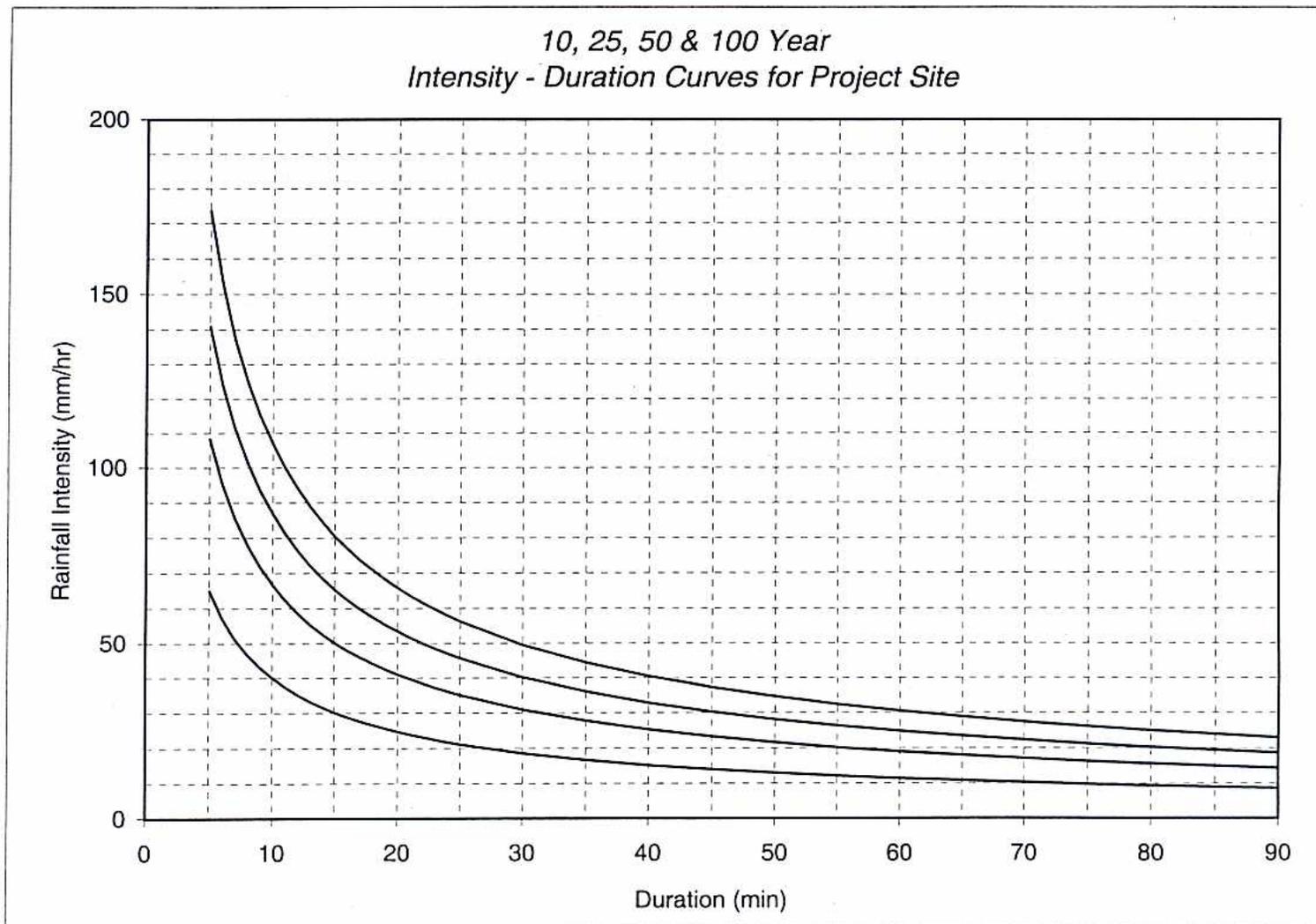
Interpolated 25-yr, 1-hr precipitation: 0.75 in

Interpolated 50-yr, 1-hr precipitation: 0.97 in

100-yr, 1-hr precipitation: 1.20 in

Curve slope (-0.6 for SW areas, -0.7 for desert & mountains): -0.70

The resulting 25 year, 10 minute duration intensity at the project site is: 67 mm/ hr, or: 2.62 in/ hr



Notes:

- Rainfall data and the isohyetal maps of the Hydrology Manual are based on USDC, NOAA Atlas 2, Volume XI, California 1973.
- The intensity values provided above are for the design of peak discharge only, not for discharge volume calculations.
- The results in this sheet are intended to be valid only for the location defined above.
- Spreadsheet developed by Fernando Manzanera (Caltrans District 8 / Hydraulics, 05/13/02).

Intensity-Duration-Frequency Table (San Bernardino County Hydrology Manual)

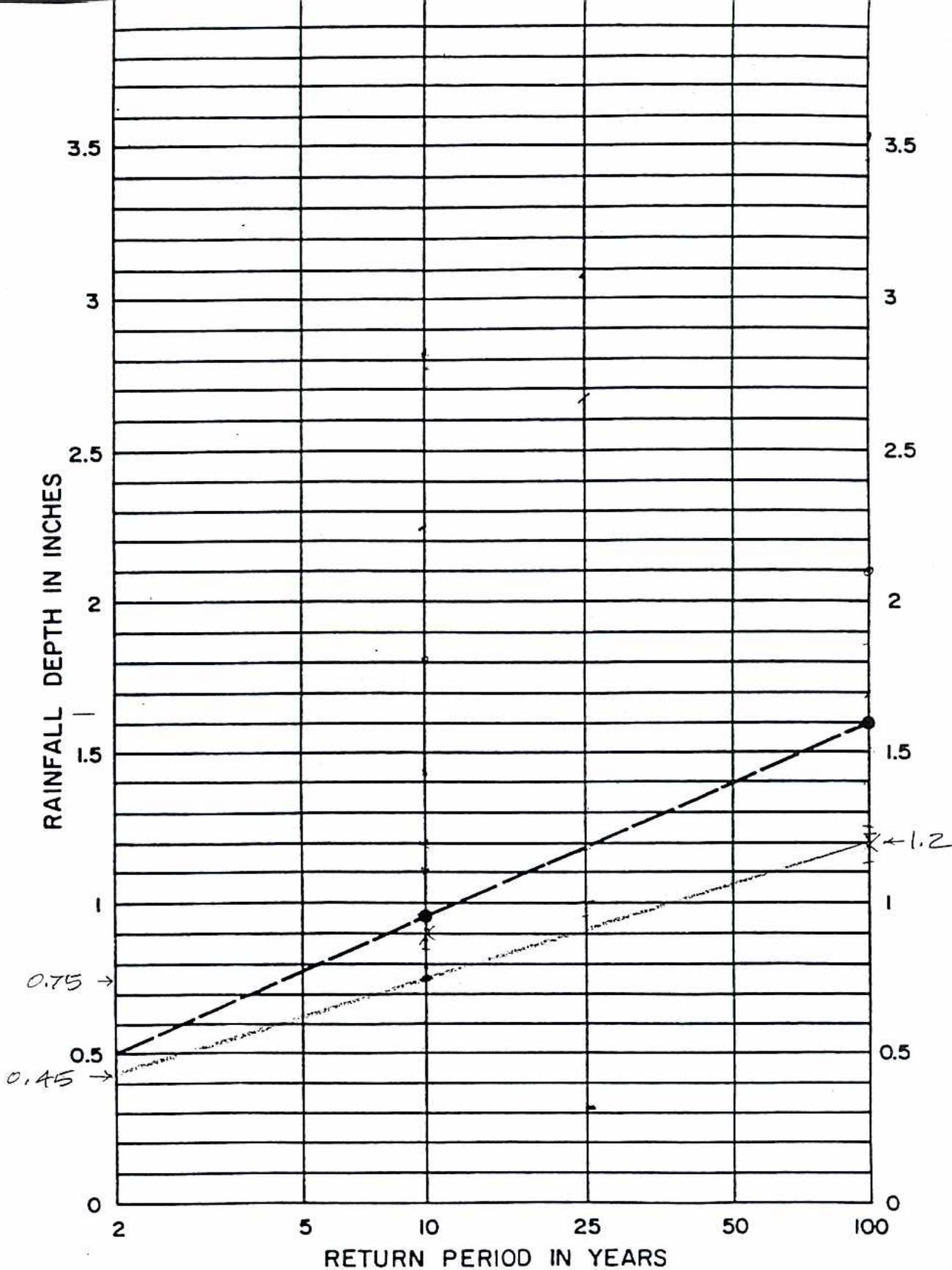
Route 62 PM 13.6/34.2

Latitude: 34.14 deg
Longitude: 116.35 deg

Datum: WGS84
Elevation: 2500

Duration (min)	10-YR INTENSITY		25-YR INTENSITY		50-YR INTENSITY		100-YR INTENSITY	
	(mm/hr)	(in/hr)	(mm/hr)	(in/hr)	(mm/hr)	(in/hr)	(mm/hr)	(in/hr)
5	65	2.56	108	4.26	141	5.55	174	6.83
6	57	2.26	95	3.75	124	4.88	153	6.01
7	51	2.02	86	3.37	111	4.38	137	5.40
8	47	1.84	78	3.07	101	3.99	125	4.92
9	43	1.70	72	2.82	93	3.68	115	4.53
10	40	1.58	67	2.62	87	3.41	107	4.21
11	37	1.48	62	2.45	81	3.19	100	3.93
12	35	1.39	59	2.31	76	3.01	94	3.70
13	33	1.31	55	2.18	72	2.84	89	3.50
14	32	1.25	53	2.07	69	2.70	84	3.32
15	30	1.19	50	1.98	65	2.57	80	3.17
16	29	1.14	48	1.89	62	2.46	77	3.03
17	28	1.09	46	1.81	60	2.36	74	2.90
18	27	1.05	44	1.74	57	2.26	71	2.79
19	26	1.01	43	1.67	55	2.18	68	2.68
20	25	0.97	41	1.61	53	2.10	66	2.59
21	24	0.94	40	1.56	52	2.03	64	2.50
22	23	0.91	38	1.51	50	1.97	62	2.42
23	22	0.88	37	1.46	48	1.91	60	2.35
24	22	0.85	36	1.42	47	1.85	58	2.28
25	21	0.83	35	1.38	46	1.80	56	2.21
30	19	0.73	31	1.22	40	1.58	50	1.95
35	17	0.66	28	1.09	36	1.42	44	1.75
40	15	0.60	25	0.99	33	1.29	40	1.59
45	14	0.55	23	0.92	30	1.19	37	1.47
50	13	0.51	22	0.85	28	1.11	35	1.36
55	12	0.48	20	0.80	26	1.04	32	1.28
60	11	0.45	19	0.75	25	0.97	30	1.20
65	11	0.43	18	0.71	23	0.92	29	1.13
70	10	0.40	17	0.67	22	0.87	27	1.08
75	10	0.38	16	0.64	21	0.83	26	1.03
80	9	0.37	16	0.61	20	0.80	25	0.98
85	9	0.35	15	0.59	19	0.76	24	0.94
90	9	0.34	14	0.56	19	0.73	23	0.90

Notes: - Rainfall data and the isohyetal maps of the Hydrology Manual are based on USDC, NOAA Atlas 2, Volume XI, California 1973.
 - The intensity values provided above are for the design of peak discharge only, not for discharge volume calculations.
 - The results in this sheet are intended to be valid only for the project on the latitude and longitude values defined above.
 - Spreadsheet developed by Fernando Manzanera (Caltrans District 8 / Hydraulics, 05/13/02).



NOTE:

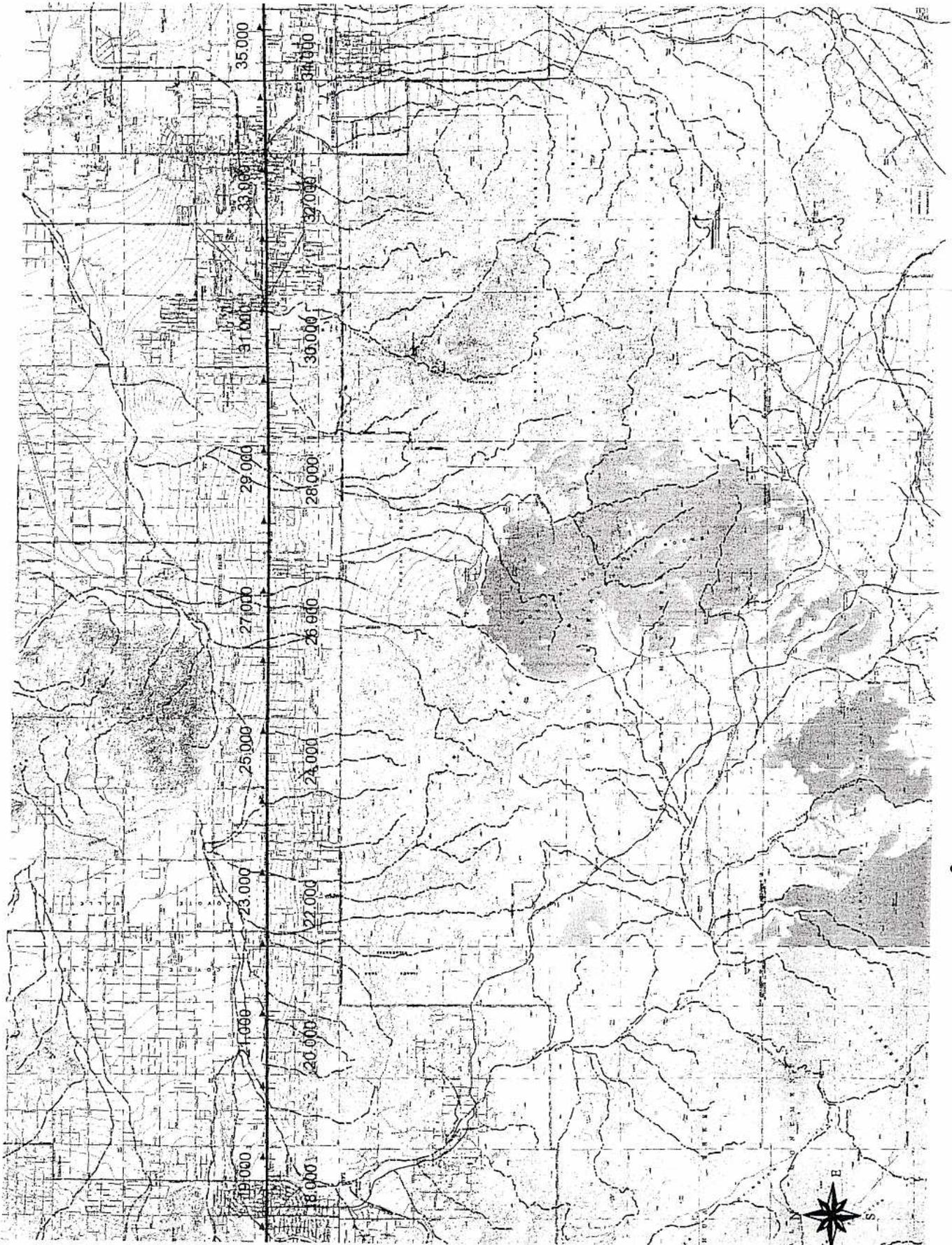
1. FOR INTERMEDIATE RETURN PERIODS PLOT 10-YEAR AND 100-YEAR ONE HOUR VALUES FROM MAPS, THEN CONNECT POINTS AND READ VALUE FOR DESIRED RETURN PERIOD. FOR EXAMPLE GIVEN 10-YEAR ONE HOUR = 0.95" AND 100-YEAR ONE HOUR = 1.60", 25-YEAR ONE HOUR = 1.18".

REFERENCE: NOAA ATLAS 2, VOLUME XI - CAL., 1973

**SAN BERNARDINO COUNTY
HYDROLOGY MANUAL**

**RAINFALL DEPTH VERSUS
RETURN PERIOD FOR
PARTIAL DURATION SERIES**

Route 62 PM 18.5/34.2



**COST ESTIMATE
35930K**

ITEM NO.	ITEM CODE	ITEM DESCRIPTION	UNITS	EST QTY	UNIT PRICE	TOTAL
	021934	Transplant Joshua Tree	EA	20	\$600.00	\$12,000
	150860	Remove Pavement and Base	M3	22,647	\$30.00	\$679,408
	151625	Reconstruct MBGR (wood post)	M	76	\$175.00	\$13,338
	152255	Reset Mailbox	EA	16	\$190.00	\$3,040
	152316	Reset Roadside Sign (one post)	EA	27	\$151.00	\$4,077
	152317	Reset Roadside Sign (two post)	EA	11	\$490.00	\$5,390
	153110	Cold Plane AC (bridge approach)	M2	7,023	\$6.00	\$42,138
	153152	Cold Plane AC Pavement 0.10' (30 mm)	M2	317,263	\$1.50	\$475,895
	153153	Cold Plane AC Pavement 0.15' (45 mm)	M2	4,682	\$5.00	\$23,411
	153154	Cold Plane AC Pavement 0.20' (60 mm)	M2	21,187	\$4.00	\$84,746
	153210	Remove Concrete	M3	292	\$150.00	\$43,789
	160101	Clearing and Grubbing	LS	1	\$40,000.00	\$40,000
	190101	Roadway Excavation	M3	41,504	\$30.00	\$1,245,120
	190185	Shoulder Backing	STA	252	\$250.00	\$63,000
	260201	Class 2 Aggregate Base	M3	30,793	\$35.00	\$1,077,765
	394046	Place AC Dike Type D	M	165,792	\$2.50	\$414,480
	390102	Asphalt Concrete (Type A - lime treated)	TONNE	188,081	\$70.00	\$13,165,674
	390106	Asphalt Concrete (open graded)	TONNE	23,267	\$90.00	\$2,094,070
	510502	Minor Concrete (Minor Structure)	M3	292	\$1,000.00	\$291,929
	650018	600-mm Reinforced Concrete Pipe	M	31	\$271.00	\$8,401
	721007	RSP (1/4 ton, Method B)	M3	100	\$100.00	\$10,000
		Striping, Markings, and Markers	LS	1	\$1,175,975.00	\$1,175,975
		Traffic Control	LS	1	\$405,000.00	\$405,000
		Electrical	LS	1	\$36,000.00	\$36,000
		Storm Water (4%)	LS	1	\$855,145.93	\$855,146
		Bridge Items	LS	1	\$440,000.00	\$440,000
		Right of Way Aquisition	LS	1	\$230,600.00	\$230,600
		Utility Relocation	LS	1	\$10,000,000.00	\$10,000,000
		Environmental Mitigation	LS	1	\$797,620.00	\$797,620
SUBTOTAL						\$33,738,014

SUBTOTAL	33,738,014
CONTINGENCY (25%)	5,677,449
SUPPLEMENTAL FUNDS (10%)	2,270,979
TOTAL PROJECT COST	41,686,442