03-PLA-80 PM 2.4/5.7
03-PLA-65 PM R4.8/R6.9
03-216-4E320K
June 2009

PROJECT STUDY REPORT
(Interchange Modification)

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

6-15-09
LINDY K. LEE — Date
District Division Chief - NR Right of Way

APPROVAL RECOMMENDED:

Samuel Jordan 6/15/09
SAMUEL JORDAN, PE — Date
Project Manager, District 3

APPROVED BY:

Steve E. Kuftinec 6/15/09
for JODY JONES — Date
District Director, District 3

Project Signature Sheet

Caltrans

This Project Study 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.

Chad Baker, P.E.
Registered Civil Engineer

6/15/09
Date

REGISTERED PROFESSIONAL ENGINEER
Chad T Baker
No. C 59750
Exp. 12-31-09
CIVIL
STATE OF CALIFORNIA

PROJECT STUDY REPORT FOR
I-80/SR 65 INTERCHANGE MODIFICATION

Executive Summary

This project consists of various modifications to Interstate 80 (I-80), State Route (SR) 65 and the interchange at their junction. The major items of work are the construction of a bi-directional HOV direct connector between I-80 and SR 65, replacement of the eastbound I-80 to northbound SR 65 loop-connector with a flyover connector, structure widening of the East Roseville Viaduct and replacement of the Taylor Road Overcrossing, widening of the southbound SR 65 to westbound I-80 and westbound I-80 to northbound SR 65 connectors with associated auxiliary lanes and ramp realignments.

Number of Alternatives:	4
Recommended Alternative for Programming:	Alternative 3 – Ultimate Build Project
Capital Costs for 2009:	$ 280,000,000
Roadway:	$ 150,000,000
Right of Way:	$ 15,000,000
Structures:	$ 110,000,000
Funding Source:	Federal Demonstration RTIP (STIP) Developer Fees
Type of Facility:	Interstate Multi-lane Freeway
Anticipated Environmental Clearance Document:	Negative Declaration/Finding of No Significant Impact
Construction Year:	2015
PM Limits:	03-Pla-80 PM 2.4/5.7 03-Pla-65 PM R4.8/R6.9

Looking east on I-80 towards the I-80/SR 65 interchange.

On southbound SR 65 looking south towards the East Roseville Viaduct.

1. Introduction

This proposed project will improve the operation of the I-80/SR 65 interchange.

The proposed improvements consist of:

- Construction of a 2-lane bi-directional High Occupancy Vehicle (HOV) direct connector on eastbound I-80 to northbound SR 65 and southbound SR 65 to westbound I-80
- Replacement of the eastbound I-80 to northbound SR 65 loop connector with a 3-lane flyover ramp
- Ramp widening and additional lane at the southbound SR 65 on-ramp from Galleria Boulevard
- Auxiliary lane at the northbound SR 65 on-ramp from Galleria Boulevard
- Connector widening with associated auxiliary lane at the westbound I-80 to northbound SR 65 connector
- Reconstruction and widening of the southbound SR 65 to eastbound I-80 connector flyover
- Widening of I-80 and SR 65 and associated ramp realignments at Eureka Road, Taylor Road and Galleria Boulevard
- Widening the East Roseville Viaduct
- Replacement of the Taylor Road Overcrossing to accommodate widening I-80 for the HOV direct connector
- Construct HOV lanes on SR 65 from the I-80/SR 65 interchange past the Galleria Boulevard interchange
- Ramp meter installation

This Study is sponsored by the South Placer Regional Transportation Authority (SPRTA).

2. Background

Interstate 80 is a primary transcontinental highway providing for passenger and goods movement between the Pacific Rim in the San Francisco Bay area through the State of California Department of Transportation's (Department) District 3 across the United States to the I-80/I-95 junction in New York. It has additional statewide importance as the principal east-west route in all of North and Central California, and as the only freeway crossing of the Sierra Nevada range. I-80 has also been identified and designated in the Department's *Interregional Transportation Strategic Plan* as a "High Emphasis" route and a "Gateway" that provides all-weather access across the Sierra-Nevada for major interstate goods movement into the Sacramento and Bay areas, and for connectivity to other vital Gateways across state borders. Within Caltrans District 3, I-80 is a four to fourteen-lane freeway extending 132 miles from the Solano/Yolo County Line in the City of Davis to the California/Nevada State Line, passing through Yolo, Sacramento, Placer, Nevada, and Sierra Counties. This interstate accommodates high commute, interregional and recreational traffic volumes

as well as high levels of truck freight traffic within the greater Sacramento Region, and in and out of Northern California and the Pacific Rim.

In Placer County, I-80 begins at the Sacramento/Placer County line as a ten-lane freeway and extends into the City of Roseville to the Riverside Boulevard interchange where it changes to six-lanes through the Cirby Way Overcrossing and the Douglas Boulevard Interchange, where it changes to eight lanes and extends east through the Rocky Ridge/Lead Hill Boulevard Overcrossing, the Atlantic Street/Eureka Road Interchange, the Roseville Parkway Overcrossing, the Taylor Road Interchange, and the SR 65 Junction interchange. At the SR 65 Junction, I-80 extends east as a six-lane freeway into the City of Rocklin in Placer County through the Rocklin Road Interchange to the Sierra College Boulevard interchange.

SR 65 is an important interregional route that serves both local and regional traffic. The route serves as a major connector for both automobile and truck traffic originating from the I-80 corridor (in the Roseville/Rocklin area) and the SR 70/99 corridor (in the Marysville/Yuba City area). SR 65 is a vital link from more affordable housing in Sutter and Yuba Counties to regional employment centers in Placer County. It is also an important route for the transport of aggregate, lumber and other commodities.

Existing Facility

For the purposes of discussing the existing conditions of I-80, it is assumed that the I-80 HOV Lane Project Phase 3 (EA 36783) will be constructed prior to work beginning on this project. The Phase 3 project was advertised on May 18, 2009 with a scheduled bid opening date of July 7, 2009 and the scope of work is to construct HOV lanes on I-80 from Miner's Ravine Bridge to 1 mile east of the I-80/SR 65 interchange. The existing conditions described below will be for I-80 in a post Phase 3 state.

The I-80/SR 65 interchange is a type L-12 freeway-to-freeway interchange constructed in the 85/86 FY. The I-80/SR 65 interchange consists of the following connectors listed in Table 1.

Table 1: Configuration of the existing connectors

Connector Description	Connector Type	Number of Lanes	Lane Width (ft)	Right Shoulder Width (ft)	Left Shoulder Width (ft)	Loop Radius (ft)
SB 65 to WB I-80	Slip	2	12	10	5	900
SB 65 to EB I-80	Flyover	2 into 1	12	10	5	850
EB I-80 to NB 65	Loop	2	12	10	5	200
WB I-80 to NB 65	Slip	1	12	10	5	850

Within the project limits, both freeways are barrier separated. Eastbound I-80 is a 5 lane facility (4 Mixed Flow + 1 HOV Lane) until the I-80/SR 65 interchange where 1 lane is dropped at the eastbound I-80 to northbound SR 65 connector. I-80 continues on as a 4 lane facility (3 Mixed Flow + 1 HOV Lane) before ending the HOV lane designation and then dropping a lane at the eastern end of the project limits. Westbound I-80 begins as a 3 lane facility and widens to 5 lanes, including a HOV lane (4 Mixed Flow + 1 HOV Lane), prior to reaching the I-80/SR 65 interchange. One lane is trapped at the westbound I-80 off-ramp to northbound SR 65 while 2 lanes are added a short distance later at the southbound SR 65 to westbound I-80 ramp. Interstate 80 then narrows to 5 lanes (4 Mixed Flow + 1 HOV Lane) in the westbound direction after dropping a lane at the Atlantic Street off-ramp and maintains this configuration to the western limits of the project at the Miner's Ravine Bridge. SR 65 is a five-lane freeway (three lanes in the southbound direction) with an unpaved median separating the two travel directions.

Both routes run through relatively flat terrain in a heavily urbanized area with frequent interchanges. The closest interchanges on I-80 are Taylor Road, 0.6 miles to the west, and Rocklin Road, 1.9 miles to the east. The closest interchange on SR 65 is Galleria Boulevard at 1.1 miles to the north.

3. Need and Purpose

The purpose of this project is to reduce congestion, improve traffic operations and enhance safety.

The SR 65/I-80 interchange is currently experiencing operational problems caused by high peak period traffic volumes and the less efficient geometry of the loop connector. Additional delay is caused by downstream bottlenecks on both corridors. These bottlenecks are generated by high demands from southbound SR 65 to westbound I-80 (AM and PM), and eastbound I-80 to northbound SR 65 (PM). Vehicle hours of delay, average speeds, travel times, and other traffic performance measures will continue to degenerate as growth increases in the surrounding areas.

4. Alternatives

There are four alternatives including the "No Build" alternative. Alternatives 1 and 2 partially overlap in their scopes of work while Alternative 3 is the "ultimate build" project encompassing all the work of Alternatives 1 and 2. It is important to note that, while the work is presented as specific alternatives, the improvements have been designed to be phased to get from the "no build" condition to the "ultimate project". This approach allows improvements to be constructed as funding and operational needs dictate.

Alternative 1: HOV Direct Connector, Connector Widening and Auxiliary Lanes

The proposed improvements consist of:

- Construction of 2-lane bi-directional High Occupancy Vehicle (HOV) direct connector on eastbound I-80 to northbound SR 65 and southbound SR 65 to westbound I-80
- Construct HOV lanes on SR 65 from the I-80/SR 65 interchange past the Galleria Blvd interchange
- Ramp widening and additional lane at the southbound SR 65 on-ramp from Galleria Boulevard
- Auxiliary lane at the northbound SR 65 on-ramp from Galleria Boulevard
- Ramp widening with associated auxiliary lane at the westbound I-80 to northbound SR 65 connector
- Realign and widen the southbound SR 65 to eastbound I-80 flyover connector
- Ramp realignments at Taylor Road and Galleria Boulevard from the HOV lane addition to I-80 and SR 65
- Widen East Roseville Viaduct
- Replacement of the Taylor Road Overcrossing to accommodate widening I-80 for the HOV direct connector
- Ramp meter installation

Total Capital Cost (Roadway, Structures and Right of Way) is $230,000,000.

Alternative 2: Mixed Flow Flyover, Connector Widening and Auxiliary Lanes

The proposed improvements consist of:

- Replacement of the eastbound I-80 to northbound SR 65 loop connector with a 3-lane flyover connector
- Ramp widening and additional lane at the southbound SR 65 on-ramp from Galleria Boulevard
- Auxiliary lane at the northbound SR 65 on-ramp from Galleria Boulevard
- Ramp widening with associated auxiliary lane at the westbound I-80 to northbound SR 65 connector
- Realign and widen the southbound SR 65 to eastbound I-80 flyover connector
- Ramp realignments at Eureka Road, Taylor Road and Galleria Boulevard from the HOV lane addition to I-80 and SR 65
- Widen the East Roseville Viaduct
- Replacement of the Taylor Road Overcrossing to accommodate widening I-80 for the HOV direct connector
- Ramp meter installation

Total Capital Cost (Roadway, Structures and Right of Way) is $240,000,000.

Alternative 3: Ultimate Build Project

The proposed improvements consist of:

- Construction of 2-lane bi-directional High Occupancy Vehicle (HOV) direct connector on eastbound I-80 to northbound SR 65 and southbound SR 65 to westbound I-80
- Construct HOV lanes on SR 65 from the I-80/SR 65 interchange past the Galleria Blvd interchange
- Replacement of the eastbound I-80 to northbound SR 65 loop connector with a 3-lane flyover connector
- Ramp widening and additional lane at the southbound SR 65 on-ramp from Galleria Boulevard
- Auxiliary lane at the northbound SR 65 on-ramp from Galleria Boulevard
- Ramp widening with associated auxiliary lane at the westbound I-80 to northbound SR 65 connector
- Realign and widen the southbound SR 65 to eastbound I-80 flyover connector
- Ramp realignments at Eureka Road, Taylor Road and Galleria Boulevard from the HOV lane addition to I-80 and SR 65
- Widening the East Roseville Viaduct
- Replacement of the Taylor Road Overcrossing to accommodate widening I-80 for the HOV direct connector
- Ramp meter installation

Total Capital Cost (Roadway, Structures and Right of Way) is $280,000,000.

Alternative 4: No Build

This alternative is not considered to be reasonable because it does not meet the purpose and need of the project.

5. Issues to be Addressed during Project Approval & Environmental Document Phase

A detailed traffic analysis using a microsimulation model must be completed during the Project Approval and Environmental Document (PA&ED) phase. The model should encompass, at a minimum, the I-80/SR 65 interchange and surrounding interchanges at Eureka Rd/Atlantic St, Taylor Rd, Rocklin Rd and Galleria Blvd. A weave analysis of eastbound I-80 from Eureka Rd/Atlantic St ramps to the I-80/SR 65 interchange connectors and of northbound and southbound SR 65 between the I-80/SR 65 interchange connectors and the Galleria Blvd ramps should be performed as part of the traffic study.

Within the broader aspect of the traffic analysis the following items should be addressed:

Connector Metering

Analyze the impacts of installing freeway connector meters for the southbound SR 65 to eastbound I-80 and southbound SR 65 to westbound I-80 connectors. The need for connector metering will be based on the results of the traffic analysis.

Three major factors should be considered for freeway connector metering. They are: 1) Benefit in total travel time savings, 2) Meeting geometric requirements, 3) Driver's expectancy. It is recommended that total travel time savings and the geometric requirements be studied during the PA&ED phase when more detailed micro-simulation models are available. Operation and storage requirements would be addressed at that time. In terms of driver's expectancy, according to the Highway Design Manual (HDM), "Any decision to meter freeway-to-freeway connectors must be carefully considered as driver expectancy on these types of facilities is for high-speed uninterrupted flow." Since the speed limits for SR 65 and I-80 are 65 mph within the study area and drivers are not expecting to stop at the connectors, an advance-warning system would be needed if freeway connector metering were provided in this project.

Taylor Road Interchange

Preliminary traffic analysis results show that the Taylor Road interchange restricts throughput on I-80 causing a bottleneck at this location in future years. Based on the results from the detailed traffic analysis undertaken during PA&ED, the ramp(s) at the Taylor Road interchange may need to be closed due to any one of or a combination of the following:

- Unacceptable weave performance along I-80 with the ramp(s) in place
- A mandatory design exception is not approved for interchange spacing (HDM 501.3)
- If Federal Highway Administration (FHWA) requires removal
- Poor traffic operations performance along I-80 between the Eureka/Atlantic and I-80/SR 65 interchanges

As part of the traffic analysis, attention must be paid to the Taylor Road ramp(s) to ensure this segment of I-80 performs to an acceptable standard. If it is determined that the ramp(s) should be closed, a specific study would be undertaken to determine the impacts of this closure on the local community and appropriate mitigation measures. Potential mitigation measures for removal of the Taylor Road ramp(s) may be 1) improvements to the eastbound I-80 to Eureka Rd/Atlantic St slip off-ramp, improvements to the westbound I-80 slip on-ramp from Eureka Rd/Atlantic St and intersection improvements at Eureka Rd/Taylor Rd and East Roseville Parkway/Taylor Rd; 2) improvements to the Rocklin Road interchange. The cost to

mitigate closing the Taylor Road interchange is estimated at $20M and is included in the cost estimate for all alternatives.

Further discussions with the City of Rocklin and City of Roseville will be required as this issue is explored to obtain concurrence from the municipalities affected. An open house public meeting to communicate any proposed changes and address concerns should be planned for.

As part of the traffic analysis of the off-ramp, City of Roseville staff requested that reconfiguration of the eastbound loop off-ramp with a signalized intersection at Taylor Road, allowing left turns from the off-ramp, be considered.

If any ramps are closed on I-80, the construction limits of the project will have to be extended to the west of the Lead Hill Boulevard Overcrossing to allow for modification of affected signage.

Design Exceptions

Due to several constraints on the existing facilities, Design Exceptions are needed for this project. Exceptions to Mandatory Design Standards fall within the following categories: stopping sight distance, paved shoulder width, interchange spacing and horizontal clearance. FHWA approval is required, and it will be sought during the PA&ED phase. Approval of the Mandatory Design Exceptions Fact Sheet is expected in June 2009.

Design Exceptions related to the Taylor Road interchange will be investigated and approval requested during the PA&ED phase. This delay is necessary because a more detailed traffic analysis is required before the operational sufficiency of the interchange can be determined which will, in turn, determine if closure of the ramps at this location is warranted and what mitigation strategy would follow.

Value Analysis

Given the time limitations on this project, a formal Value Analysis will be performed during the Project Approval and Environmental (PA&ED) phase.

6. Traffic Data

Volumes and Capacity

Tables 3 through 6 show peak hour and peak period volumes for various segments and ramps of I-80 and SR 65 within the project limits. The tables cover current year 2007 (No Build) and long term year 2040 (Alternative 3) values. See attachment 12 for full forecasted volumes for each alternative for years 2007, 2020, 2030 and 2040.

As shown in Tables 3 through 6, the peak hour volumes on I-80 and SR 65 are as high as 7,000 and 4,000 vehicles under current year (2007) conditions, to 12,700 and 9,200 at year 2040 conditions, respectively. The substantial increase in daily traffic is one primary justification for this project.

Table 3: 2007 Peak Hour and Peak Period Volumes for I-80 (No Build)

I-80 2007	WB AM 4 Hour Peak Period	EB PM 4 Hour Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	13,541	14,390	3,788	3,896
Rocklin Rd Off-Ramp	1,099	4,381	356	1,080
Rocklin Rd On Ramp	2,902	604	721	184
East of I-80/SR 65 IC	15,344	18,167	4,153	4,792
WB off to NB 65	3,861		1,160	
WB on from SB 65	9,564		2,782	
EB on from SB 65		5,096		1,491
EB off to NB 65		12,826		3,375
West of I-80/SR 65 IC	21,047	25,897	5,775	6,676
Taylor Rd Off Ramp		1,749		388
Taylor Rd On Ramp	2,597		712	
East of Eureka Rd	23,644	27,646	6,487	7,064
Eureka Rd Off Ramp	1,121	4,591	364	1,186
Eureka Rd Off Ramp (Loop)	3,348		1,019	
Eureka Rd On Ramp	3,193	4,672	862	1,111
Eureka Rd On Ramp (Loop)		1,454		363
West of Eureka Rd	22,369	26,111	5,967	6,776

Table 4: 2007 Peak Hour and Peak Period Volumes for SR 65 (No Build)

SR 65 2007	NB PM 4 Hour Peak Period	SB AM 4 Hour Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	16,934	13,415	4,277	3,888
Stanford Ranch NB Off Ramp	3,453	497	825	125
Stanford Ranch SB Off Ramp	1,581	2,440	375	807
Stanford Ranch On Ramp	3,387	2,713	799	788
North of Stanford Ranch Rd	15,287	13,639	3,876	4,032

Table 5: 2040 Peak Hour and Peak Period Volumes for I-80 (Alt 3)

I-80 2040	WB AM 4 Hour Peak Period	EB PM 4 Hour Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	24,382	23,508	6,755	6,161
Rocklin Rd Off-Ramp	1,491	7,444	466	1,835
Rocklin Rd On Ramp	3,645	1,017	906	355
East of I-80/SR 65 IC	26,536	29,934	7,195	7,641
WB off to NB 65	5,886		1,768	
WB on from SB 65	15,475		4,826	
WB on from SB 65 (HOV)	4,410		1,375	
EB on from SB 65		8,182		2,394
EB off to NB 65		21,294		5,603
EB off to NB 65 (HOV)		5,591		1,471
West of I-80/SR 65 IC	40,536	48,637	11,627	12,321
Taylor Rd Off Ramp		1,728		383
Taylor Rd On Ramp	3,131		853	
East of Eureka Rd	43,667	50,364	12,480	12,704
Eureka Rd Off Ramp	2,312	8,321	798	2,263
Eureka Rd Off Ramp (Loop)	7,269		2,132	
Eureka Rd On Ramp	3,998	9,947	1,172	2,391
Eureka Rd On Ramp (Loop)		2,658		708
West of Eureka Rd	38,084	46,080	10,722	11,868

Table 6: 2040 Peak Hour and Peak Period Volumes for SR 65 (Alt 3)

SR 65 2040	NB PM 4 Hour Peak Period	SB AM 4 Hour Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	42,471	31,872	10,774	9,217
Stanford Ranch NB Off Ramp	6,363	1,801	1,423	441
Stanford Ranch SB Off Ramp	2,913	8,840	647	2,845
Stanford Ranch On Ramp	6,004	8,884	1,354	2,891
North of Stanford Ranch Rd	39,200	33,629	10,059	9,611

Capacity is defined as the maximum amount of traffic that can be accommodated by a uniform segment of freeway under prevailing conditions. If the vehicular demand exceeds this capacity, the vehicle density will increase and speeds will drop until breakdown occurs, resulting in queuing and congestion. A typical freeway segment can accept 2,200 vehicles per hour per lane (vphpl) before breakdown occurs. The capacity of a typical connector is 1,500 vph. The capacity of a typical HOV lane is 1,200 vph. Field traffic counts conducted for this project in 2006 and 2008 measured the actual capacity of the freeway mainlines at approximately 2,000 vphpl prior to breakdown.

Table 7 shows existing mainline and connector volumes for the highest AM and PM peak periods and peak hours. Capacities of connectors and mainlines are also shown. The far-right column is the theoretical volume-to-capacity ratio (v/c ratio). Congested conditions occur when the v/c ratio approaches 1.0. The formal definition of congested conditions is a condition where speeds drop to below 35 mph for a duration of 15 minutes or longer. The highest peak hour volumes (AM or PM) were used in the v/c calculation. The v/c ratio exceeds 1.0 at three of the eight movements listed in Table 7.

Table 7: Existing Mainline and Connector Volumes, Capacity and V/C Ratio

Location	Peak Period (vehicles)	Peak Hour (vehicles)	Number of Lanes	Capacity (vehicles)	V/C Ratio
EB I-80 Mainline	27,646	7,064	4 + 1 HOV	9,800	0.72
EB I-80 to NB 65	12,826	3,375	2	3,000	1.13
WB I-80 Mainline	23,644	6,487	3 + 1 HOV	7,800	0.83
WB I-80 to NB 65	3,861	1,160	1	1,500	0.77
NB 65 Mainline	16,934	4,277	2	4,000	1.07
SB 65 Mainline	13,415	3,888	3	6,000	0.65
SB 65 to EB I-80	5,096	1,491	2 into 1	1,500	0.99
SB 65 to WB I-80	9,564	2,782	2	3,000	0.93

Note: Existing conditions assumes completion of I-80 HOV Phase 3 project.

Accident Analysis

Tables 8 and 9 describe a summary of the accidents within the project limits for a three-year period from April 2005 to March 2008. This data was obtained from the Traffic Accident Surveillance and Analysis System (TASAS) database and represents recorded accidents within the project limits.

Table 8: 3-Year Accident Data along Mainline - TASAS Table B

APRIL 1, 2005 TO MARCH 31, 2008												
			NUMBER OF ACCIDENTS				ACCIDENT RATE (ACC/MVM)[1]					
							Actual			Average		
Route	Dir	PM	Total	Fatal	Injury	F+I[2]	Total	Fatal	F+I	Total	Fatal	F+I
80	EB	2.4 to	118	0	46	46	0.47	0.000	0.18	1.06	0.006	0.33
	WB	5.7	270	1	78	79	1.07	0.004	0.31	1.06	0.006	0.33
Total for Both Directions			**388**	**1**	**124**	**125**	**0.77**	**0.002**	**0.25**	**1.05**	**0.006**	**0.33**
65	NB	R4.9 to	47	1	23	24	0.44	0.009	0.22	1.19	0.013	0.42
	SB	R6.9	76	0	29	29	0.71	0.000	0.27	1.19	0.013	0.42
Total for Both Directions			**123**	**1**	**52**	**53**	**0.58**	**0.005**	**0.25**	**1.14**	**0.012**	**0.40**

Notes: [1] Accident rate is accidents per million vehicle miles (MVM)
[2] F + I = Fatal plus injury (total accidents)
[3] Accidents and accident rates are per direction only

The accident data shows that a total of 388 accidents occurred in both directions on I-80 and a total of 123 accidents occurred in both directions on SR 65. A total of two fatal accidents were reported within the project limits, one on I-80 and one on SR 65. In comparison with the statewide average for similar facilities, the actual accident rates were lower than the statewide average.

This project should reduce the number of rear end type accidents on I-80 by providing a smoother flow via mixed flow flyover in Alternatives 2 and 3 instead of the lower speed loop ramp and should reduce the number of sideswipe accidents by providing the HOV flyover in Alternatives 1 and 3 effectively reducing weaving from vehicles having to move to the right to access the mixed flow connector to SR 65.

Table 9: 3-Year Accident Data at Ramps - TASAS Table B

APRIL 1, 2005 TO MARCH 31, 2008													
				NUMBER OF ACCIDENTS				ACCIDENT RATE (ACC/MVM)[1]					
								Actual			Average		
Route	Ramp	Dir	PM	Total	Fatal	Injury	F+I[2]	Total	Fatal	F+I	Total	Fatal	F+I
80	On from Atlantic	EB	3.01	4	0	3	3	1.44	0.000	1.08	0.70	0.001	0.24
	On from Eureka	EB	3.24	7	0	0	0	0.65	0.000	0.00	0.60	0.003	0.22
	Off to Taylor	EB	3.60	6	0	1	1	1.34	0.000	0.22	1.25	0.003	0.42
	Off to NB SR 65	EB	4.22	30	0	10	10	0.99	0.000	0.33	0.90	0.004	0.26
	On from SB SR 65	EB	4.50	4	0	0	0	0.38	0.000	0.00	0.55	0.006	0.19
	Off to Atlantic	WB	3.18	3	0	2	2	0.70	0.000	0.46	0.90	0.006	0.33
	On from Taylor	WB	3.61	3	0	0	0	0.53	0.000	0.00	0.60	0.003	0.22
	On from SB SR 65	WB	3.95	11	0	3	3	0.37	0.000	0.10	0.40	0.004	0.13
	Off to NB SR 65	WB	4.32	2	0	0	0	0.14	0.000	0.00	0.45	0.004	0.15
65	Off to WB Galleria	NB	R5.81	5	1	1	2	0.79	0.157	0.31	1.25	0.003	0.42
	Off to EB Stanford	NB	R5.81	1	0	1	1	0.10	0.000	0.10	0.90	0.006	0.33
	On from Stanford	NB	R6.15	15	0	6	6	1.48	0.000	0.59	0.80	0.002	0.32
	On from Galleria	SB	R5.70	21	0	10	10	2.66	0.000	1.27	0.80	0.002	0.25
	Off to WB Galleria	SB	R6.04	2	0	1	1	0.27	0.000	0.14	0.45	0.004	0.15
	Off to EB Stanford	SB	R6.04	7	0	0	0	1.86	0.000	0.00	1.25	0.003	0.42

Notes:
[1] Accident rate is accidents per million vehicle miles (MVM)
[2] F + I = Fatal plus injury (total accidents)
[3] Accidents and accident rates are per direction only

The accidents occurring on the ramps on I-80 are of two types: rear ends and sideswipes. The only other accident type of any frequency is an overturn vehicle which occurred on the EB I-80 to NB SR 65 loop connector.

The proposed mixed flow flyover in Alternatives 2 and 3 should reduce the overturn and rear end accidents by having a larger radius curve and allowing a free flowing path to SR 65, sideswipe type accidents may remain unchanged. If the eastbound off ramp to Taylor Road is closed, all accidents at that location will be resolved but may be transferred to another ramp. The remaining eastbound I-80 ramps within the project limits may have their accident rates remain unchanged by the project though

an improvement or change in accident type may be seen due to the additional auxiliary lanes constructed as part of the mixed flow flyover. The westbound I-80 ramps within the project limits have a lower than average accident rate or are not being significantly modified by this project and thus no change in accident rates is expected.

The addition of auxiliary lanes on SR 65 between I-80 and the Galleria Interchange and construction of a ramp meter at the southbound onramp from Galleria Blvd for all alternatives should reduce the higher than average accident rate at this ramp. The construction of an auxiliary lane from the northbound on-ramp to SR 65 from Galleria Blvd should help reduce the number of sideswipe and rear end type accidents on this section of roadway by allowing a greater length for merging/weaving onto the freeway. The remaining ramp with a higher accident rate than average is the southbound SR 65 off-ramp to eastbound Stanford Ranch, a recent reconfiguration of the local road intersection of this ramp is anticipated to have a positive impact on the accident rate for this ramp due to improved operations and thus no work at this location is anticipated as part of this project.

Traffic Operation System (TOS) Elements

It is recommended to place ramp metering, loop detectors, closed circuit television cameras, and communication fiber conduit within the project limits. These TOS elements would be used to collect traffic volume data, monitor queue lengths and speed for future traffic studies and real time traffic management.

Traffic Analysis Summary

The findings in the traffic report showed that the build alternatives improved traffic operations when compared to the no build alternative. The improved performance was a result of adding HOV mainline lanes to the I-80 and SR 65 corridors, and the additional congestion relieving improvements in each of the alternatives analyzed in this report. Performance margins for each of the build alternatives were comparatively close because all build alternatives provided similar throughput, speeds and volumes in the 2040 design year. However, performance margins between all the build alternatives and the no-build alternative were large.

The findings do not support selection of the no build alternative. The study showed that the no build alternative would result in freeway system breakdown in future design years. Most of the interchange movements are currently running at or above capacity.

The ultimate build alternative (Alternative 3) showed the greatest benefits. This alternative not only improved the previously less efficient design with the removal of the loop connector, but serves the interchange more efficiently by providing an HOV direct connector. Alternatives 1 and 2 were less effective than Alternative 3. Alternative 2 was less effective than Alternative 1 because the loop connector would only serve one direction, and would bring the greatest impact only in the PM peak

period. The HOV direct connector of Alternatives 1 and 3, however, would serve two directions, and it is expected to help alleviate congestion both in the AM and PM peak periods.

It is recommended that all build alternatives be advanced to the PA&ED phase of the project development process. A more detailed microsimulation analysis, building upon the effort during the Project Initiation Document (PID) phase, is necessary to analyze detailed design options and construction staging strategies.

7. System Planning

This project is consistent with the Corridor System Management Plans for Interstate 80 and SR 65 and the Placer County Transportation Planning Agency Regional Transportation Plan (RTP) 2027.

Other Related Projects

- EA 03-36782
  This project will construct auxiliary and HOV lanes on Interstate 80 from 0.6 miles west of the Sacramento/Placer County Line to 0.1 miles east of Miner's Ravine Bridge. The project was awarded on May 1, 2008.

- EA 03-36783
  The project will construct HOV lanes on Interstate 80 from the Miner's Ravine Bridge to 1 mile east of the Route 65/80 separation. The project has a scheduled bid opening date of July 7, 2009.

- EA 03-4E140
  This Special Funded project proposes to widen the eastbound ramps at the Eureka/Atlantic Interchange. The project is scheduled to go to construction in 2012.

8. Traffic Management Plan (TMP)

A TMP is required for this project and a TMP Data Sheet has been prepared for this PSR (Attachment 8). Work will be limited to nighttime hours and no lane closures will be allowed during daytime and peak commute hours on weekdays. Construction of viaducts and other structures will require detouring/shifting traffic around the areas under construction. Falsework for bridge span construction will require occasional facility closure, as well as horizontal and vertical clearance reduction for the duration of the bridge work.

An early coordination with the City of Roseville, City of Rocklin and Placer County will need to be established to discuss any closures or traffic handling options on the city streets or county roads.

A public awareness campaign, portable changeable message signs, and Construction Zone Enhanced Enforcement Program (COZEEP) will be included in the project. Lane closure charts will be developed during the PS&E phase.

9. Hazardous Waste

An Initial Site Assessment (ISA) for Hazardous Waste was prepared for this PSR (Attachment 9). The hazardous waste investigation was limited to a review of aerial photographs and field review. Based on this review and without the benefit of soil and ground water sampling or a full field investigation, no hazardous waste such as petroleum hydrocarbons is expected to be encountered within the proposed project work scope.

Due to potentially hazardous levels of lead and chromium in yellow and white color traffic paint and/or thermoplastic stripes, if removal is included in the project scope, it shall be removed and disposed of in accordance with the Non-Standard Special Provision 15-300 N-SSP.

Lead-contaminated soil may exist due to the historical use of leaded gasoline, leaded airline fuels, waste incineration, etc. The areas of primary concern in relation to highway facilities are soils along routes that have had high vehicle emissions due to large traffic volumes, congestion, or stop and go situations during the time period when leaded gasoline was in use. For practical purposes, most Aerially Deposited Lead (ADL), due to vehicle emissions, would have been deposited prior to 1986. If the project area was constructed or reconstructed with clean material after 1986, it is likely that the levels of ADL contaminated soil are low. The only way to approximate the level of ADL contaminated soil is by sampling and testing the project area by performing a Preliminary Site Investigation (PSI). Depending on the test results, soil on the project may have to be managed as a hazardous waste in compliance with State and Federal laws.

The Contractor shall prepare a project specific "Lead Compliance Plan" and a lead awareness training to prevent or minimize worker exposure to lead while handling material potentially containing aerially deposited lead.

10. Environmental Issues

In order to identify environmental issues, constraints, costs, and resource needs the North Region Office of Environmental Services prepared a Preliminary Environmental Analysis Report (PEAR) for the project (Attachment 10). The PEAR analyzes the scope of work required to construct Alternative 3, which combines the features of Alternative 1 and Alternative 2. As such, the PEAR covers the worst-case scenario regarding potential impacts and estimated resources. The anticipated environmental approval document is a Negative Declaration (ND)/Focused ND for

the California Environmental Quality Act (CEQA) and a Finding of No Significant Impact for the National Environmental Policy Act (NEPA).

Potential special environmental processes that may be necessary include:

- Section 4(f), for work near the Antelope Creek Trail.
- Work within Antelope Creek, which will require wetland delineation and a jurisdictional determination from the US Army Corps of Engineers (USACE). There is also a possibility o work within Secret Ravine Creek, if the Taylor Road ramps are removed improvements are made to the Eureka Road/Atlantic Street ramps.
- A work window for work in Antelope Creek and Secret Ravine Creek may be required if affected fish species are discovered. The work window would occur during the dry season.
- Work window for removal of potential nesting trees and bushes: September 1st to January 31st.

Depending upon the results of the environmental studies, anticipated environmental commitments may include:

- Work window for removal of potential nesting trees and bushes: September 1st to January 31st.
- A work window for Antelope Creek and possibly Secret Ravine Creek during the dry season.
- Mitigation related to encroachment of floodplains, costs unknown at this time.
- Mitigation related to work within Antelope Creek and Secret Ravine Creek, costs unknown at this time (pending determination by USACE).
- Vegetation replacement as a result of construction of new connectors, auxiliary lanes and ramp lanes, and elimination of existing ramps, costs unknown at this time.
- If aerial deposited lead is discovered at hazardous levels, a lead compliance plan would be required at a cost of approximately $3,500.
- Noise abatement (soundwalls) may be required, pending the results of noise monitoring. Cost is unknown at this time.

Since there will be work within Antelope Creek, and possibly Secret Ravine Creek, the following permits are required:

- Section 401 Water Quality Certification (Regional Water Quality Control Board); approximately 6 months to acquire.
- Section 404 Nationwide Permit (USACE); up to one year to acquire.
- 1602 Streambed Alteration Agreement (California Department of Fish and Game); approximately 6 months to acquire.
- Statewide National Pollutant Discharge Elimination System (NPDES) Permit issues by the State Water Resources Control Board, (Board Order 99-06-DWQ). The Department already has this permit.

Level of Effort

Factors that may affect cost, schedule, level of effort, and resources needed to complete the environmental document include:

- Community impacts:
  - Relocation of residents and/or businesses
  - Impacts of extended temporary ramp closures to businesses and residents

- Cultural resources:
  - Discovery of cultural resources could extend the schedule three to five years.

- Biological resources:
  - Discovery of federally-listed plant species would trigger Federal Endangered Species Act (FESA) Section 7 consultation, and possible external factors beyond the Department's control, such as resources agency staffing shortages, may lengthen consultation timeframes.
  - Plant and animal surveys need to be conducted during the spring, summer and early fall months. If possible, these surveys should be started in spring 2009. The project schedule may be affected if these surveys are pushed to spring 2010.

- Hazardous waste:
  - Discovery of hazardous waste within the environmental study limits of the project.

4(f) Impacts

The project may create 4(f) issues if it results in any temporary or permanent impacts to the City of Roseville's Antelope Creek Trail that extends under Highway 65 west of I-80 and adjacent to Antelope Creek.

Community Impacts

A full Community Impacts Analysis (CIA) will be required for this project. The CIA will address potential construction related impacts such as economic impacts and impacts to public services, as well as issues related to land use and growth. Due to the limited acquisition of land for this project, any other community impacts are expected to be minor.

Visual/Aesthetics

A Visual Impact Assessment (VIA) is required. Aesthetic relief should be included for all structures and soundwalls, if needed. New columns should be designed to match or integrate with existing structures. Landscaping will be needed to replace

removed elements and possibly mitigate visual impacts from the magnitude of the structures.

All disturbed areas will be replanted with irrigated landscaping and/or erosion control as is appropriate to their specific location. Removed landscaping will be replaced. Existing trees will be preserved and protected to the maximum extent possible. Replacement landscaping will follow existing design concept of trees, mulch and maximum mowable areas. All slopes will be vegetated to protect against erosion and to help meet Storm Water Quality issues. The design of the flyovers and retaining walls are to incorporate existing, or soon to be constructed, corridor aesthetics.

Visual simulations may be required. Cost of visual simulations can be significant; however, because a decision as to the number of simulations has not been made, cost is unknown at this time.

Cultural Resources

Much of the State right of way and adjacent area has been previously surveyed for cultural resources by Caltrans cultural resources staff, with negative results. Additionally, previous cultural resources studies have been conducted within a half-mile radius of the project primarily for numerous commercial and residential developments in the project vicinity. Within this radius, but outside the present project Area of Potential Effect (APE), numerous investigations with prehistoric and historical archaeological resources have been identified. The area of the I-80/SR 65 interchange is extremely disturbed, with commercial, residential development and recent highway construction, which may preclude the presence of surface and/or buried archaeological resources.

It is unlikely a Historic Resource Evaluation Report (HRER) will be necessary. The project area is comprised mostly of modern development and the one known historic resource (the First Transcontinental Railroad-UPRR) that passes through the project APE has been well documented and would be considered eligible for listing in the National Register of Historic Places (NRHP).

For compliance with Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA), Caltrans cultural resources staff would be required to:

- Conduct a record and literature search at the California Historical Information System;
- Coordinate with interested parties (i.e., local historical society, Native American Heritage Commission, local Native American representatives, and the State Office of Historic Preservation (OHP);
- Delineate an Area of Potential Effects (APE);
- Conduct an archaeological survey of all areas not previously examined within the last 5 years and preparation of an Archaeological Survey Report (ASR);

- Prepare a Finding of Effect (FOE);
- Preparation of a Historic Property Survey Report, a summary document; and
- Coordination with OHP.

Cultural resources could not be identified during field surveys. The number of months required to satisfy Section 106 compliance is contingent on the results of pedestrian surveys and background research of the area within the project APE.

Hydrology and Floodplain

A floodplain evaluation report will be prepared to analyze the effects of the alterations to the bridge footings on the 100-year floodplain. The project will encroach on several floodplains, including Secret Ravine and Antelope Creek. The floodplain study will include an assessment of the impacts and mitigation measures to reduce the significance of these impacts.

Water Quality and Storm Water Runoff

Caltrans has a Statewide National Pollutant Discharge Elimination System (NPDES) Permit issued by the State Water Resources Control Board, (Board Order 99-06-DWQ). This permit regulates the storm water and non-storm water discharges associated with construction activity, discharges associated with normal maintenance and operations of Caltrans facilities (also known as a Municipal Storm Water Permit), and it also serves as a State of California Waste Discharge Requirement.

The permit requires Caltrans to comply with the requirements of the statewide Construction General Permit (Board Order Number 99-08-DWQ). During construction, compliance with the permit requires the appropriate selection and deployment of both structural and non-structural Best Management Practices (BMPs) that achieve the performance standards of Best Available Technology economically achievable/Best Conventional Pollutant Control Technology (BAT/BCT) to reduce or eliminate storm water pollution.

Air Quality

This project is consistent with the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP) and Metropolitan Transportation Improvement Program (MTIP). As such, a satisfactory affirmative regional conformity determination has been made.

Noise

The project is anticipated to meet the definition of a Type I project, requiring the need for a technical noise studies report. The need for noise abatement (such as soundwalls) will not be determined until after the noise monitoring is complete.

Climate Change

Information from the Standard Environmental Reference regarding climate change will be incorporated. Climate change analysis involving modeling may be required.

Biological Environment

Formal surveys will be completed for the Natural Environment Study (NES), as well as pre-construction surveys by a qualified biologist to determine absence/presence of listed and non-listed plant and animal species. These formal surveys will begin in early spring and end October 1st (within the same year). A Biological Assessment (BA) is not anticipated.

Because of the potential work within Antelope Creek, and possibly Secret Ravine Creek, a complete wetland delineation and jurisdictional determination from the USACE is required, and permits are needed before project construction begins. Formal consultation with the USFWS and NMFS may be required.

Cumulative Impacts

A cumulative impact assessment will be conducted and included in the environmental document.

Community Interaction

A public information meeting will be held as part of the Project Approval and Environmental Document (PA&ED) phase of the project.

Storm Water Management Plan (SWMP)

The Caltrans' Storm Water Management Plan (SWMP) requires this project to comply with Caltrans' statewide National Pollution Discharge Elimination System (NPDES) permit. Approved treatment Best Management Practices shall be considered as a part of this project, per the May 2007 revision of the Storm Water Planning and Design Guidelines.

The Central Valley Regional Water Quality Control Board has jurisdiction within the project limits. This project is within the Placer County MS4 permit area.

A Storm Water Pollution Prevention Plan (SWPPP) shall be submitted by the contractor and reviewed and approved by Caltrans Construction.

11. Right of Way

A Right of Way Data Sheet was prepared for this project (Attachment 11). There are five partial acquisitions and one complete acquisition necessary to construct Alternative 1. Two additional partial acquisitions are required for Alternatives 2 and 3.

There are utilities within the project limits but it is unknown at this time the extent of relocation that will be necessary. There is an Outdoor Advertising Sign (billboard), a Roseville Auto Mall Sign and on-site advertising sings that will need to be relocated. Relocation Assistance Program (RAP) will be involved with at least one property owner. Widening the East Roseville Viaduct will occur over existing railroad tracks and will require coordination with the Railroad.

12. Project Reviews

The project study report and associated attachments have been reviewed by the Headquarters Project Development Coordinator, Headquarters Design Reviewer, FHWA and District staff.

13. Funding/Scheduling

Proposed Funding

SPRTA and PCTPA will provide the funding for the project from a combination of the following sources:

- Federal Demonstration (DEMO) and other federal earmarked funds
- Local developer fees
- Regional Transportation Improvement Program (RTIP) – part of the State Transportation Improvement Program (STIP)
- Potential future local tax measure funding

Schedule and Capital Support Resources

The schedule and required Capital Outlay Support resources assume that Caltrans staff will perform the project development functions. The Programming Sheet for the project is included as Attachment 13.

Table 10: Project Schedule

Milestone	Date
PA&ED	April 2011
PS&E	January 2013
Ready to List	March 2013
Contract Acceptance	November 2015

ATTACHMENTS

1. LOCATION MAP
2. TYPICAL SECTIONS
3. LAYOUT SHEETS
4. PROFILES AND SUPERELEVATIONS
5. ADVANCE PLANNING STUDY
6. COST ESTIMATE
7. LANDSCAPE ARCHITECTURE ASSESSMENT SHEET
8. TMP DATA SHEET
9. INITIAL SITE ASSESSMENT FOR HAZARDOUS WASTE
10. PRELIMINARY ENVIRONMENTAL ANALYSIS REPORT
11. RIGHT OF WAY DATA SHEET
12. TRAFFIC VOLUME FORECASTS
13. PROGRAMMING SHEET

ATTACHMENT 1

I-80/SR 65 Interchange Modification Project
Location Map

ATTACHMENT 2

ALTERNATIVE 1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS INCOMPLETE FOR DESIGN STUDY ONLY

PLANS APPROVAL DATE

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ABBREVIATIONS:

RHMA-O - RUBBERIZED HOT MIX ASPHALT (TYPE O)
HMA-A - HOT MIXED ASPHALT (TYPE A)

NEW STRUCTURAL SECTIONS

1 0.10' RHMA-O
0.70' HMA-A
2.20' AB (CLASS 2)

2 0.10' RHMA-O
0.25' HMA-A

3 0.10' RHMA-O
0.75' HMA-A
1.65' AB (CLASS 2)

4 0.10' RHMA-O
0.60' HMA-A
1.90' AB (CLASS 2)

5 0.10' RHMA-O
0.60' HMA-A
1.35' AB (CLASS 2)

6 0.10' RHMA-O

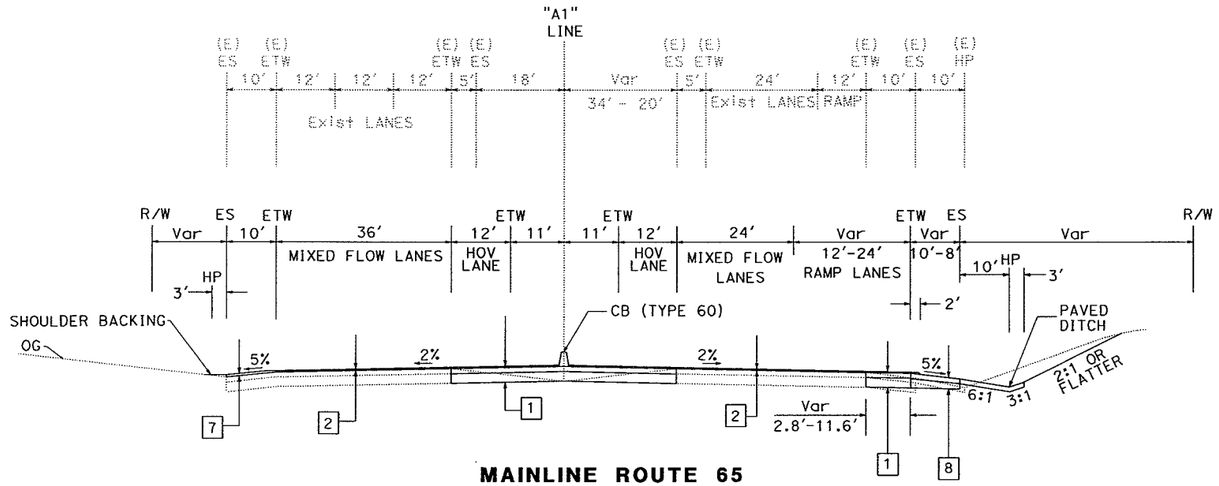
7 0.25' RHMA-A

8 0.70' RHMA-A
2.20' AB (CL2)

9 0.75' HMA-A
1.65' AB (CL2)

10 0.60' HMA-A
1.90' AB (CL2)

11 0.60' HMA-A
1.35' AB (CL2)



MAINLINE ROUTE 65

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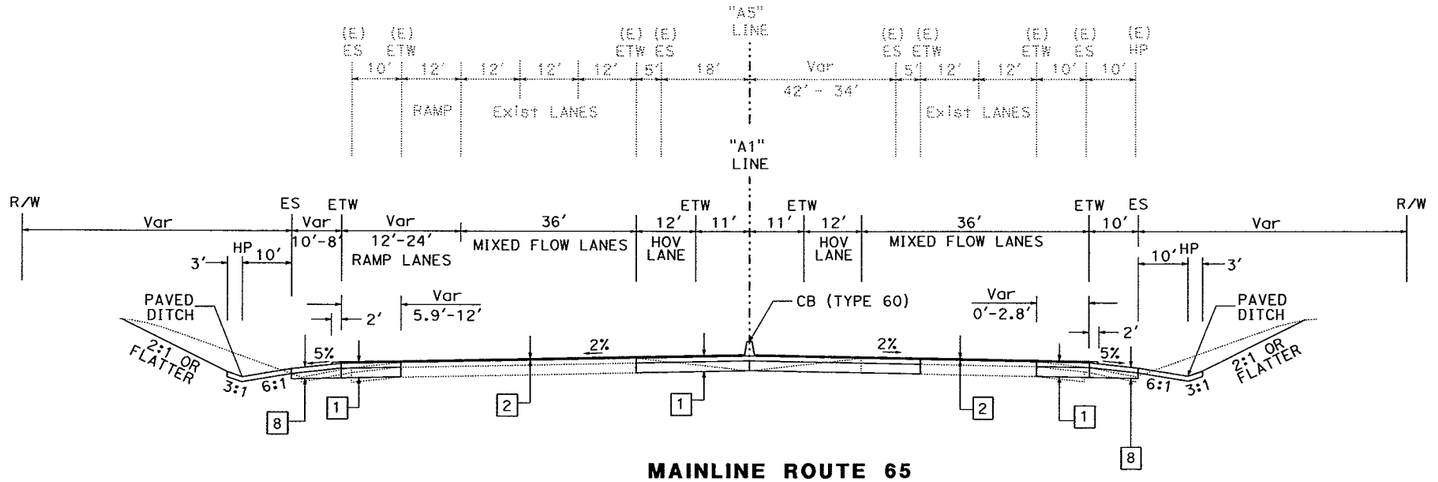

MAINLINE ROUTE 65

"A1" STA 131+81 TO STA 139+75
* (E) "A5" Var From Proposed "A1" 6.5' - 0'

DESIGN DESIGNATION MAINLINE 80

Annual ADT		
Base Year	2006	163,000
	2020	220,100
	2030	260,800
	2040	301,600
Peak Hour		
Base Year	2006	11,900
	2020	16,100
	2030	19,000
	2040	22,000
20-year Directional %	62	
20-year DH Truck %	4.0	
10-yaer TI (Lane1)	11.0	
10-yaer TI (Lane2,3)	13.5	
20-year TI (Lane1)	12.0	
20 year TI (LANE2,3)	14.5	

DESIGN DESIGNATION MAINLINE 65

Annual ADT		
Base Year	2007	108,000
	2020	171,200
	2030	219,800
	2040	268,400
Peak Hour		
Base Year	2007	8,210
	2020	13,000
	2030	16,700
	2040	20,400
20-year Directional %	65	
20-year DH Truck %	4.0	
10-yaer TI	13.0	
20-year TI	14.0	
40 year TI	15.0	

TYPICAL CROSS SECTIONS
ALTERNATIVE 1
NO SCALE

X-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY
CHECKED BY

FUNCTIONAL SUPERVISOR
CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

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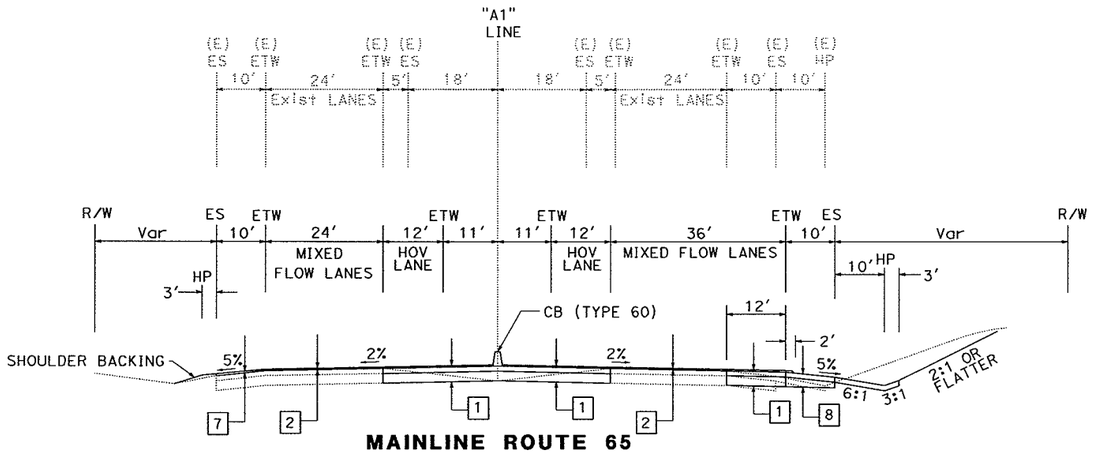

MAINLINE ROUTE 65

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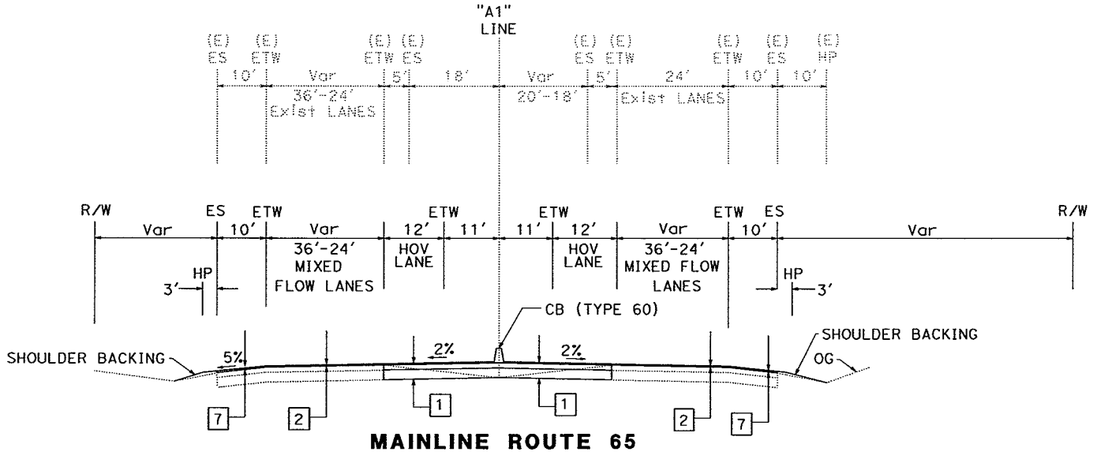

MAINLINE ROUTE 65

"A1" STA 143+39 TO STA 174+15

* "A1" STA 143+39 TO STA 161+00 PLACE AC DIKE (TYPE E)

TYPICAL CROSS SECTIONS

ALTERNATIVE 1

NO SCALE

X-2

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

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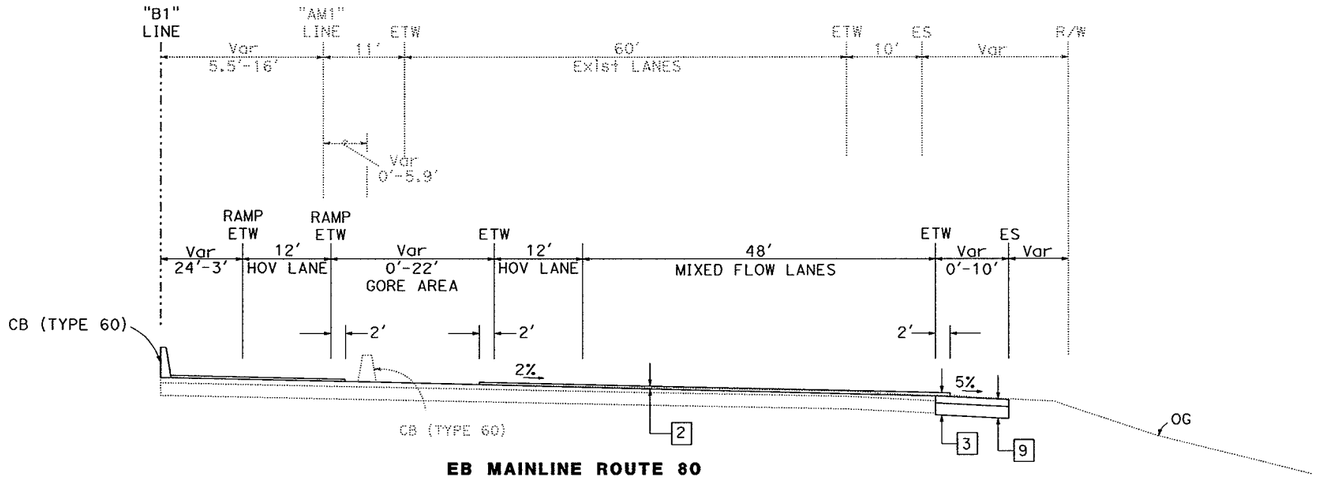

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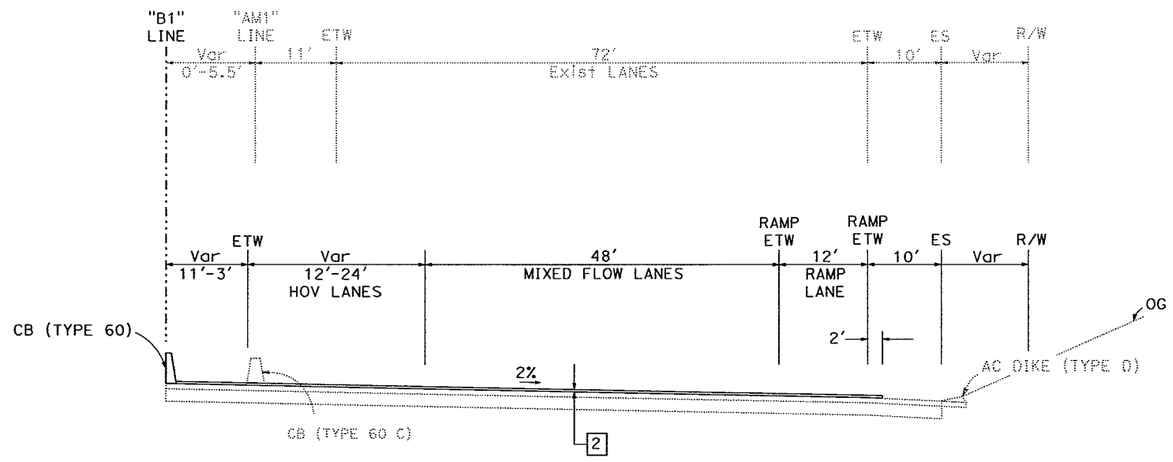

EB MAINLINE ROUTE 80

"B1" 88+24 TO 93+42

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-3

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BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

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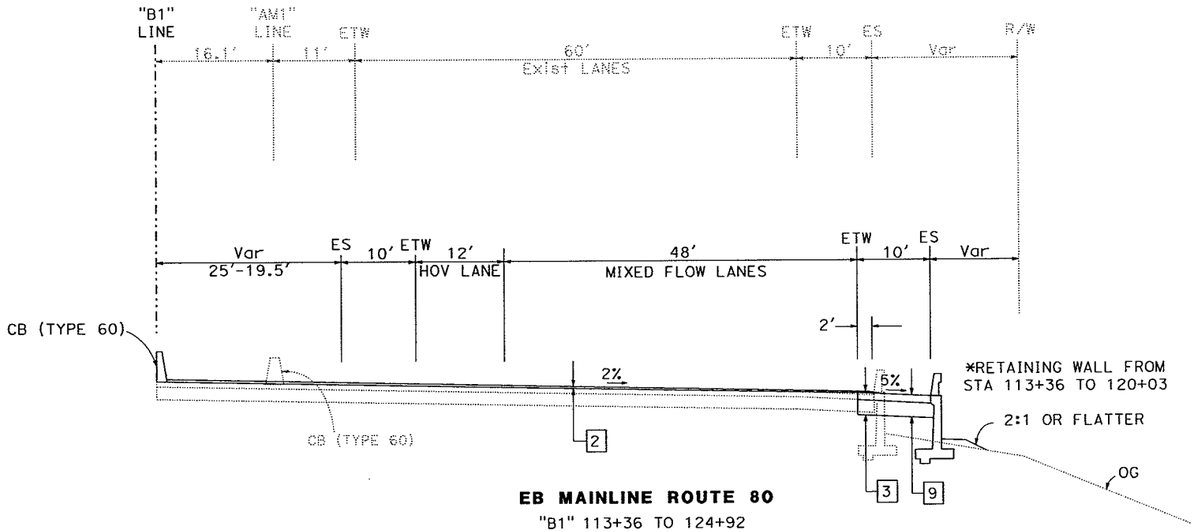

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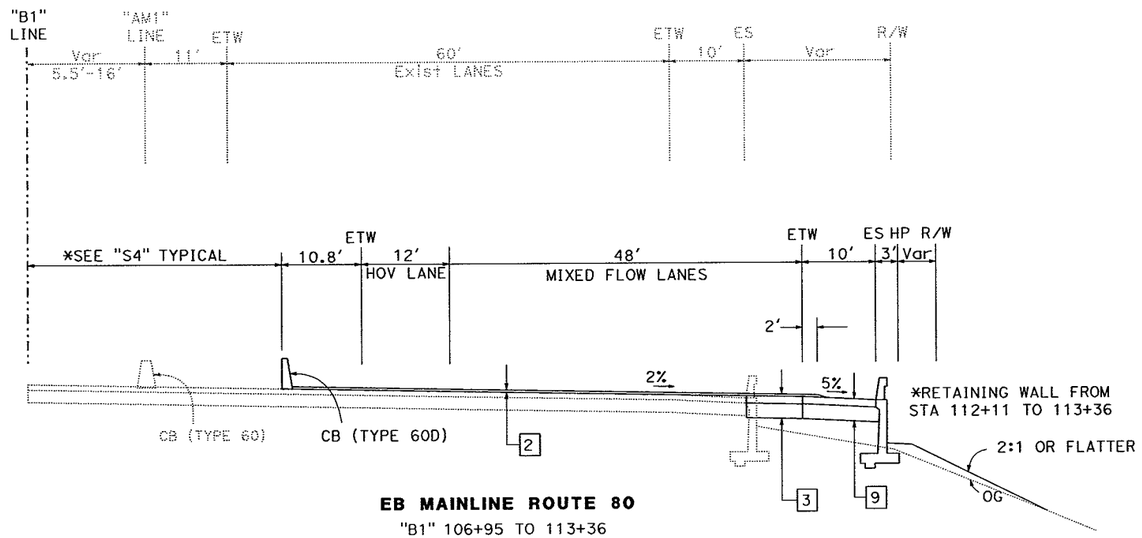

EB MAINLINE ROUTE 80

"B1" 106+95 TO 113+36

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-4

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

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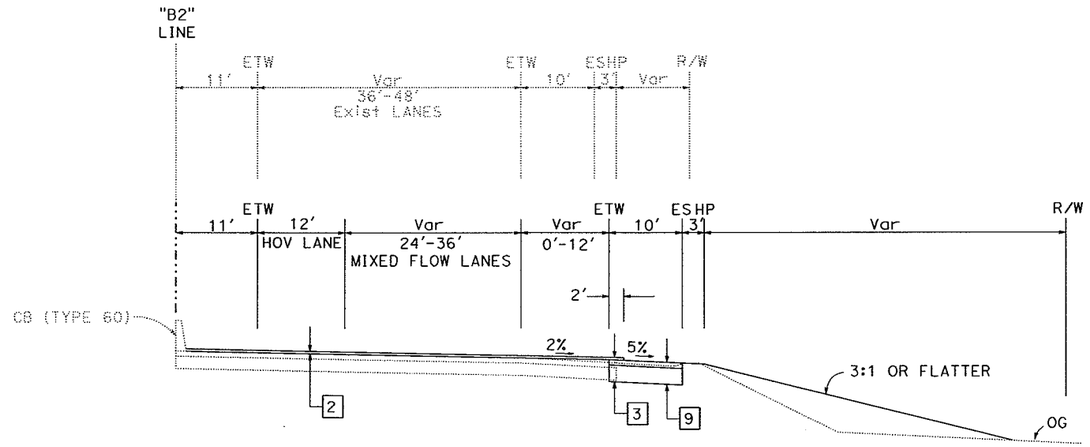

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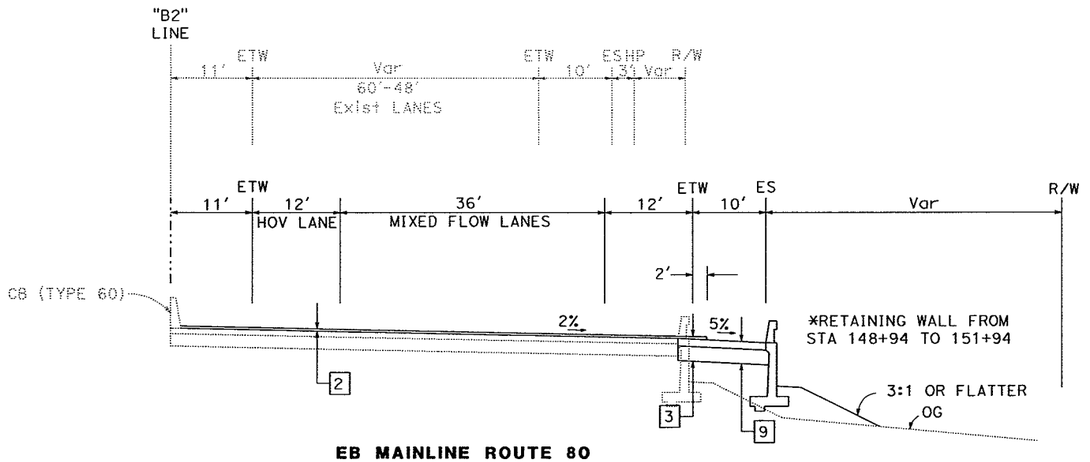

EB MAINLINE ROUTE 80

"B2" 148+94 TO 155+30

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-5

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans **ADVANCE PLANNING**

FUNCTIONAL SUPERVISOR

CHAD BAKER

LAST REVISION 03-04-08

DATE PLOTTED => 18-JUN-2009

TIME PLOTTED => 11:25

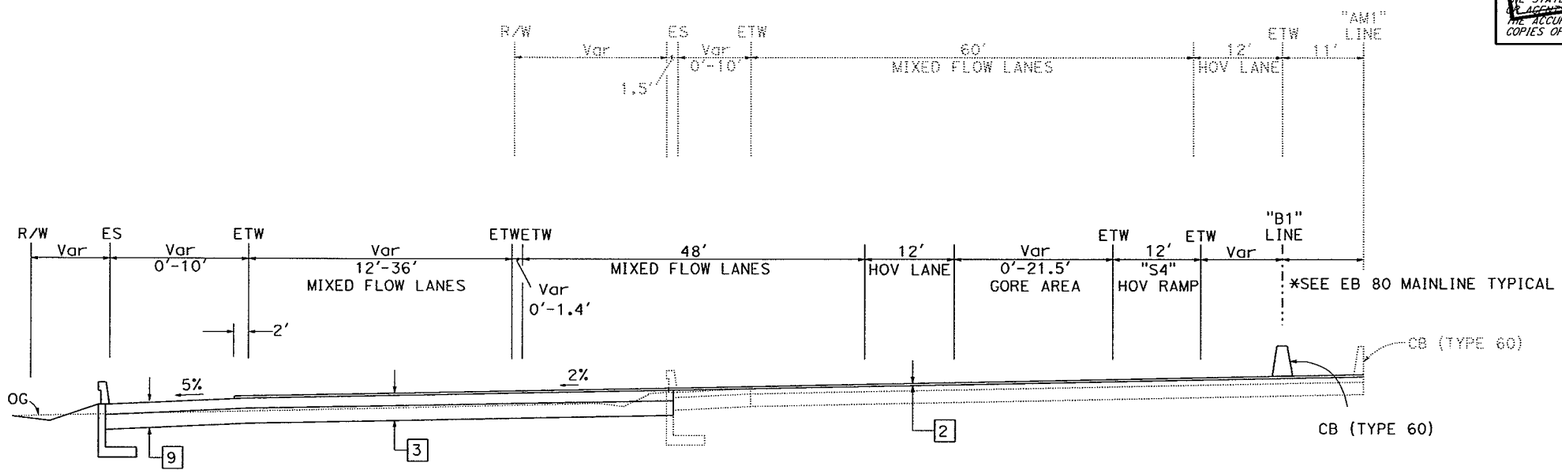
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

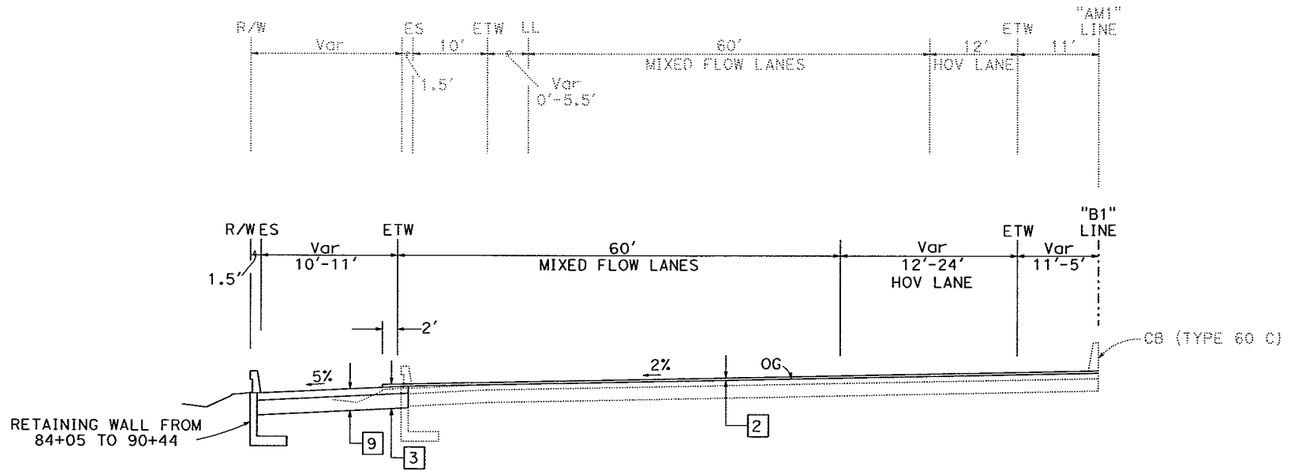
INCOMPLETE PLANS ONLY FOR DESIGN STUDY

PROFESSIONAL ENGINEER — EXP. — CIVIL — STATE OF CALIFORNIA



WB MAINLINE ROUTE 80

"B1" 90+44 TO 106+95



WB MAINLINE ROUTE 80

"B1" 84+40 TO 90+44

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans **ADVANCE PLANNING**
FUNCTIONAL SUPERVISOR: CHAD BAKER
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LAST REVISION 03-04-08
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:25

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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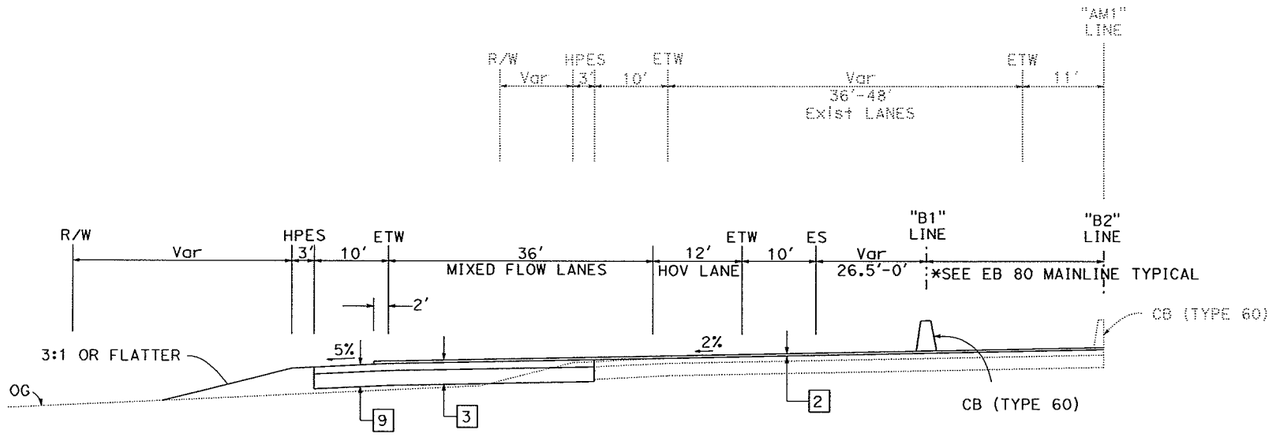
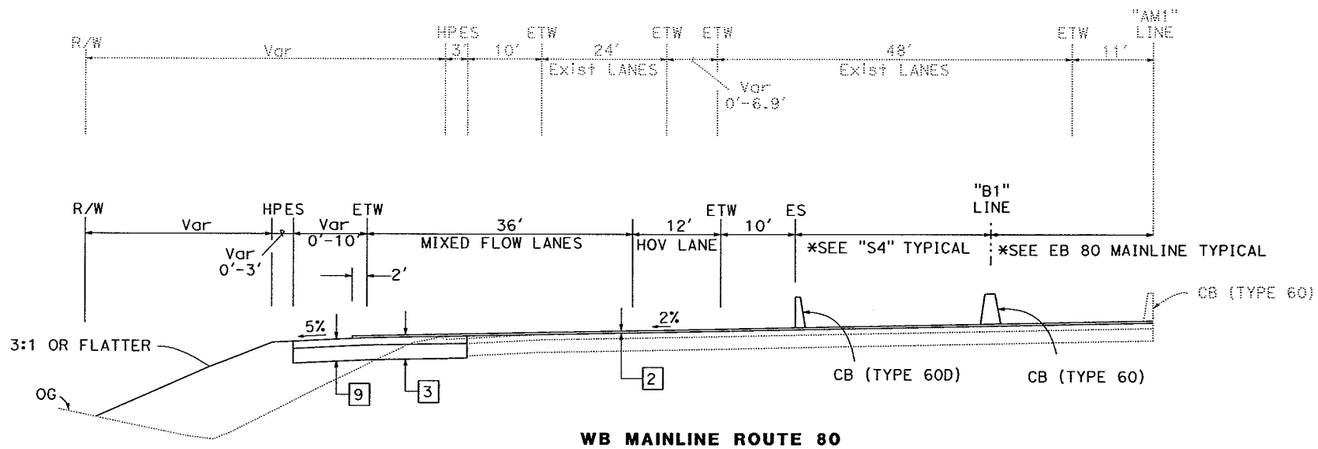
REGISTERED PROFESSIONAL ENGINEER — INCOMPLETE PLANS — ONLY FOR DESIGN STUDY — EXP. — CIVIL — STATE OF CALIFORNIA



WB MAINLINE ROUTE 80

"B1" 113+46 TO 124+51
"B2" 124+47 TO 133+44



WB MAINLINE ROUTE 80

"B1" 106+95 TO 113+36

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-7

REVISED BY	DATE REVISED

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FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

LAST REVISION 03-04-08
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:25

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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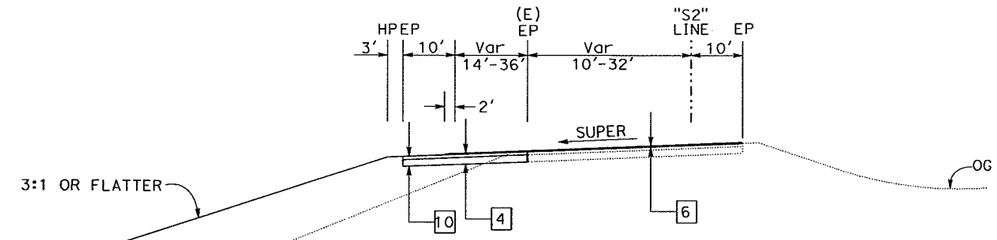
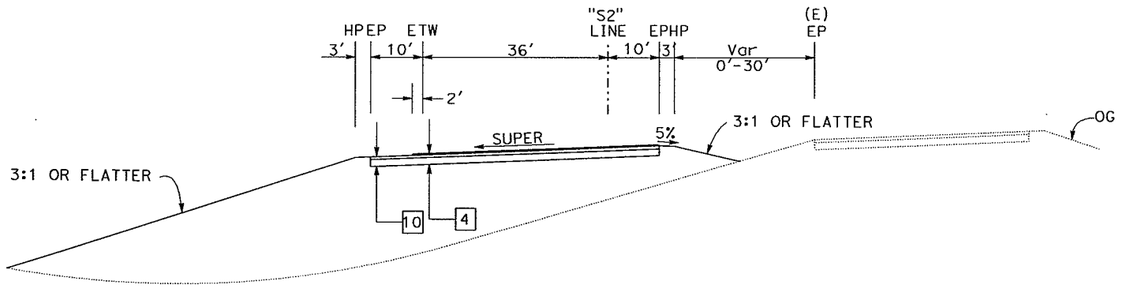


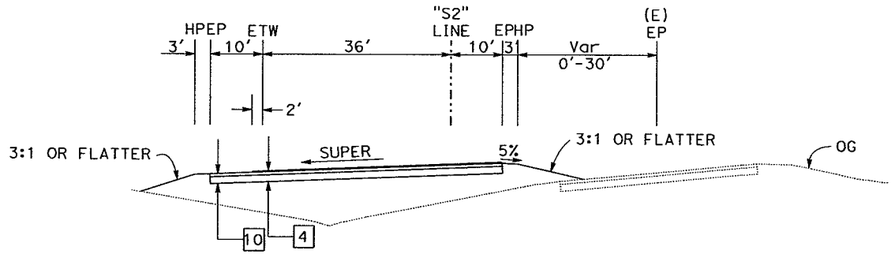
SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 124+00 TO 137+85.55



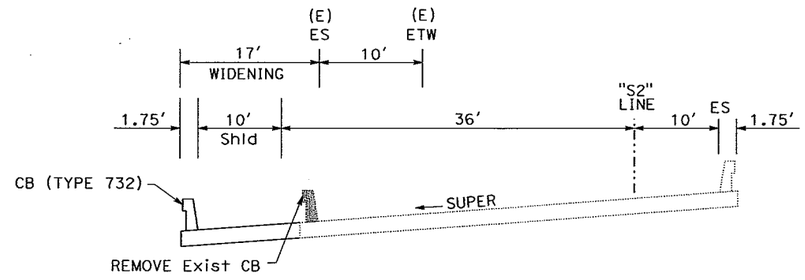
SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 121+00 TO 124+00



SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 108+65.83 TO 121+00



SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 115+75.74 TO 128+42.90

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
Caltrans® ADVANCE PLANNING	CHAD BAKER				

LAST REVISION 05-05-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:25

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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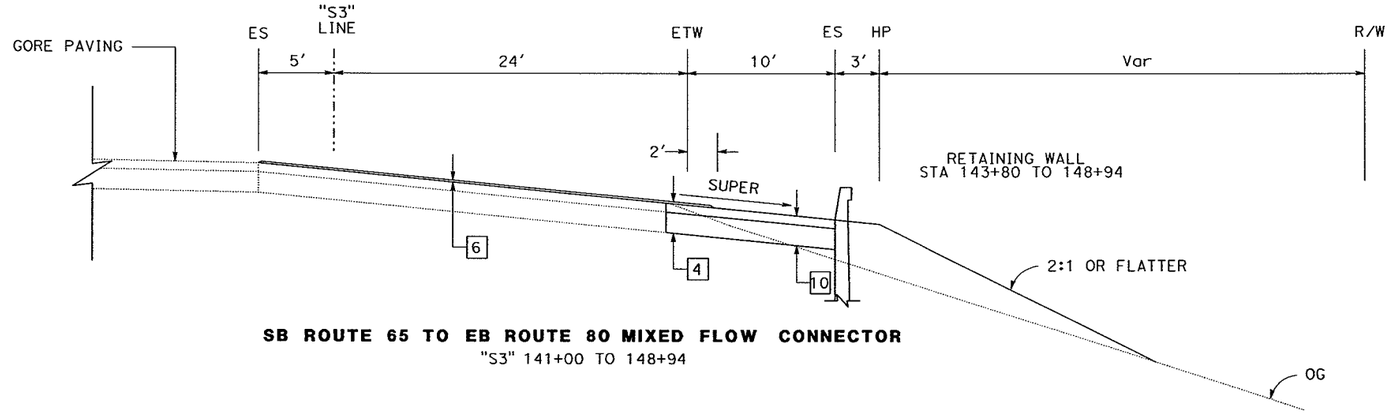
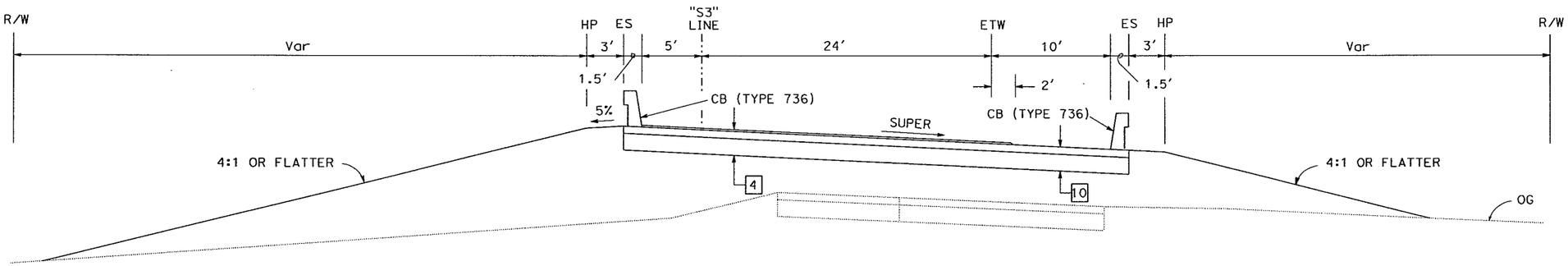
PROFESSIONAL ENGINEER — REGISTERED — STATE OF CALIFORNIA — CIVIL — Exp. — No.

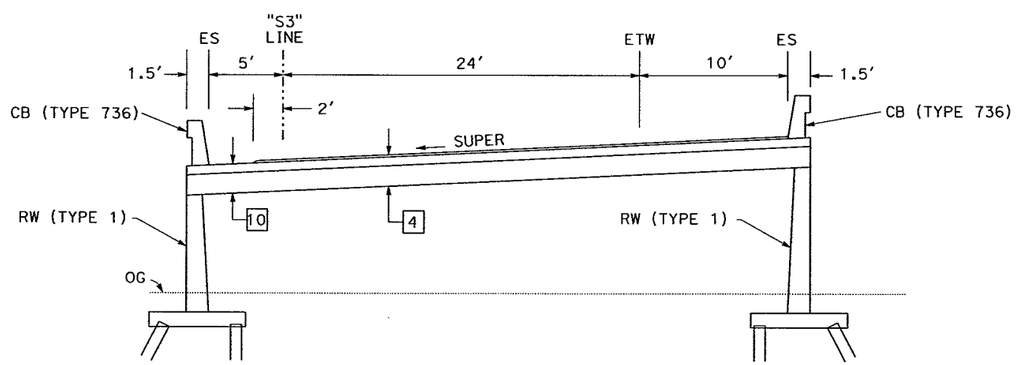
INCOMPLETE PLANS ONLY FOR DESIGN STUDY



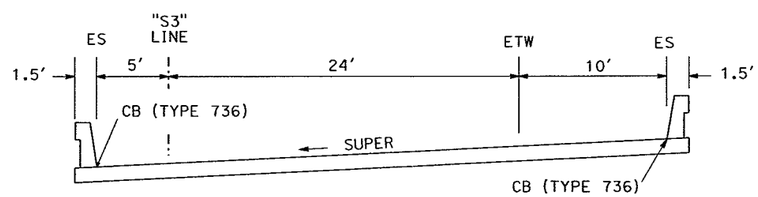
SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 141+00 TO 148+94



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 138+00 TO 141+00



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 109+25 TO 113+00



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 113+00 TO 138+00

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ADVANCE PLANNING
FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

LAST REVISION 03-31-09
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:26

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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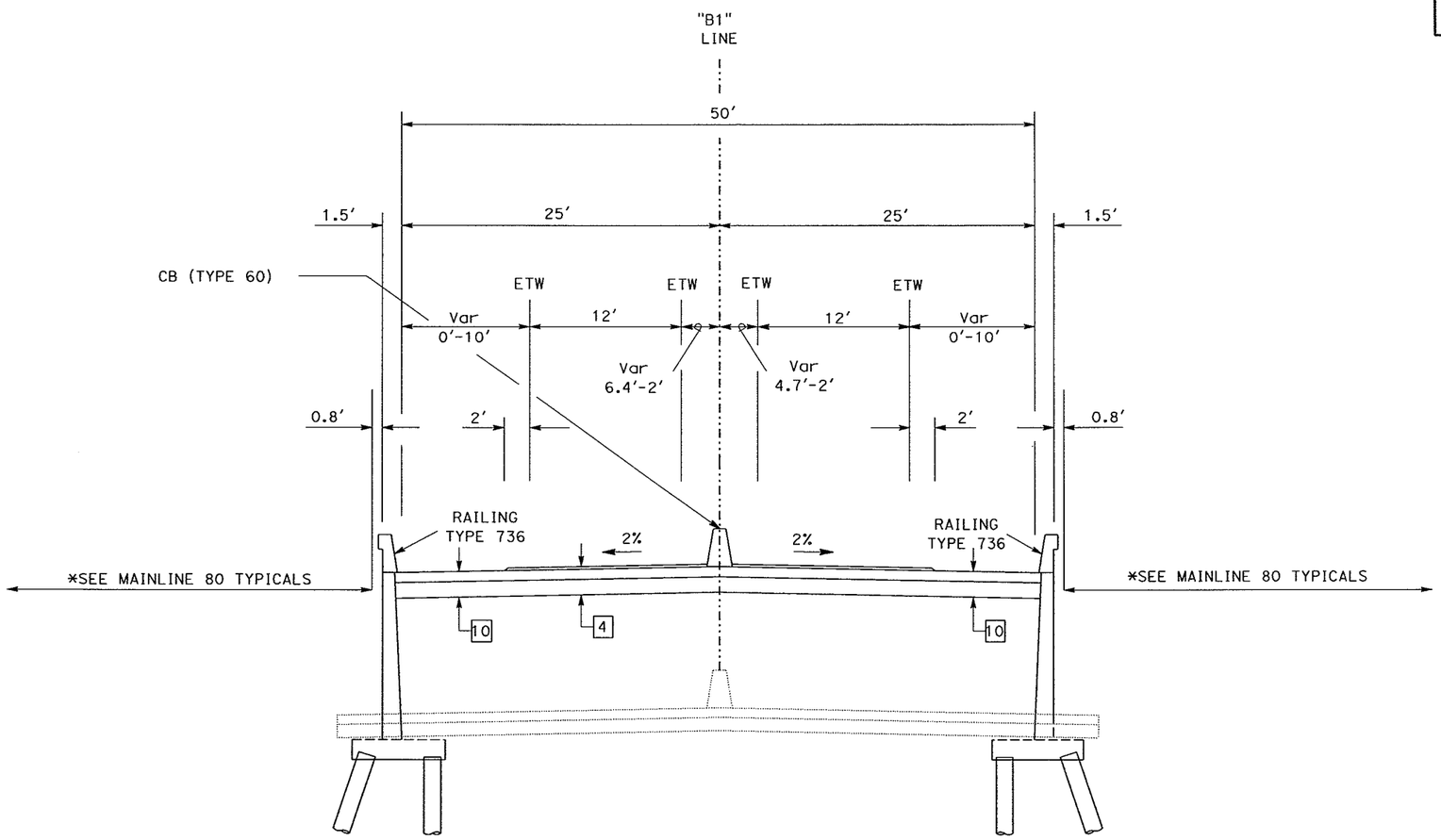
INCOMPLETE PLANS FOR DESIGN STUDY ONLY

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA



EB ROUTE 80 TO NB ROUTE 65/SB ROUTE 65 TO WB ROUTE 80
HOV DIRECT CONNECTOR "S4"

"B1" STA 106+95 TO STA 113+36

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER

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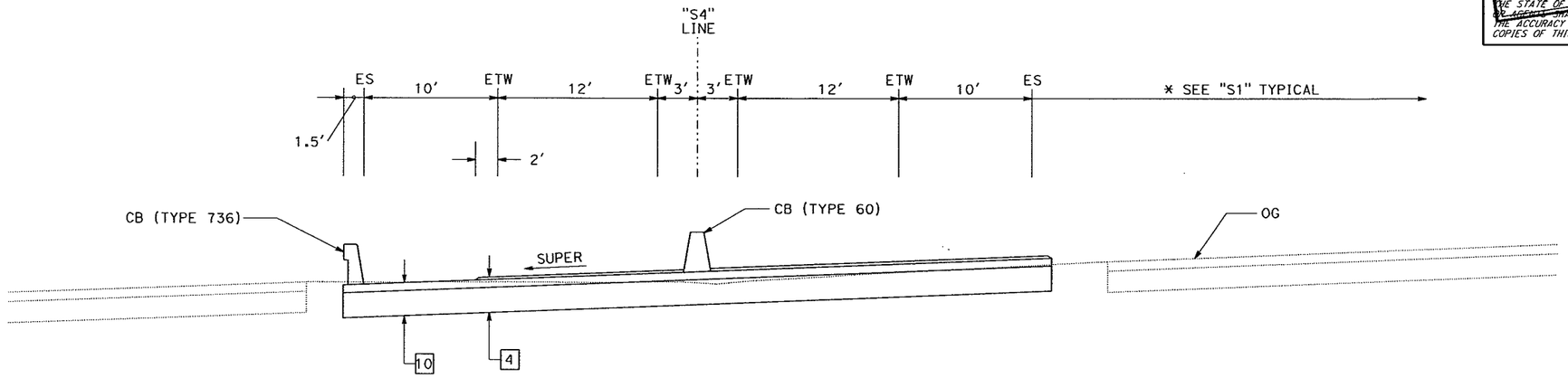
LAST REVISION 03-31-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

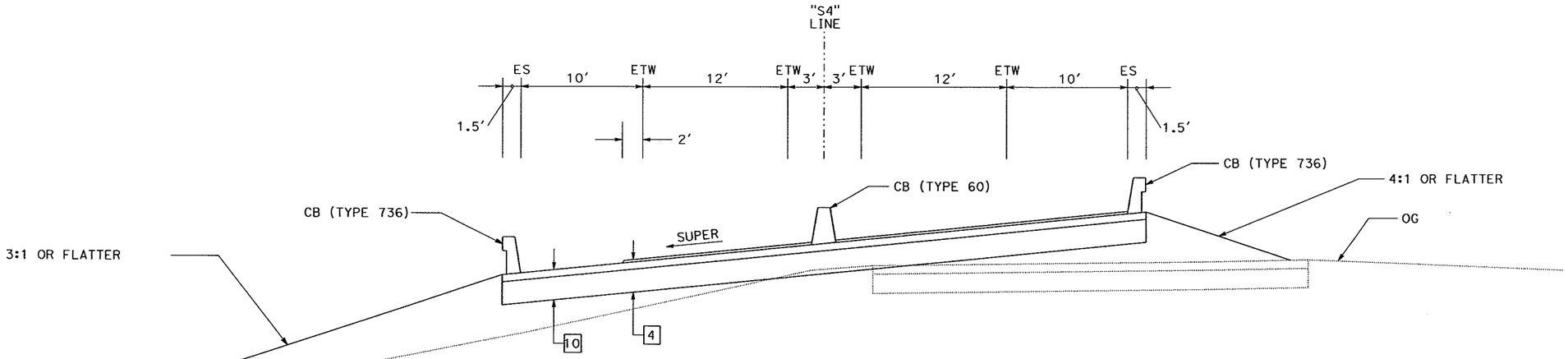
REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS APPROVAL DATE _____



EB ROUTE 80 TO NB ROUTE 65/SB ROUTE 65 TO WB ROUTE 80
HOV DIRECT CONNECTOR "S4"

"S4" STA 130+68 TO STA 131+49



EB ROUTE 80 TO NB ROUTE 65/SB ROUTE 65 TO WB ROUTE 80
HOV DIRECT CONNECTOR "S4"

"S4" STA 127+09 TO STA 130+68

TYPICAL CROSS SECTIONS
ALTERNATIVE 1

NO SCALE

X-11

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Caltrans ADVANCE PLANNING

LAST REVISION 00-00-00 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:26

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS APPROVAL DATE _____

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

Exp. _____ CIVIL

STATE OF CALIFORNIA

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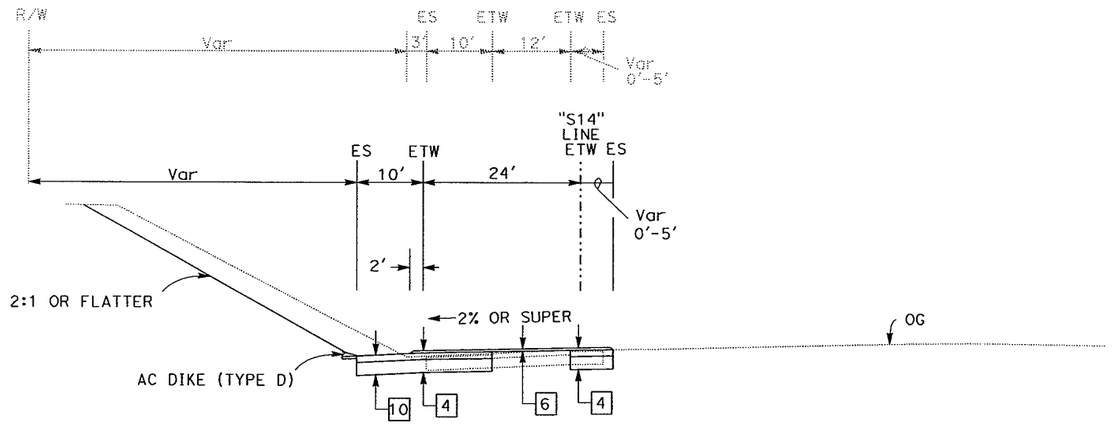
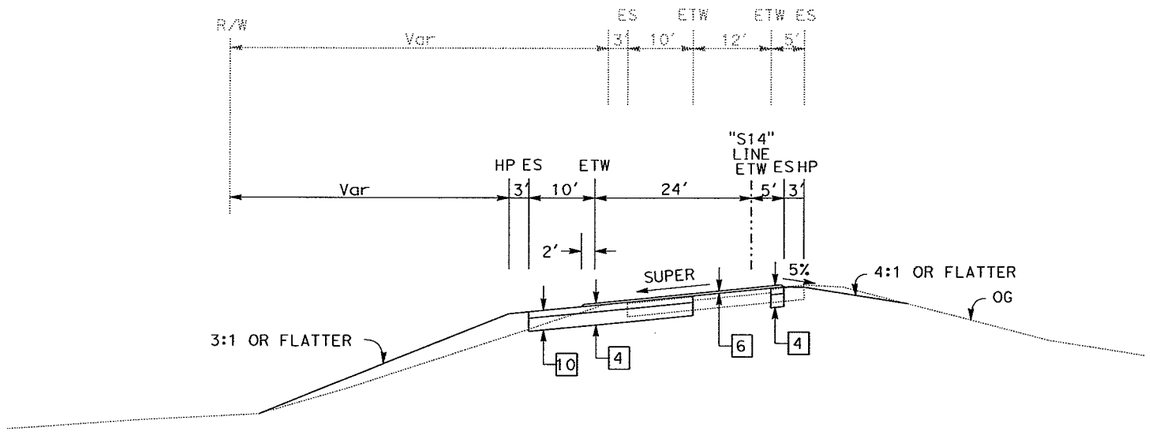


WB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S14" 133+02 TO 137+28



WB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S14" 119+85 TO 133+02

TYPICAL CROSS SECTIONS
ALTERNATIVE 1

NO SCALE

X-12

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans ADVANCE PLANNING

FUNCTIONAL SUPERVISOR

CHAD BAKER

LAST REVISION 03-31-09

DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:26

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS APPROVAL DATE _____

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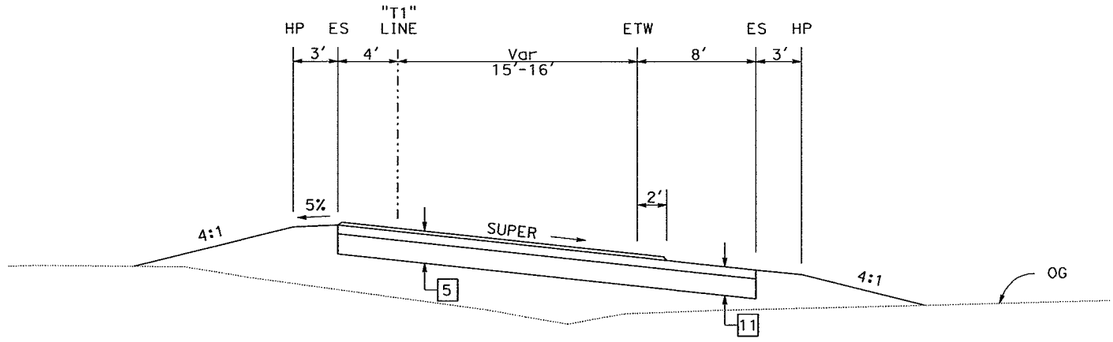
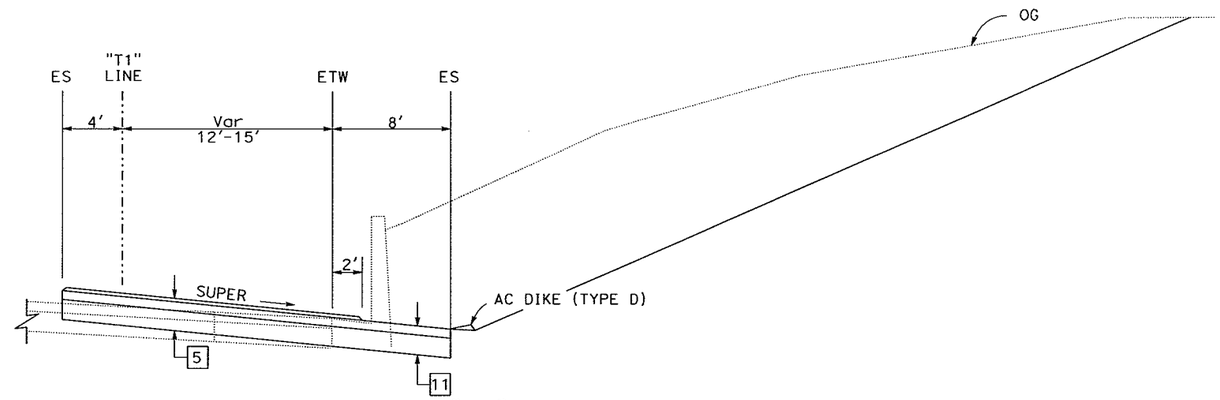
REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA



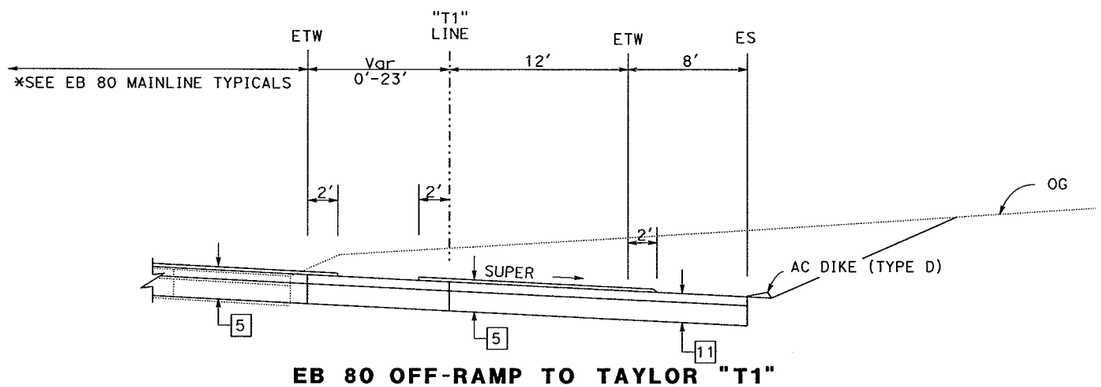
EB 80 OFF-RAMP TO TAYLOR "T1"

"T1" 100+00 TO 108+43



EB 80 OFF-RAMP TO TAYLOR "T1"

"T1" 96+17 TO 100+00



EB 80 OFF-RAMP TO TAYLOR "T1"

"T1" 93+09 TO 96+17

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

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FUNCTIONAL SUPERVISOR: CHAD BAKER

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BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.1 R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

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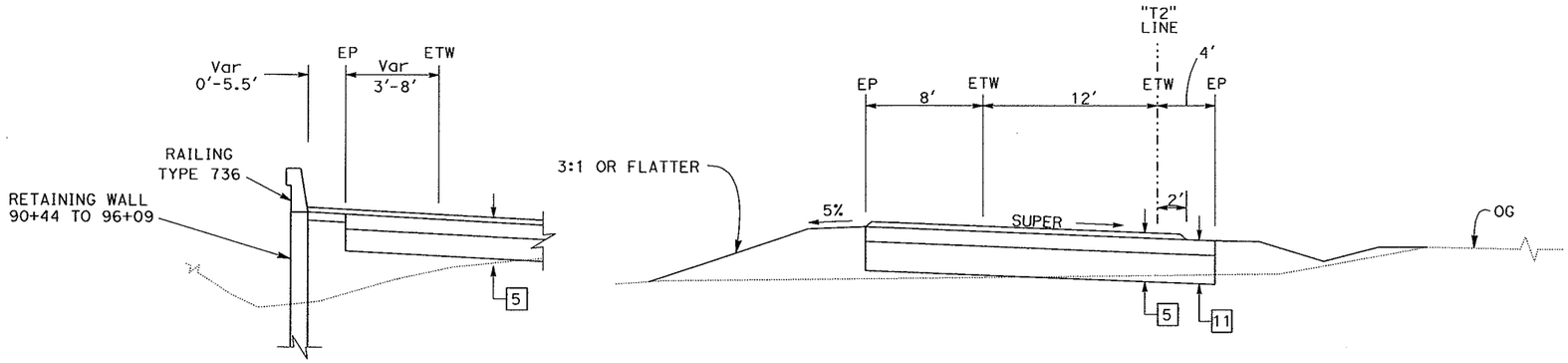

WB TAYLOR TO WB ROUTE 80 SLIP ON-RAMP "T2"

"T2" 90+44 TO 102+02

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-14

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BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS APPROVAL DATE _____

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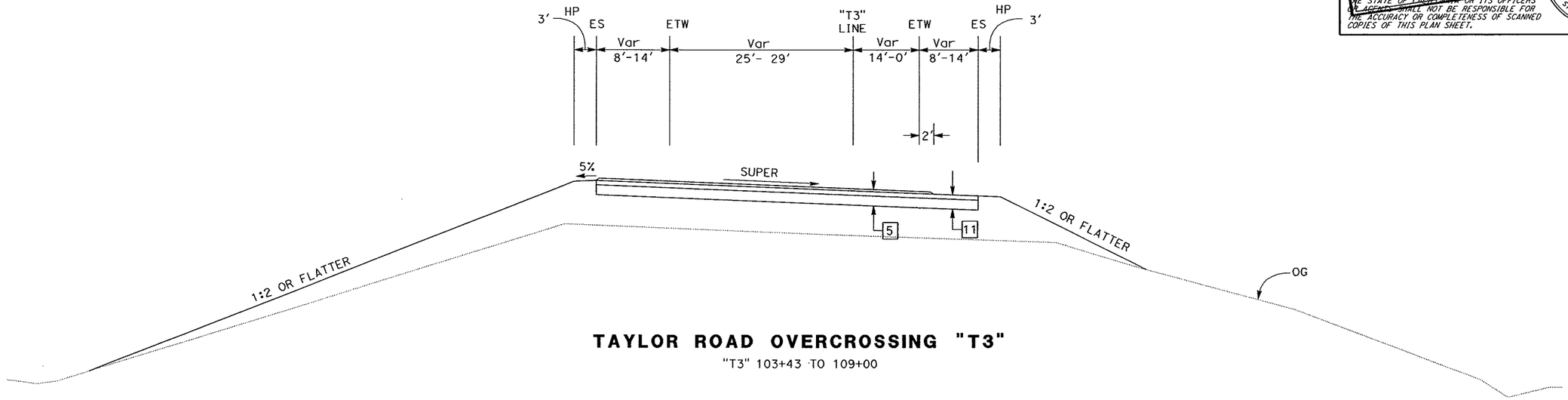
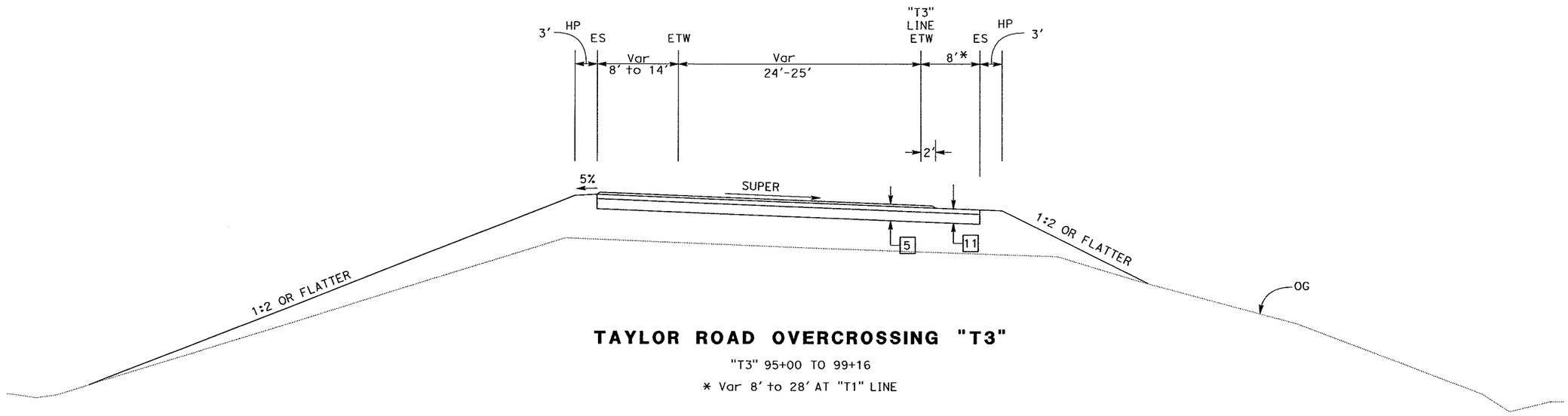


TAYLOR ROAD OVERCROSSING "T3"

"T3" 103+43 TO 109+00



TAYLOR ROAD OVERCROSSING "T3"

"T3" 95+00 TO 99+16

* Var 8' to 28' AT "T1" LINE

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-15

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER

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DETAILER

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REGISTERED CIVIL ENGINEER _____ DATE _____

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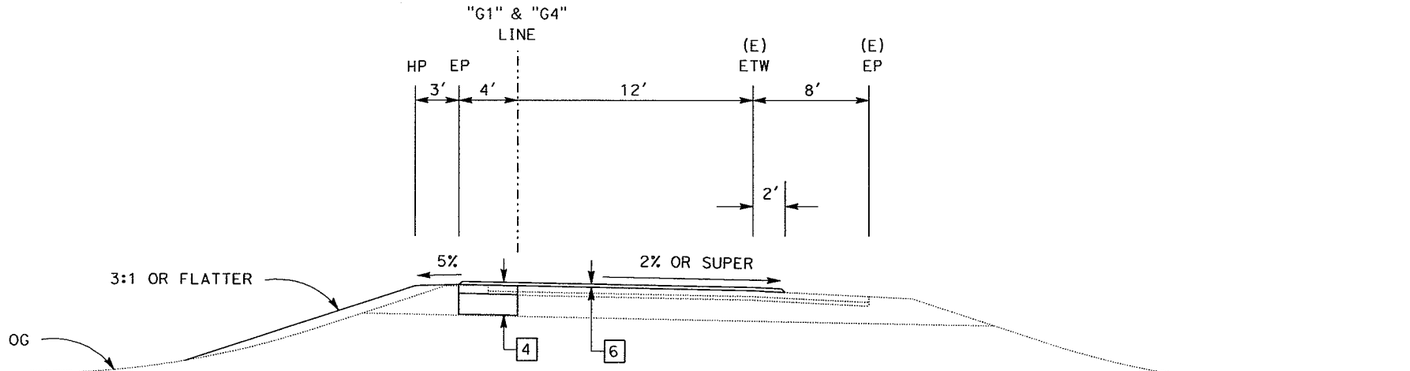
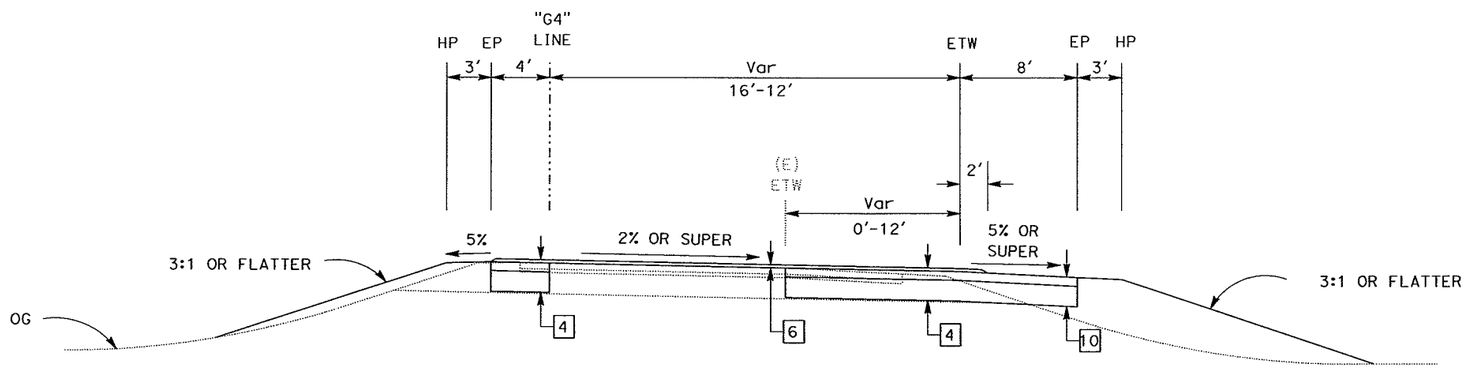
REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA



NB GALLERIA OFF-RAMP "G1" & "G4"

"G1" 148+26 TO 162+24
"G4" 149+41 TO 168+36



NB GALLERIA OFF-RAMP "G4"

"G4" 143+39 TO 149+41

TYPICAL CROSS SECTIONS
ALTERNATIVE 1

NO SCALE

X-16

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FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ADVANCE PLANNING

LAST REVISION 03-31-09
DATE PLOTTED => 18-JUN-2009
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BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

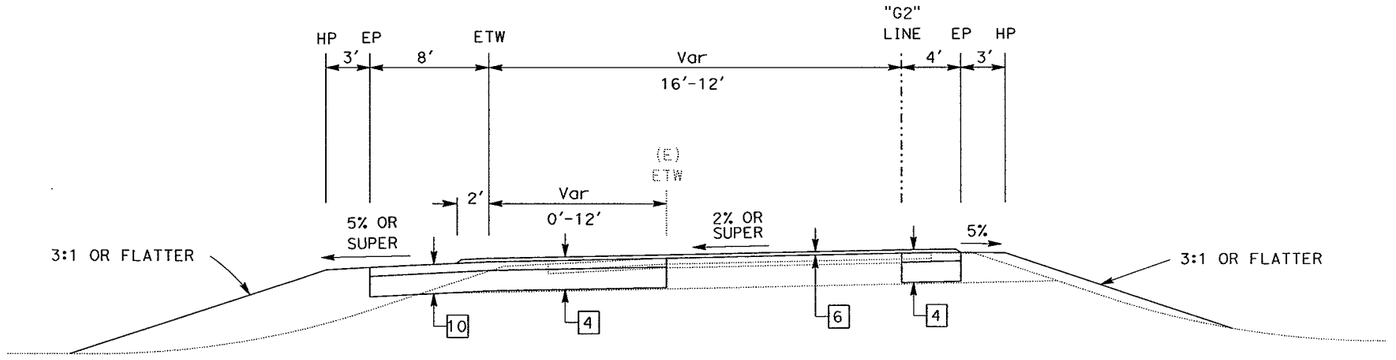
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

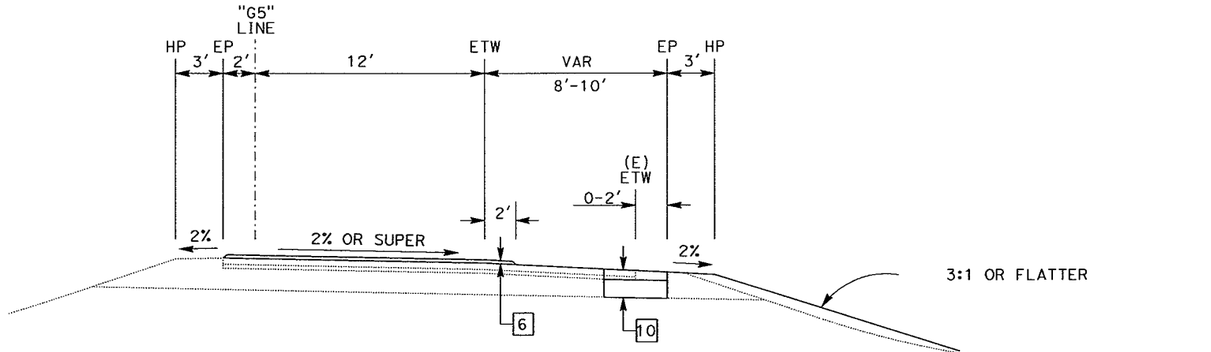
INCOMPLETE PLANS FOR ITEM STUDY ONLY

PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA



SB GALLERIA SLIP ON-RAMP "G2"

"G2" 139+75 TO 153+50



NB GALLERIA SLIP ON-RAMP "G5"

"G5" 173+17 TO 174+15

TYPICAL CROSS SECTIONS ALTERNATIVE 1

NO SCALE

X-17

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans® ADVANCE PLANNING

LAST REVISION 03-31-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:26

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

ALTERNATIVE 2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

ABBREVIATIONS:

RHMA-O - RUBBERIZED HOT MIX ASPHALT (TYPE O)

HMA-A - HOT MIXED ASPHALT (TYPE A)

NEW STRUCTURAL SECTIONS

[1] 0.10′ RHMA-O
0.70′ HMA-A
2.20′ AB (CLASS 2)

[2] 0.10′ RHMA-O
0.25′ HMA-A

[3] 0.10′ RHMA-O
0.75′ HMA-A
1.65′ AB (CLASS 2)

[4] 0.10′ RHMA-O
0.60′ HMA-A
1.90′ AB (CLASS 2)

[5] 0.10′ RHMA-O
0.60′ HMA-A
1.35′ AB (CLASS 2)

[6] 0.10′ RHMA-O

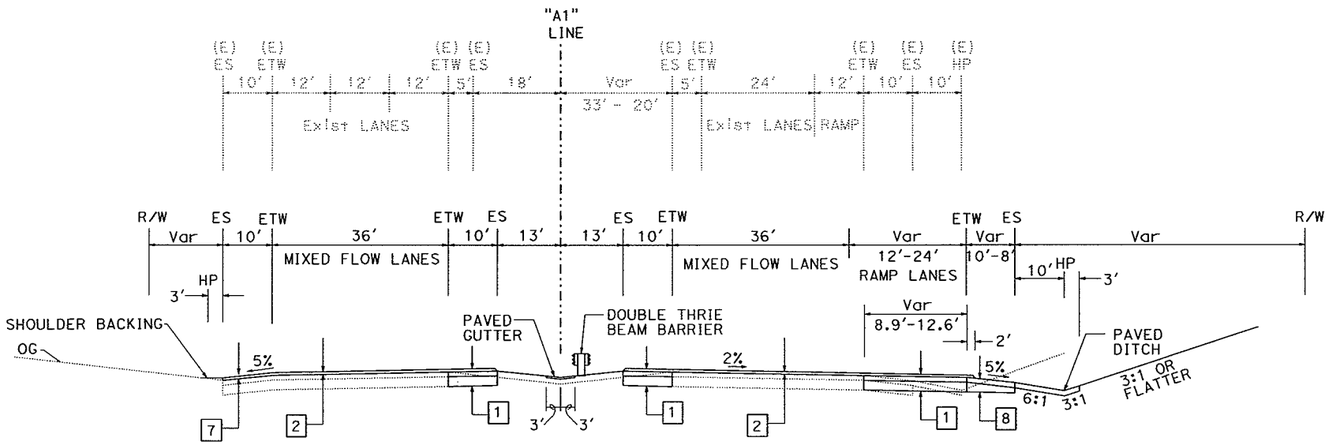
[7] 0.25′ RHMA-A

[8] 0.70′ RHMA-A
2.20′ AB (CL2)

[9] 0.75′ HMA-A
1.65′ AB (CL2)

[10] 0.60′ HMA-A
1.90′ AB (CL2)

[11] 0.60′ HMA-A
1.35′ AB (CL2)

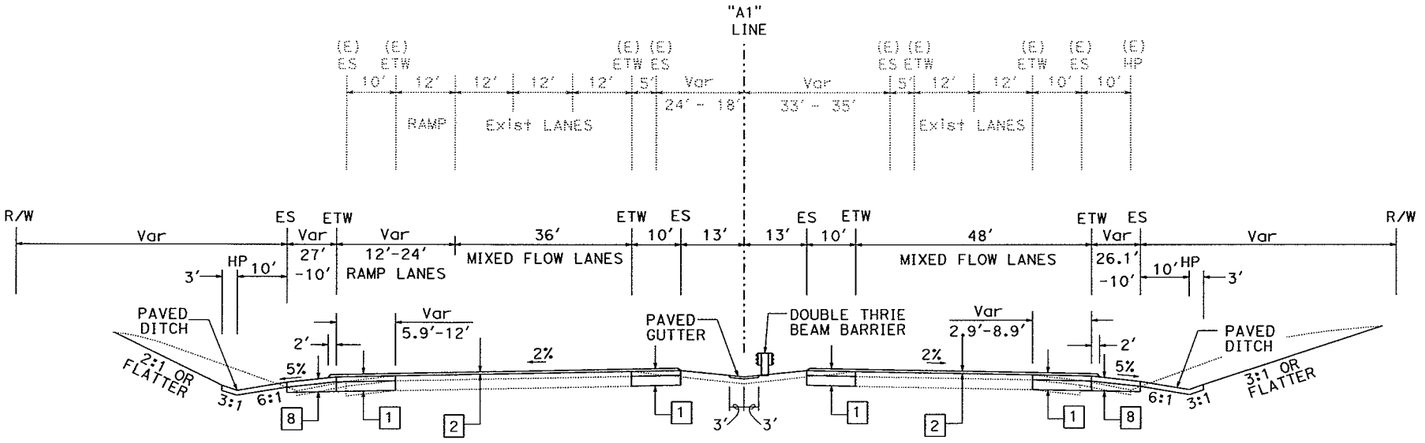


MAINLINE ROUTE 65

"A1" STA 139+75 TO STA 143+39

DESIGN DESIGNATION MAINLINE 80

Annual ADT		
Base Year	2006	163,000
	2020	220,100
	2030	260,800
	2040	301,600
Peak Hour		
Base Year	2006	11,900
	2020	16,100
	2030	19,000
	2040	22,000
20-year Directional %	62	
20-year DH Truck %	4.0	
10-yaer TI (Lane1)	11.0	
10-yaer TI (Lane2,3)	13.5	
20-year TI (Lane1)	12.0	
20 year TI (LANE2,3)	14.5	



MAINLINE ROUTE 65

"A1" STA 131+82 TO STA 139+75

DESIGN DESIGNATION MAINLINE 65

Annual ADT		
Base Year	2007	108,000
	2020	171,200
	2030	219,800
	2040	268,400
Peak Hour		
Base Year	2007	8,210
	2020	13,000
	2030	16,700
	2040	20,400
20-year Directional %	65	
20-year DH Truck %	4.0	
10-yaer TI	13.0	
20-year TI	14.0	
40 year TI	15.0	

TYPICAL CROSS SECTIONS

ALTERNATIVE 2

NO SCALE

X-1

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

ADVANCE PLANNING

LAST REVISION 00-00-00 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:27

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS INCOMPLETE FOR DESIGN STUDY ONLY

PLANS APPROVAL DATE _____

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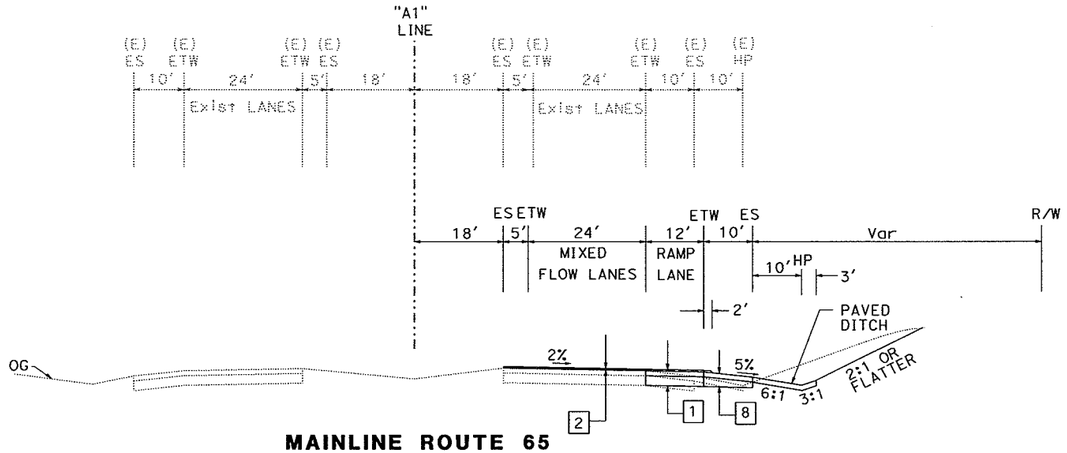
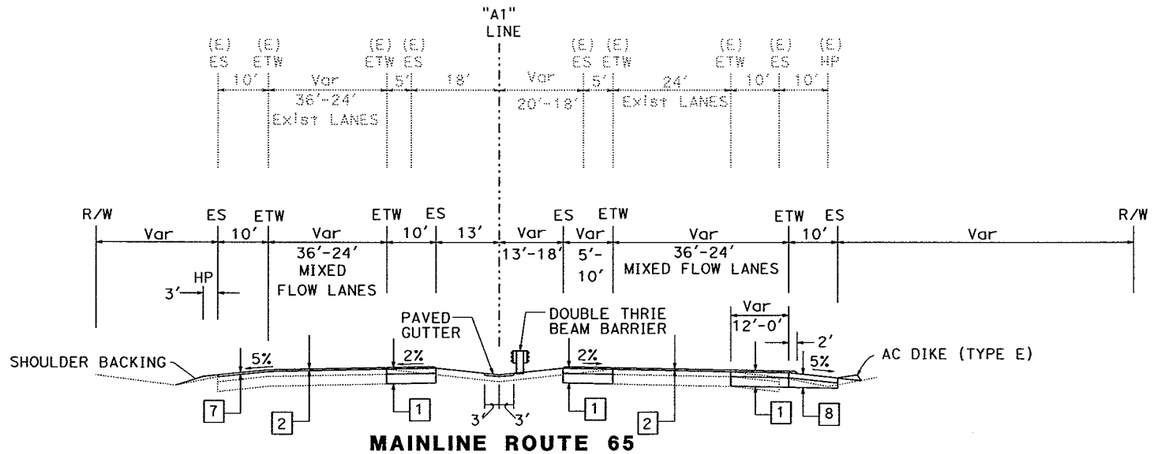


MAINLINE ROUTE 65

"A1" STA 174+15 TO STA 186+62



MAINLINE ROUTE 65

"A1" STA 143+39 TO STA 162+00

* "A1" STA 143+39 TO STA 161+00 PLACE AC DIKE (TYPE E)
* NORTHBOUND WORK ENDS AT STA 161+40

TYPICAL CROSS SECTIONS

ALTERNATIVE 2

NO SCALE

X-2

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Caltrans® ADVANCE PLANNING

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REGISTERED CIVIL ENGINEER DATE

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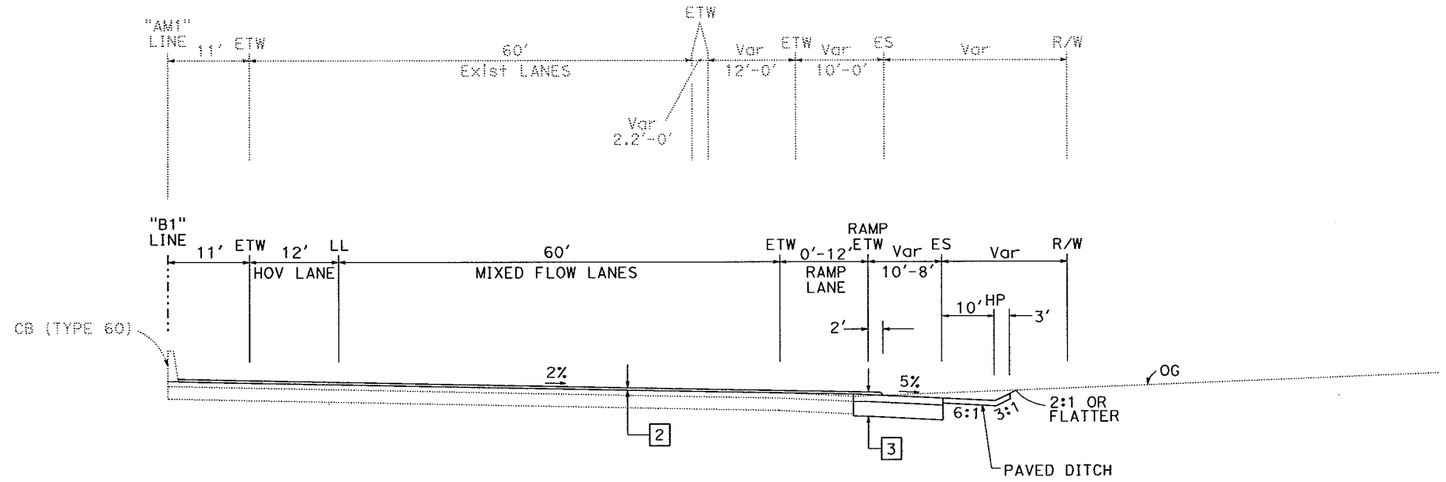
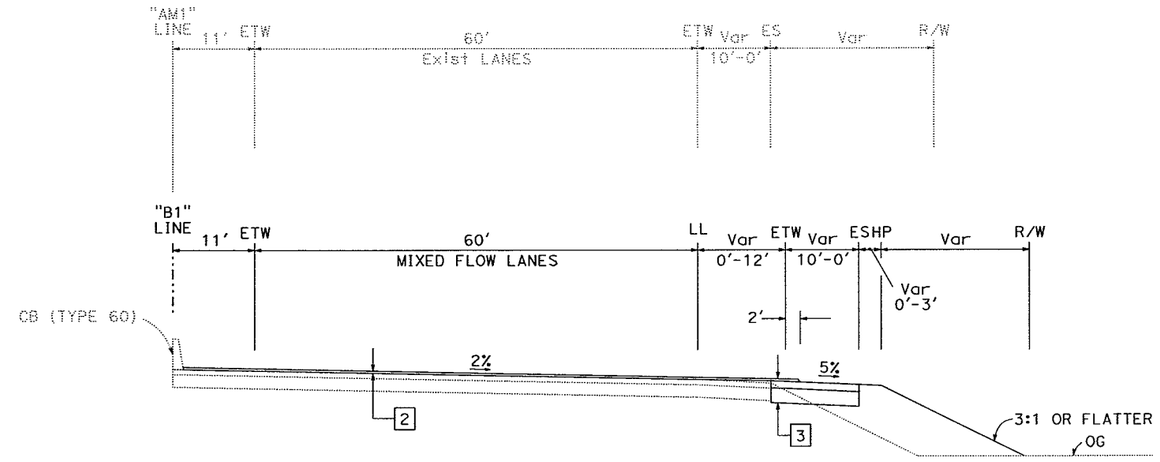


EB MAINLINE ROUTE 80
"B1" 70+19 TO 82+04



EB MAINLINE ROUTE 80
"B1" 61+90 TO 70+19

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-3

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Caltrans ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER

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REVISED BY	DATE REVISED

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:27

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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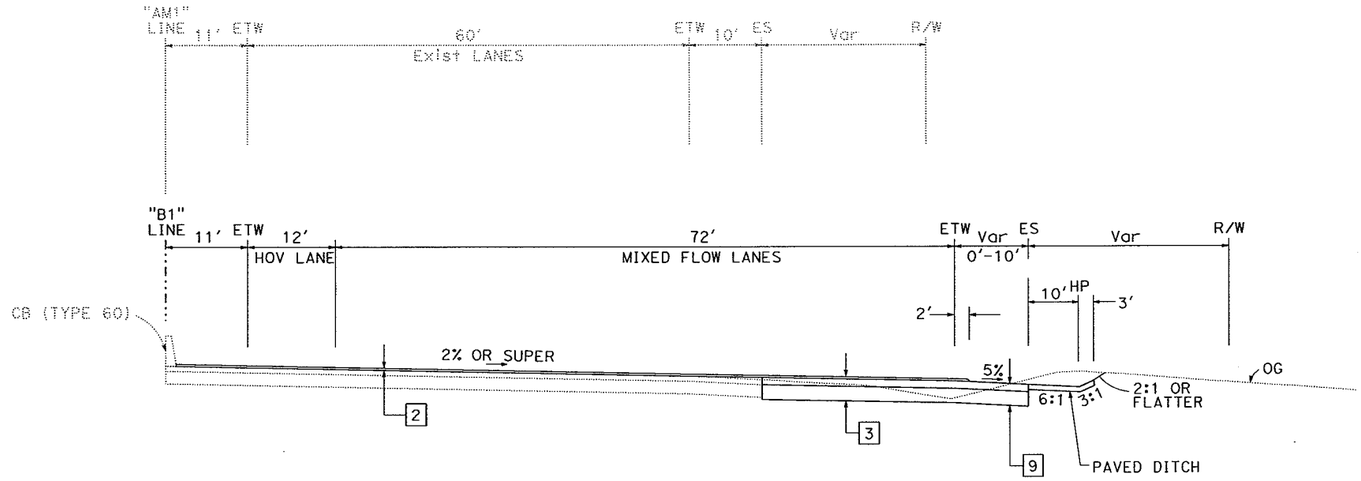
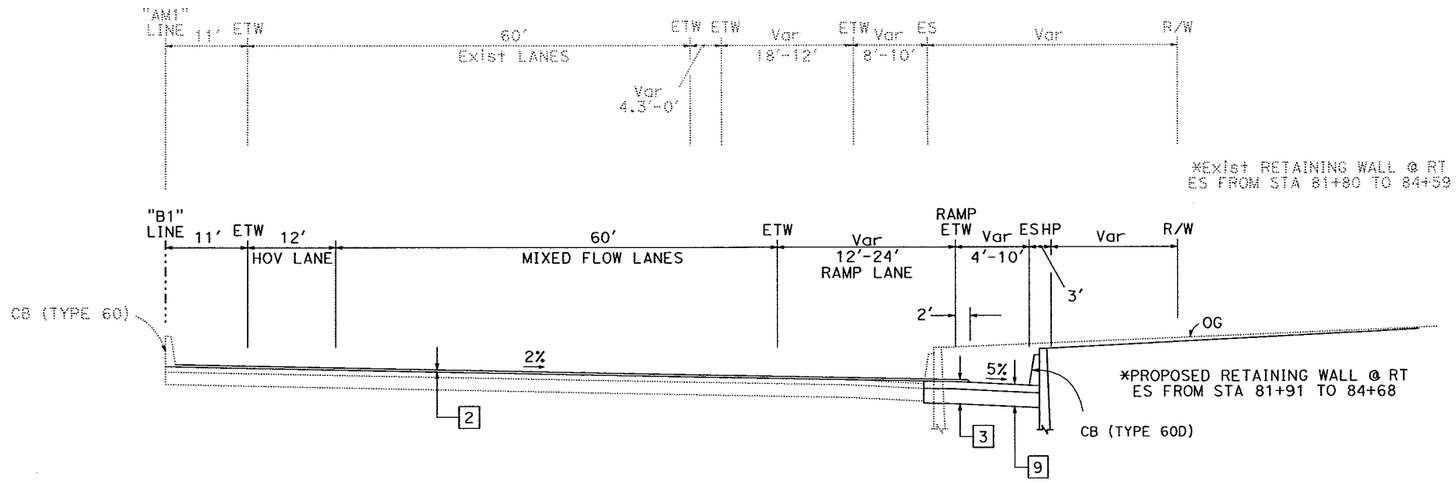


EB MAINLINE ROUTE 80
"B1" 93+09 TO 101+50



EB MAINLINE ROUTE 80
"B1" 82+04 TO 93+09

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-4

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Caltrans **ADVANCE PLANNING**

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:27

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

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REGISTERED CIVIL ENGINEER DATE

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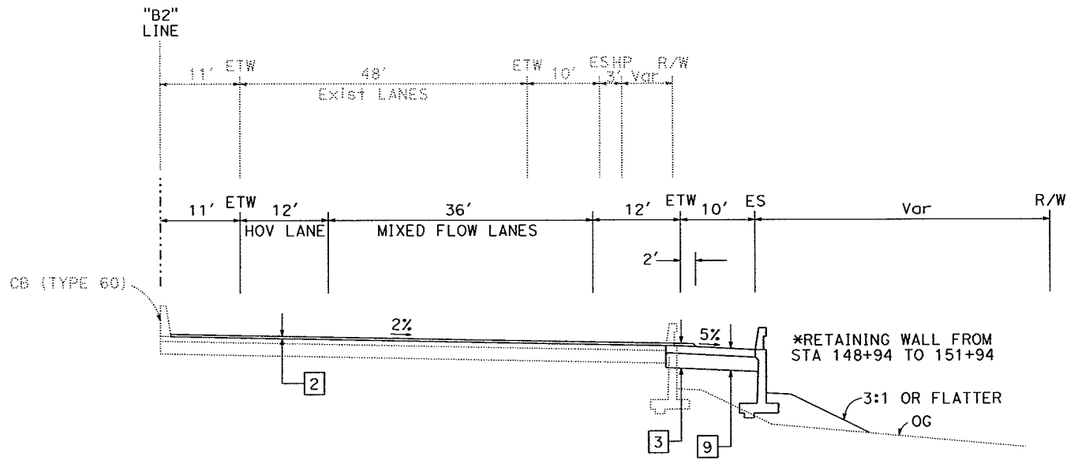
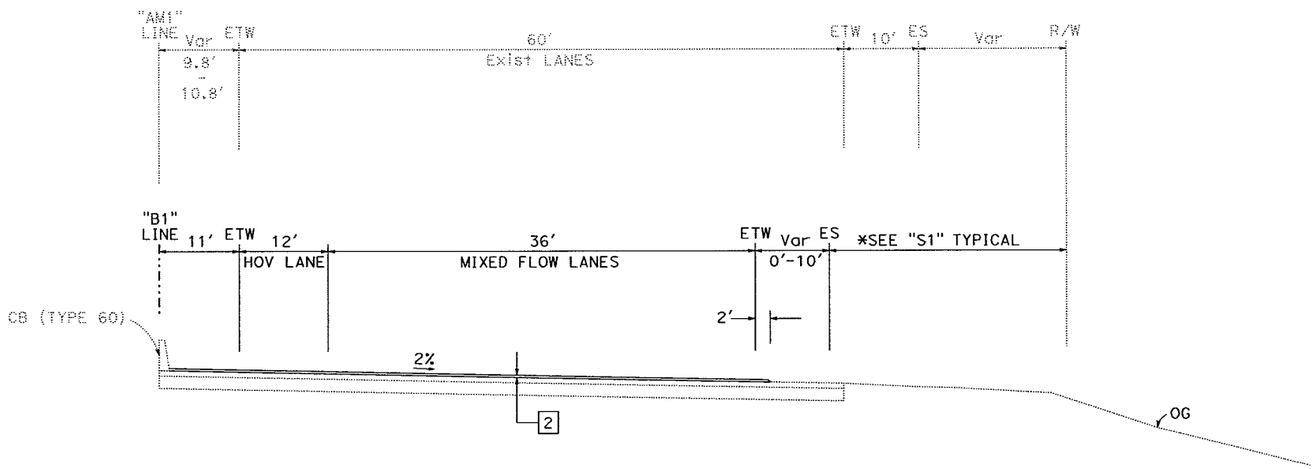


EB MAINLINE ROUTE 80
"B1" 148+94 TO 155+30



EB MAINLINE ROUTE 80
"B1" 101+50 TO 106+00

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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LAST REVISION 03-04-08
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BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320K

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03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

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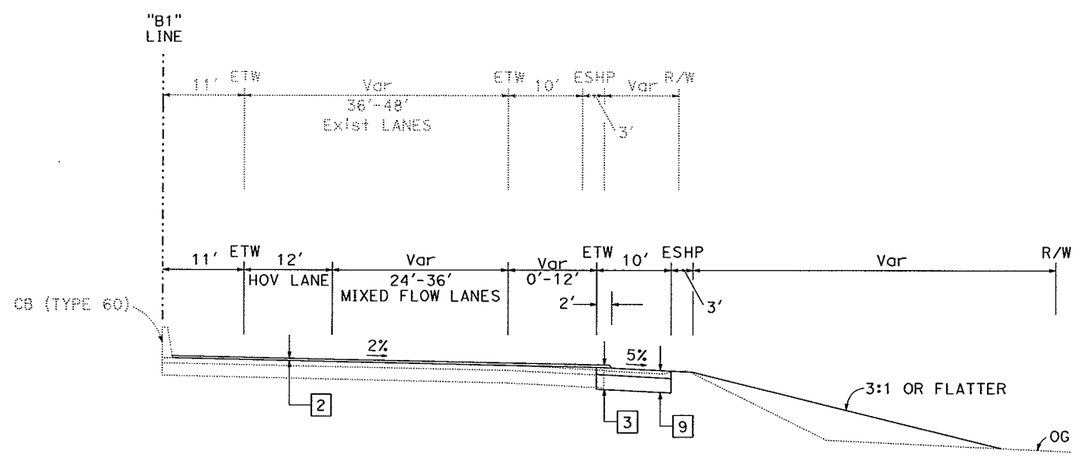

EB MAINLINE ROUTE 80
"B1" 155+30 TO 185+96

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

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LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:28

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

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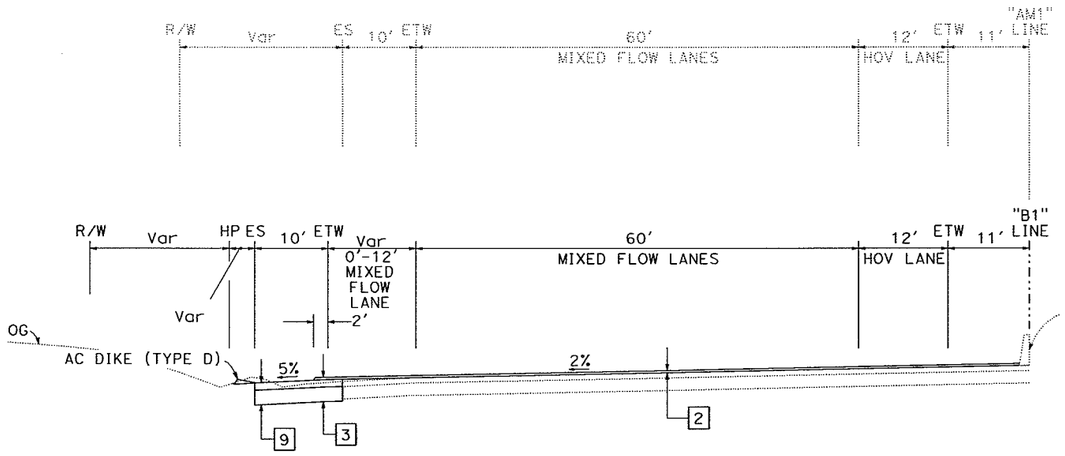

WB MAINLINE ROUTE 80
"B1" 102+62 TO 106+12

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-7

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Caltrans ADVANCE PLANNING
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LAST REVISION 03-04-08
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BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE 0 1 2 3
USERNAME => s117031
CU 03216
EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

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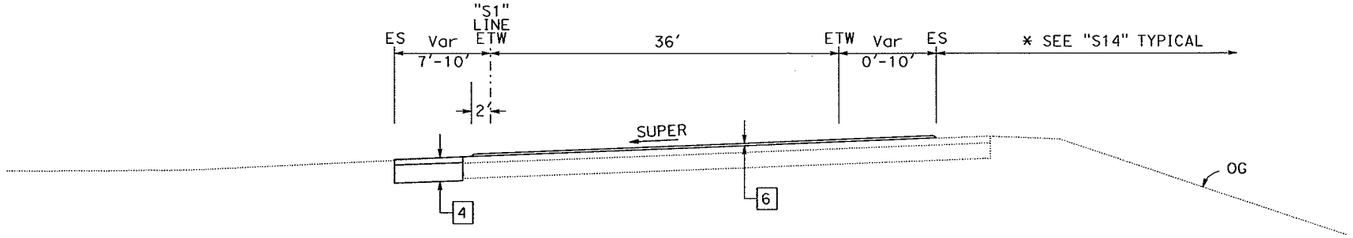
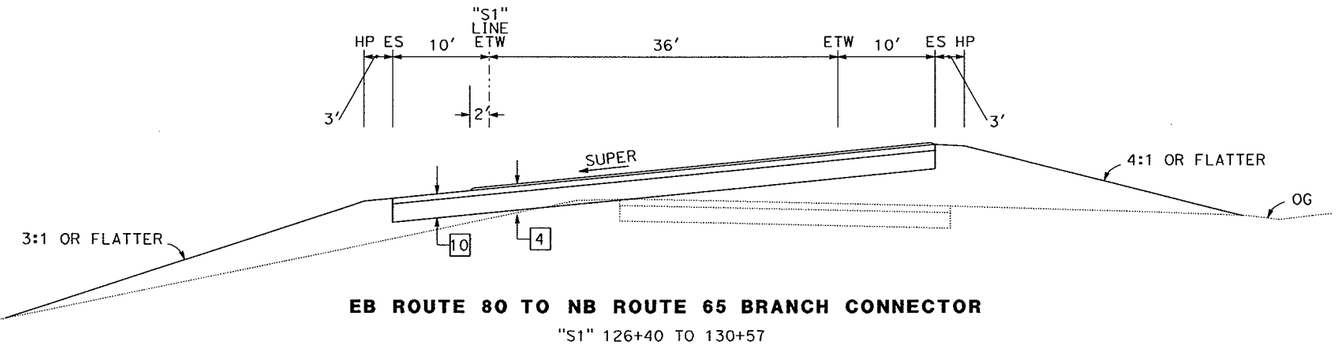


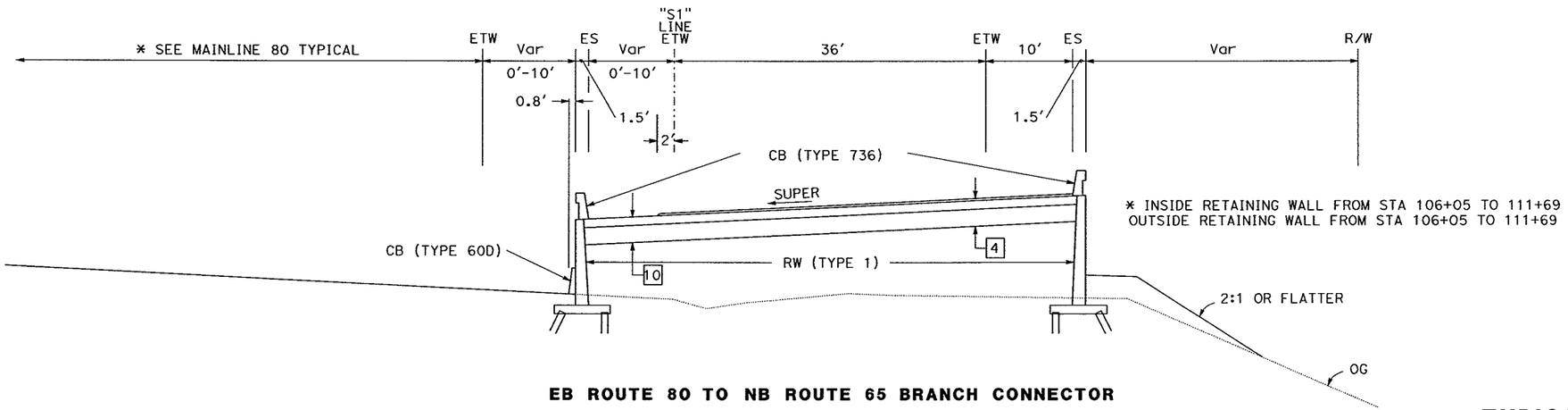
EB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S1" 130+57 TO 133+08



EB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S1" 126+40 TO 130+57



EB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S1" 106+05 TO 111+69

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-8

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BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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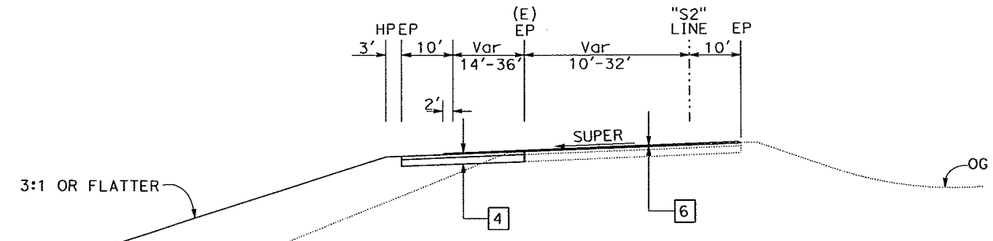
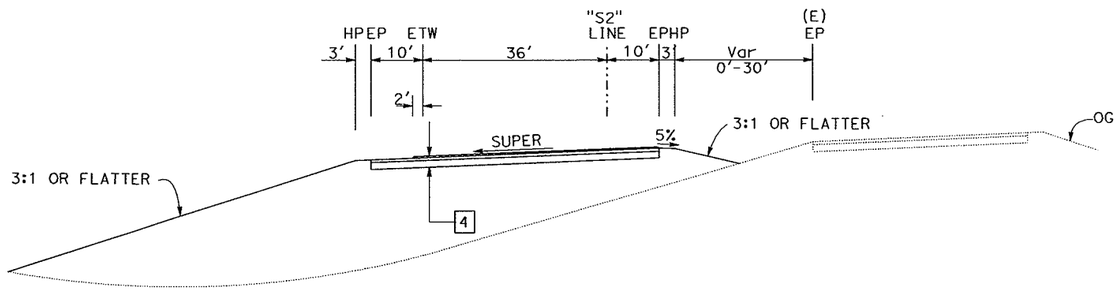


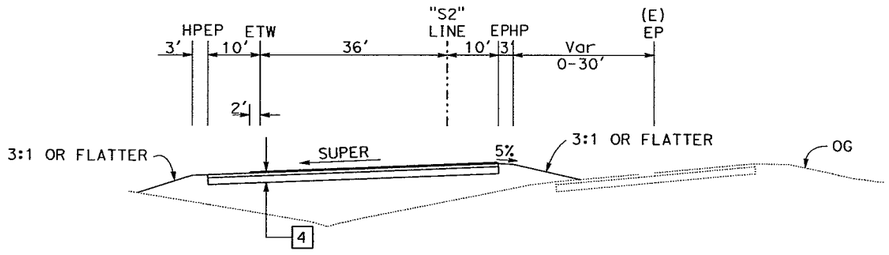
SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 124+00 TO 137+85.55



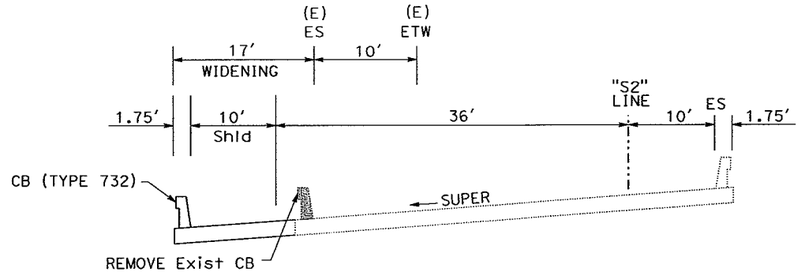
SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 121+00 TO 124+00



SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 108+65.83 TO 121+00



SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 115+75.74 TO 128+42.90

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-9

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Caltrans ADVANCE PLANNING

LAST REVISION 05-05-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:28

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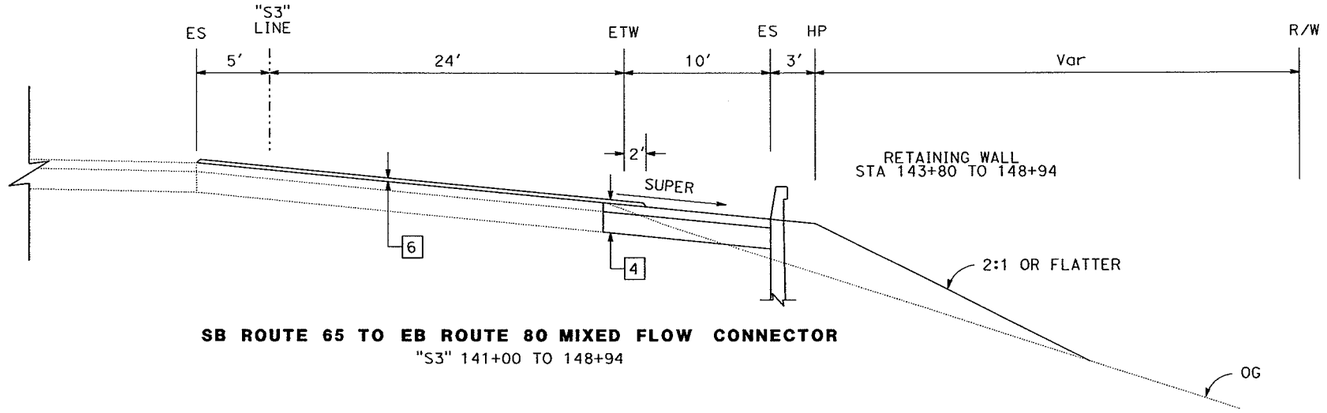
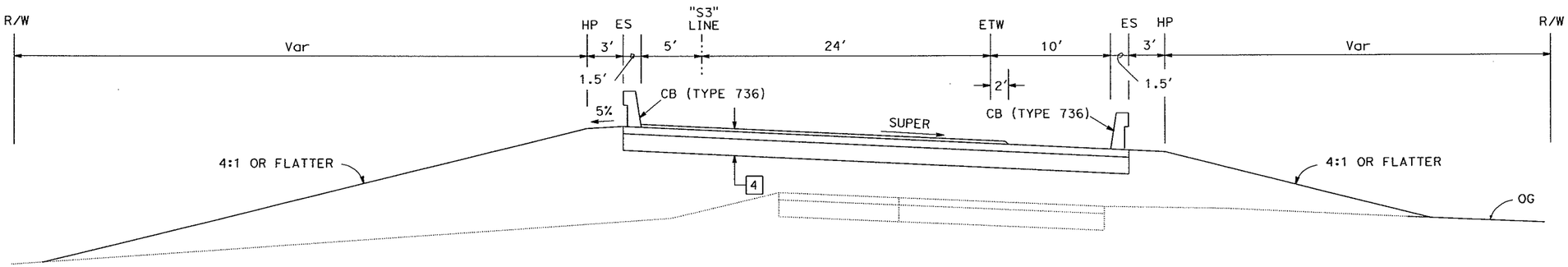
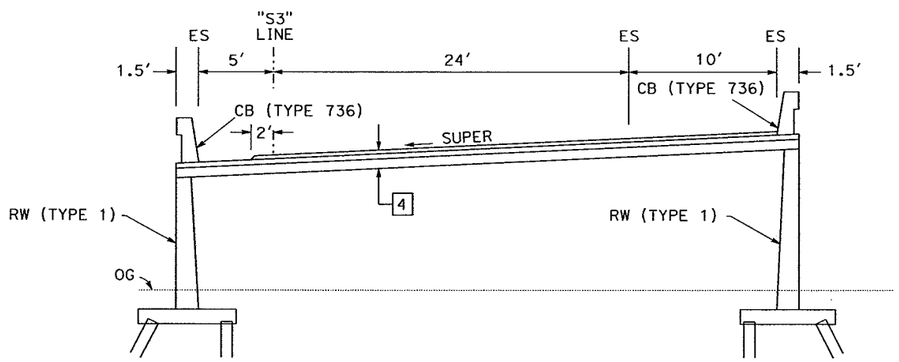


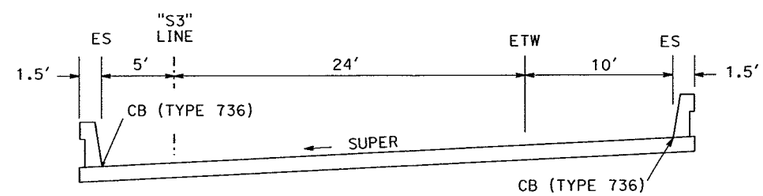
SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 141+00 TO 148+94



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 138+00 TO 141+00



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 109+25 TO 113+00



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 113+00 TO 138+00

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER

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LAST REVISION 03-31-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:28

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

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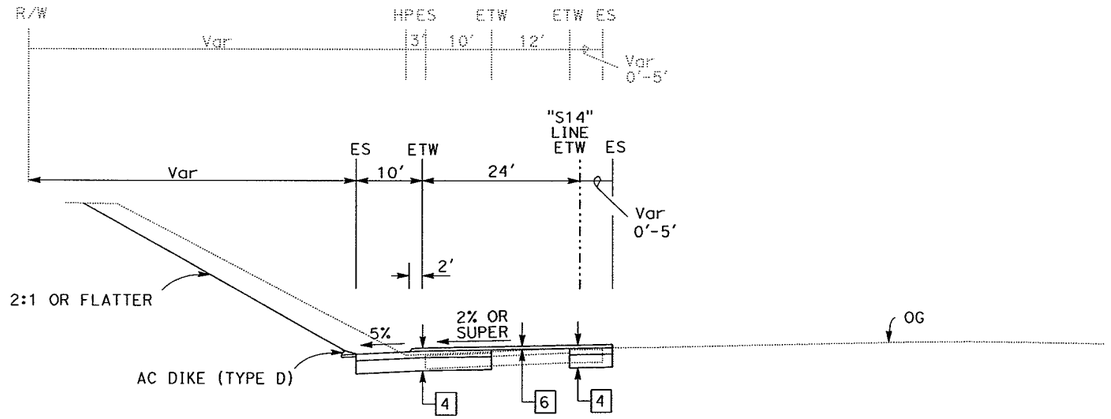
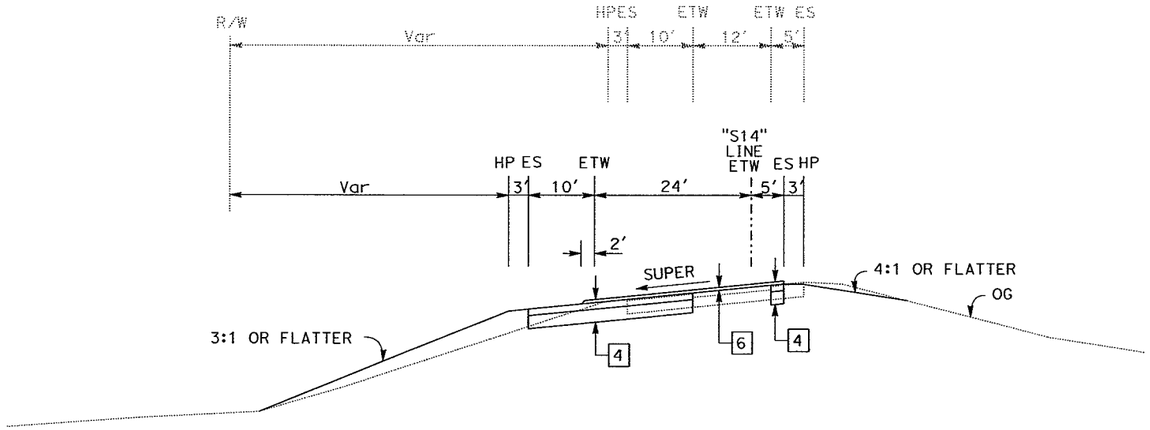


WB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S14" 133+02 TO 137+28



WB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S14" 119+85 TO 133+02

TYPICAL CROSS SECTIONS
ALTERNATIVE 2

NO SCALE

X-11

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CALCULATED-DESIGNED BY

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FUNCTIONAL SUPERVISOR: CHAD BAKER

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Caltrans ADVANCE PLANNING

LAST REVISION 03-31-09

DATE PLOTTED => 18-JUN-2009

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

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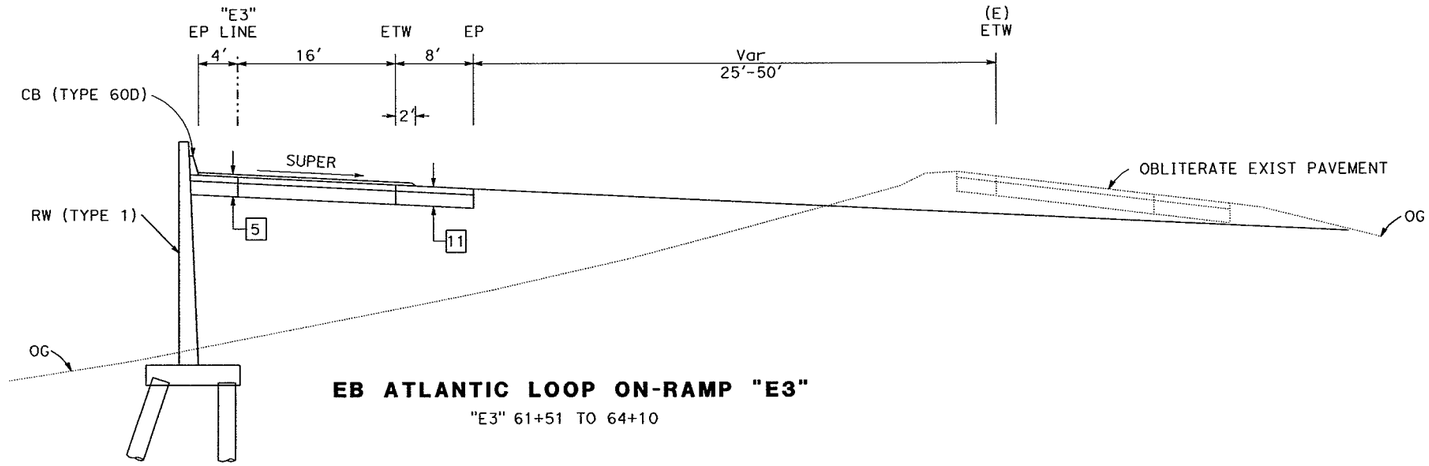
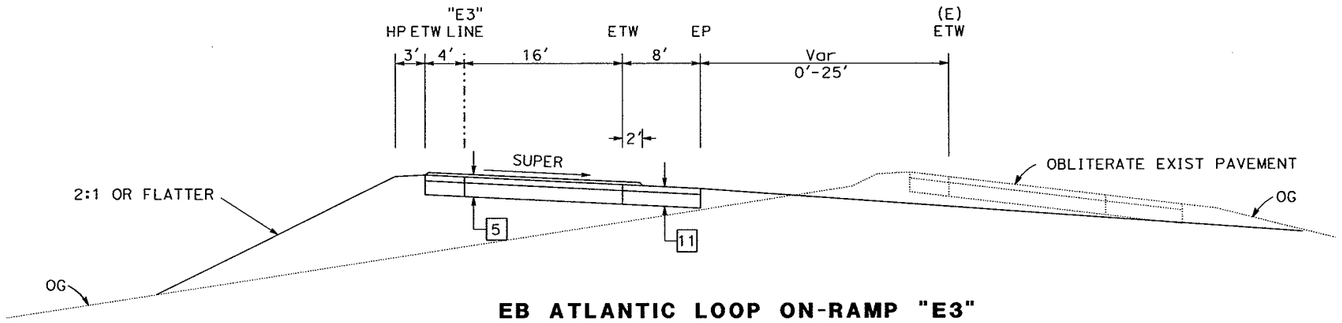


EB ATLANTIC LOOP ON-RAMP "E3"

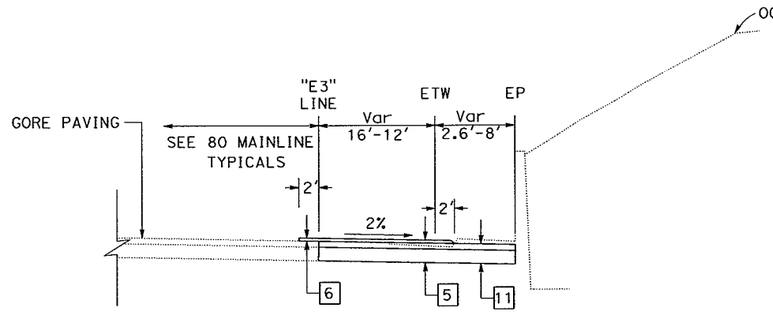
"E3" 61+51 TO 64+10



EB ATLANTIC LOOP ON-RAMP "E3"

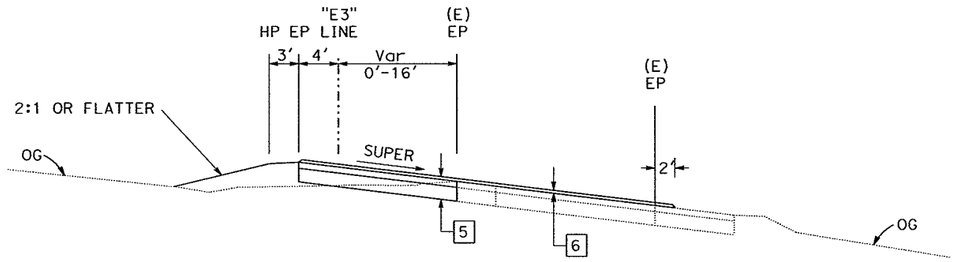
"E3" 59+30 TO 61+51

"E3" 64+10 TO 65+72



EB ATLANTIC LOOP ON-RAMP "E3"

"E3" 65+72 TO 70+19



EB ATLANTIC LOOP ON-RAMP "E3"

"E3" 56+43 TO 59+30

TYPICAL CROSS SECTIONS
ALTERNATIVE 2

NO SCALE

X-12

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BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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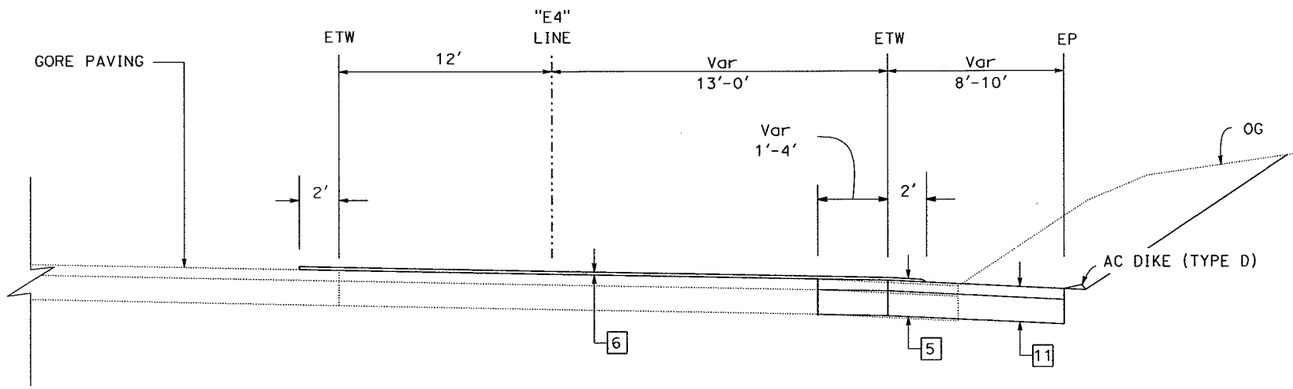

EB ATLANTIC SLIP ON-RAMP "E4"

"E4" 78+90 TO 82+05

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-13

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CU 03216

EA 4e320k

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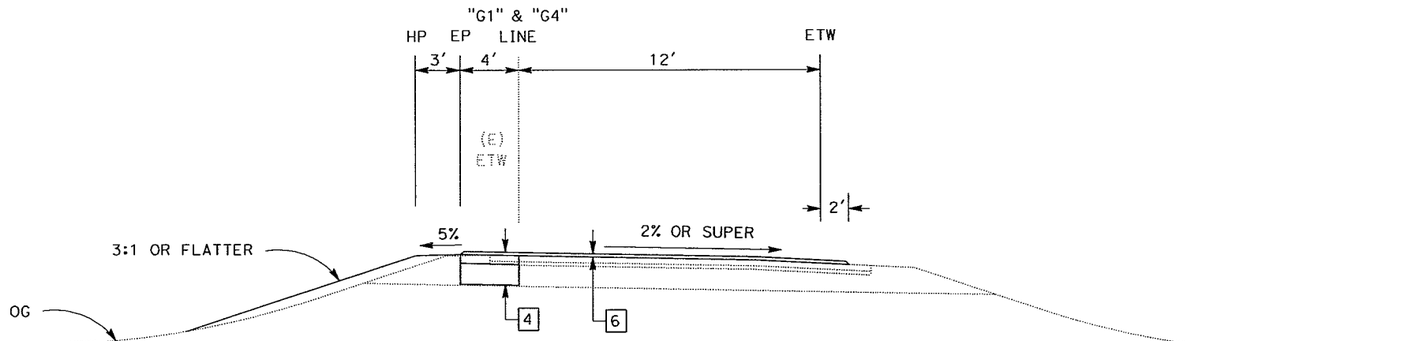
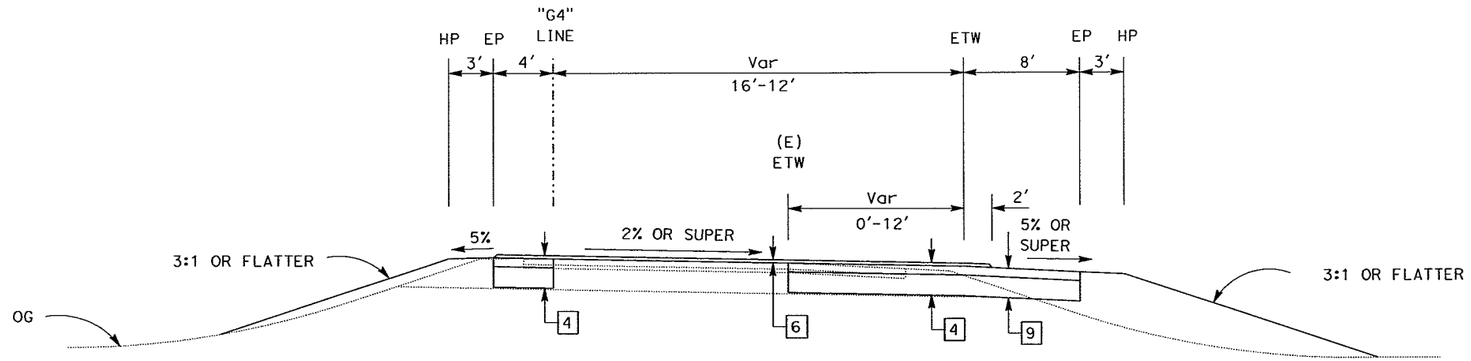


NB GALLERIA OFF-RAMP "G1" & "G4"

"G1" 148+26 TO 162+24
"G4" 149+41 TO 168+36



NB GALLERIA OFF-RAMP "G4"

"G4" 143+39 TO 149+41

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-14

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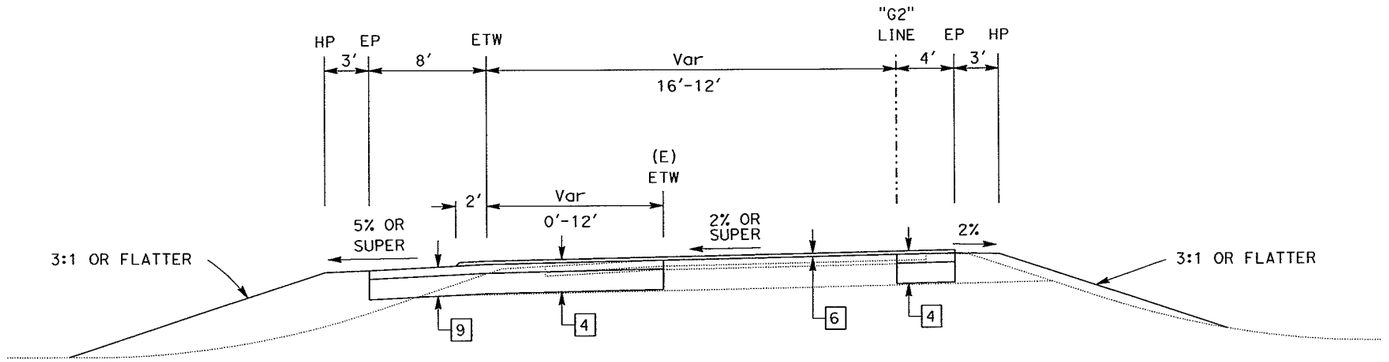
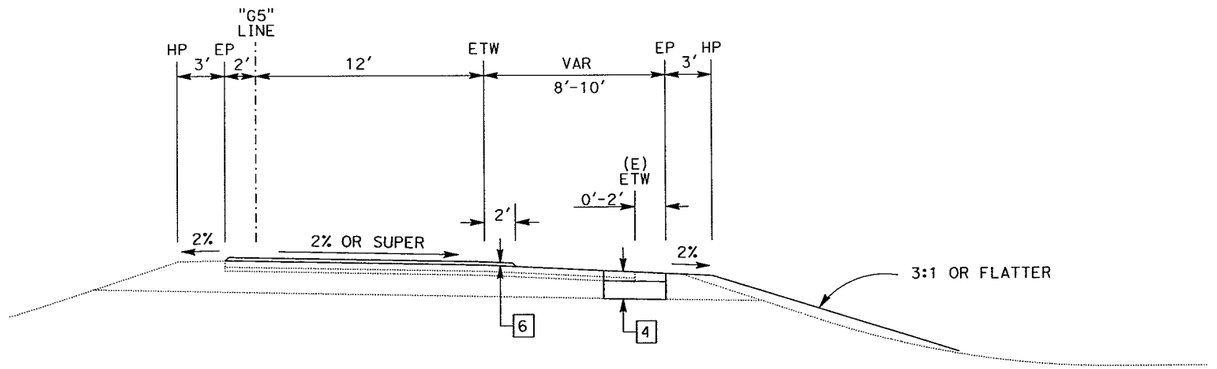


SB GALLERIA SLIP ON-RAMP "G2"

"G2" 139+75 TO 153+50



NB GALLERIA SLIP ON-RAMP "G5"

"G5" 173+17 TO 174+15

TYPICAL CROSS SECTIONS ALTERNATIVE 2

NO SCALE

X-15

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USERNAME => s117031

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EA 4e320k

ALTERNATIVE 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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REGISTERED CIVIL ENGINEER _____ DATE _____

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REGISTERED PROFESSIONAL ENGINEER

STATE OF CALIFORNIA

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ABBREVIATIONS:

RHMA-O - RUBBERIZED HOT MIX ASPHALT (TYPE O)

HMA-A - HOT MIXED ASPHALT (TYPE A)

NEW STRUCTURAL SECTIONS

[1] 0.10' RHMA-O
0.70' HMA-A
2.20' AB (CLASS 2)

[2] 0.10' RHMA-O
0.25' HMA-A

[3] 0.10' RHMA-O
0.75' HMA-A
1.65' AB (CLASS 2)

[4] 0.10' RHMA-O
0.60' HMA-A
1.90' AB (CLASS 2)

[5] 0.10' RHMA-O
0.60' HMA-A
1.35' AB (CLASS 2)

[6] 0.10' RHMA-O

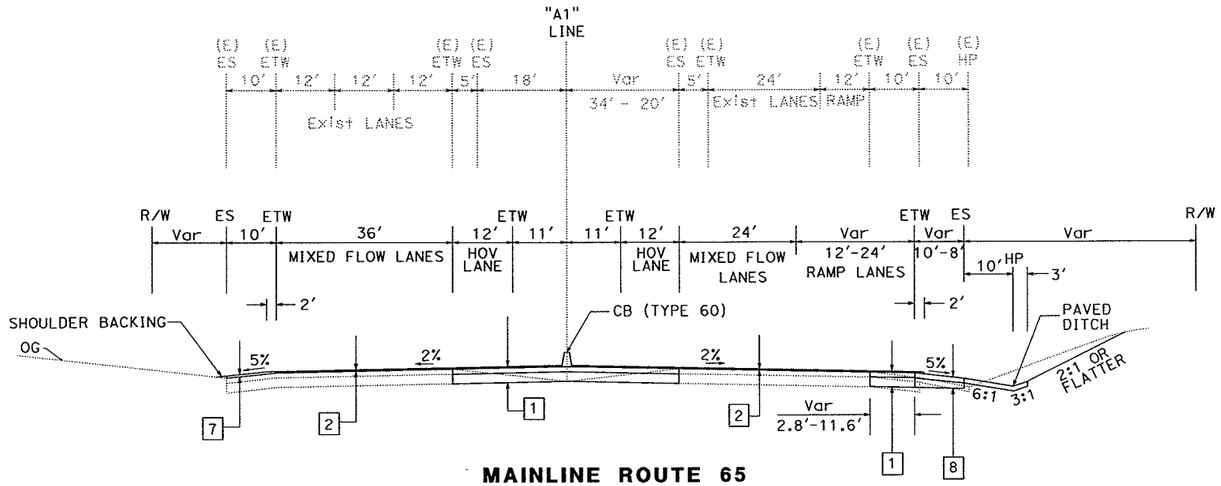
[7] 0.25' RHMA-A

[8] 0.70' RHMA-A
2.20' AB (CL2)

[9] 0.75' HMA-A
1.65' AB (CL2)

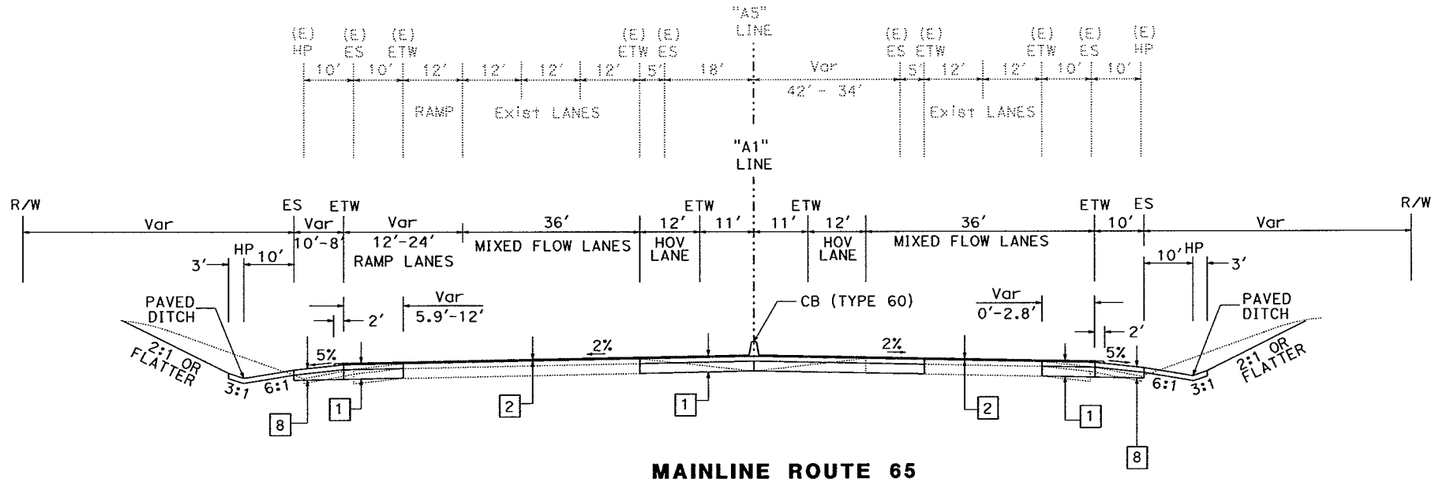
[10] 0.60' HMA-A
1.90' AB (CL2)

[11] 0.60' HMA-A
1.35' AB (CL2)



MAINLINE ROUTE 65

"A1" STA 139+75 TO STA 143+39



MAINLINE ROUTE 65

"A1" STA 131+81 TO STA 139+75

* (E) "A5" Var From Proposed "A1" 6.5' - 0'

DESIGN DESIGNATION MAINLINE 80

Annual ADT		
Base Year	2006	163,000
	2020	220,100
	2030	260,800
	2040	301,600
Peak Hour		
Base Year	2006	11,900
	2020	16,100
	2030	19,000
	2040	22,000
20-year Directional %	62	
20-year DH Truck %	4.0	
10-yaer TI (Lane1)	11.0	
10-yaer TI (Lane2,3)	13.5	
20-year TI (Lane1)	12.0	
20 year TI (LANE2,3)	14.5	

DESIGN DESIGNATION MAINLINE 65

Annual ADT		
Base Year	2007	108,000
	2020	171,200
	2030	219,800
	2040	268,400
Peak Hour		
Base Year	2007	8,210
	2020	13,000
	2030	16,700
	2040	20,400
20-year Directional %	65	
20-year DH Truck %	4.0	
10-yaer TI	13.0	
20-year TI	14.0	
40 year TI	15.0	

TYPICAL CROSS SECTIONS
ALTERNATIVE 3
NO SCALE

X-1

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RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

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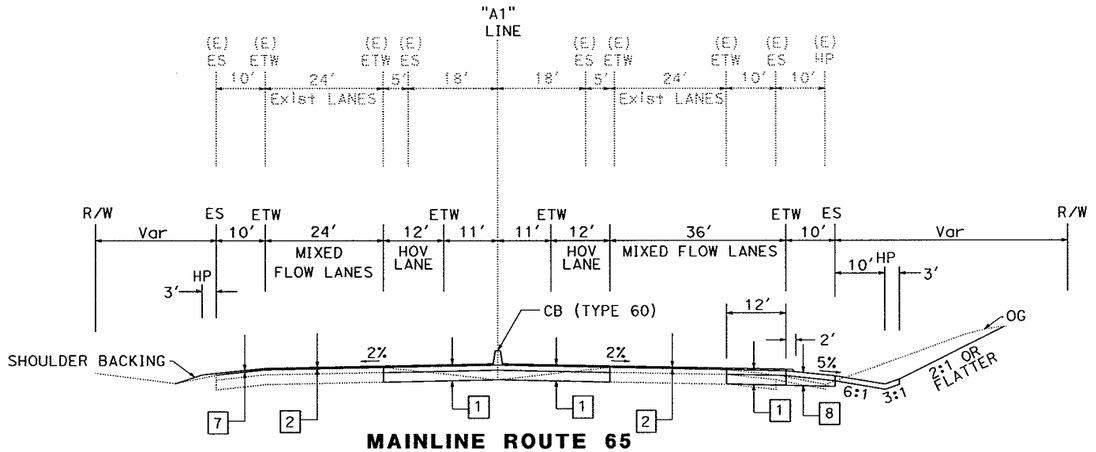
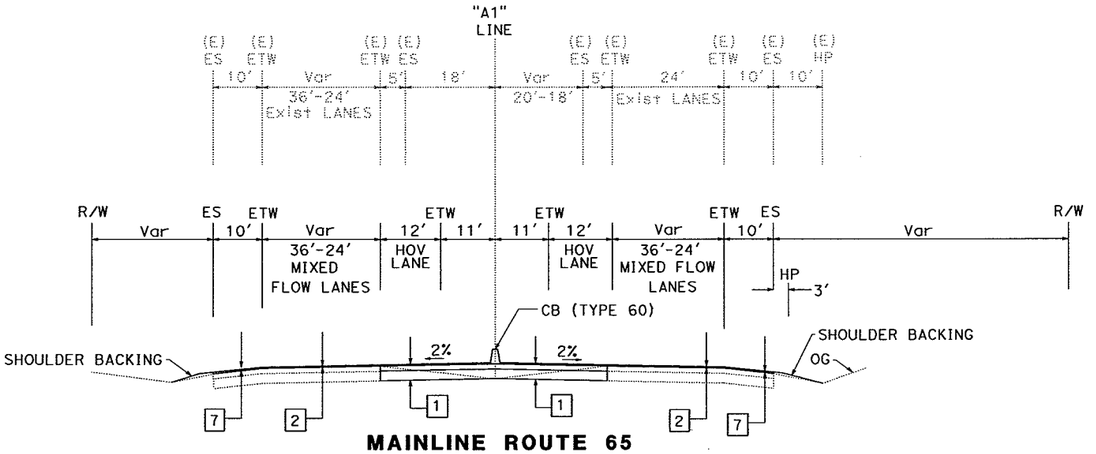


MAINLINE ROUTE 65

"A1" STA 174+15 TO STA 186+62



MAINLINE ROUTE 65

"A1" STA 143+39 TO STA 174+15

* "A1" STA 143+39 TO STA 161+00 PLACE AC DIKE (TYPE E)

TYPICAL CROSS SECTIONS

ALTERNATIVE 3

NO SCALE

X-2

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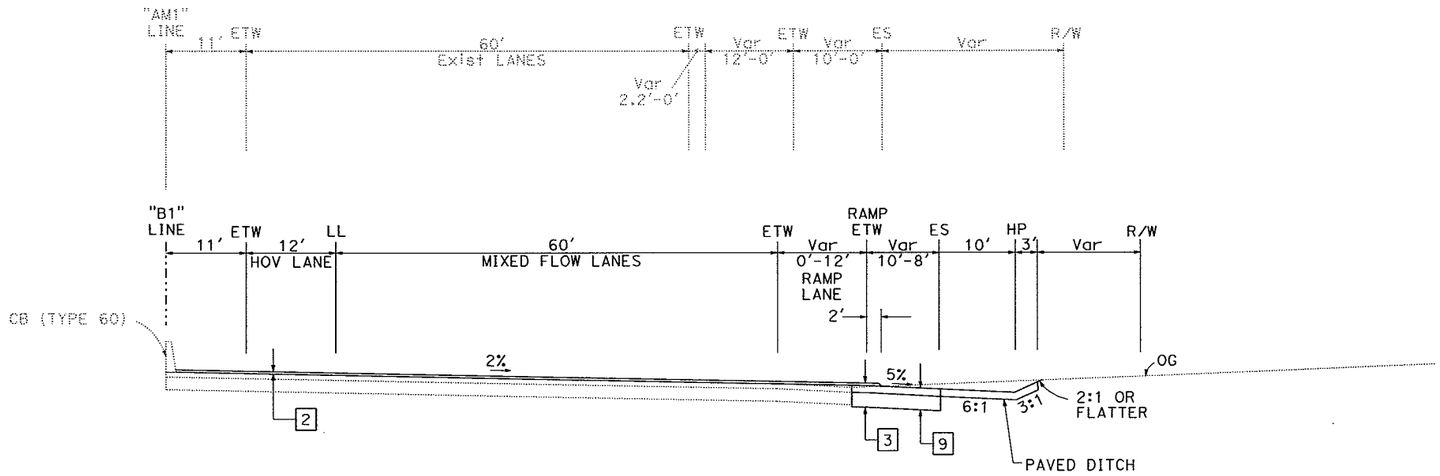
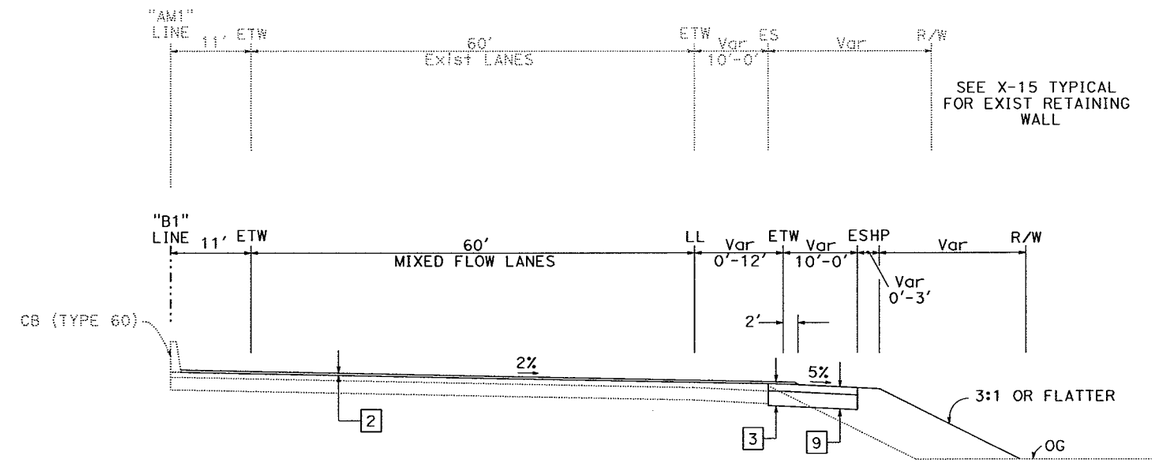


EB MAINLINE ROUTE 80

"B1" 70+19 TO 82+04



EB MAINLINE ROUTE 80

"B1" 61+90 TO 70+19

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-3

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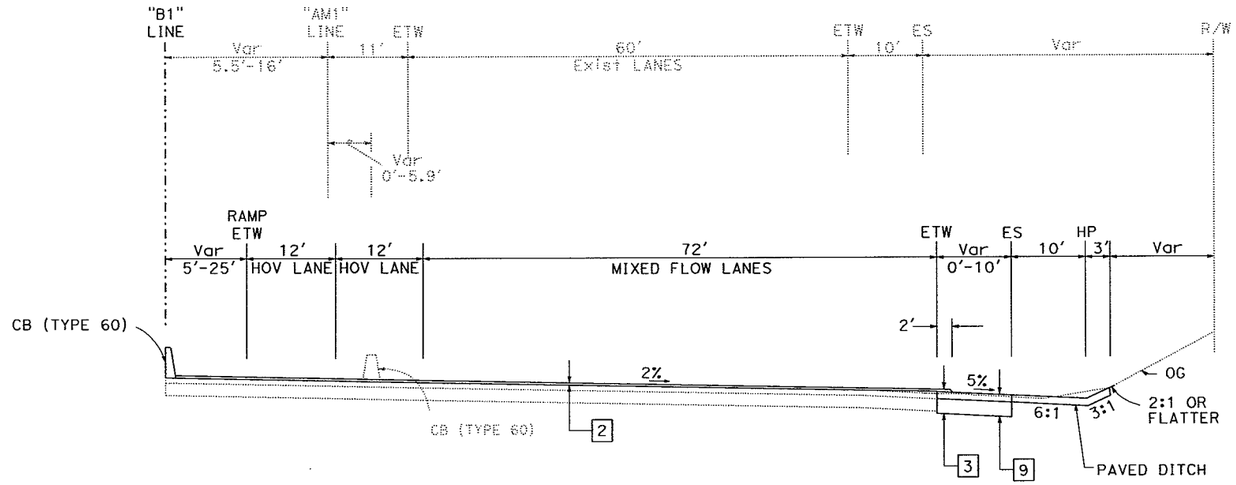
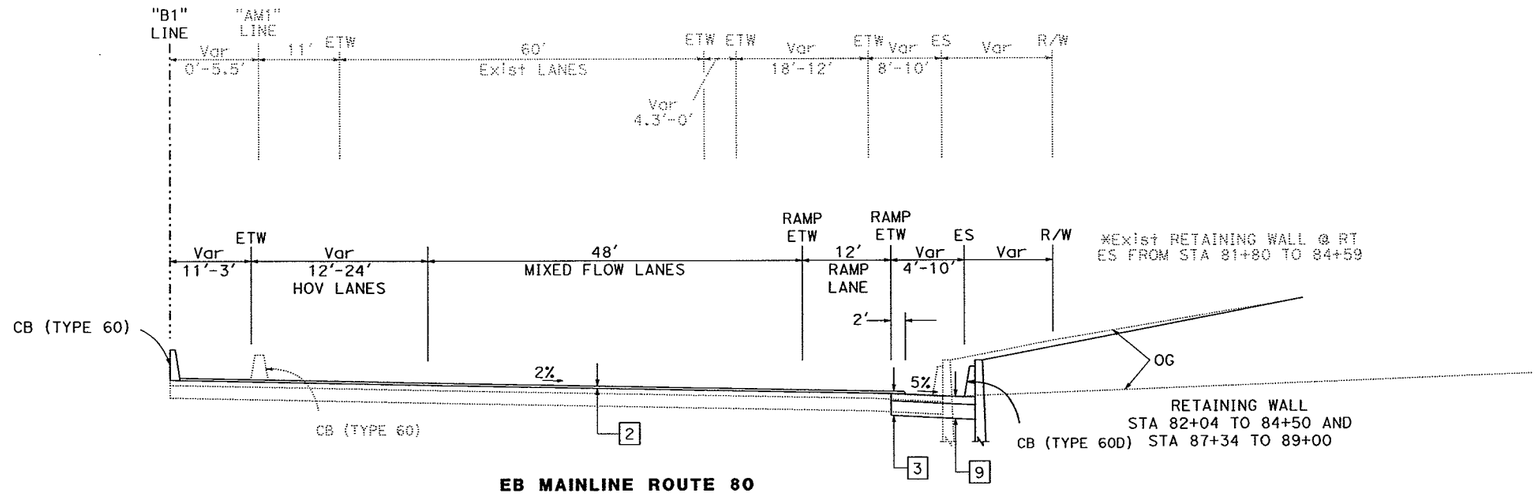


EB MAINLINE ROUTE 80

"B1" 93+09 TO 101+53



EB MAINLINE ROUTE 80

"B1" 82+04 TO 93+09

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-4

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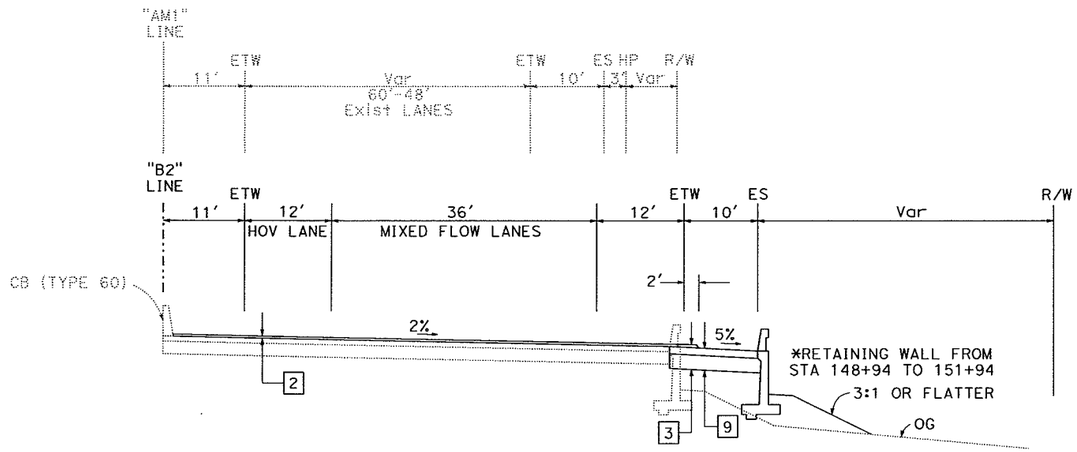
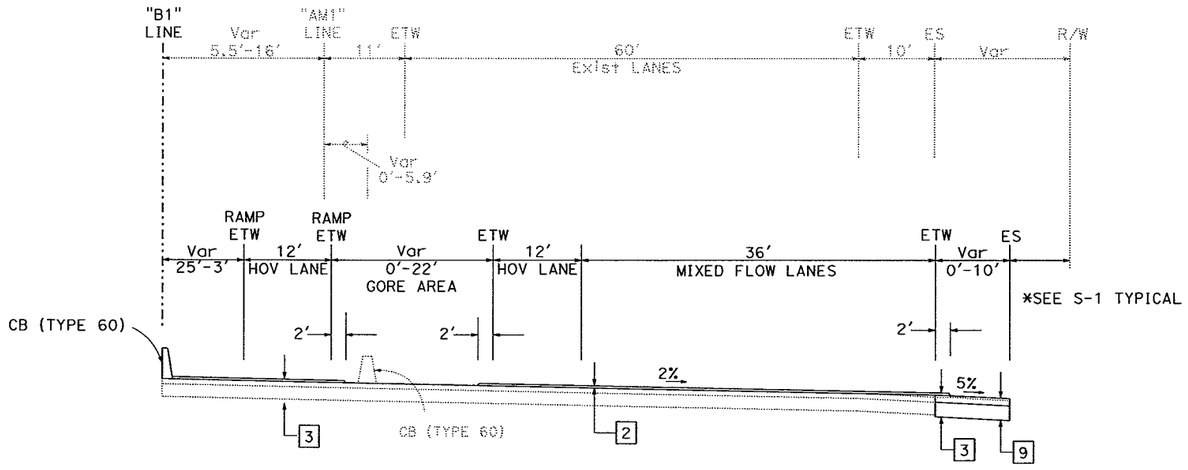


EB MAINLINE ROUTE 80
"B2" 148+94 TO 155+30



EB MAINLINE ROUTE 80
"B1" 101+53 TO 106+84

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-5

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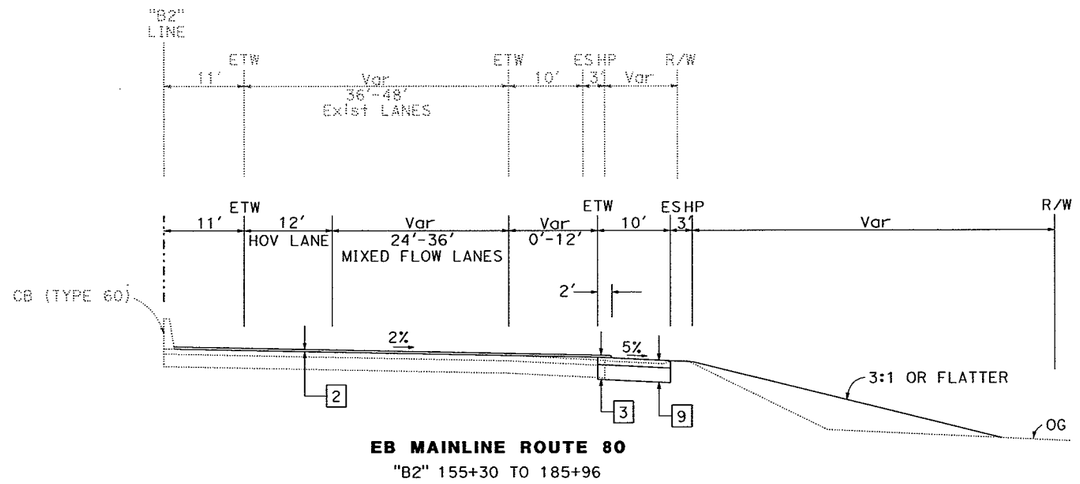

EB MAINLINE ROUTE 80

"B2" 155+30 TO 185+96

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-6

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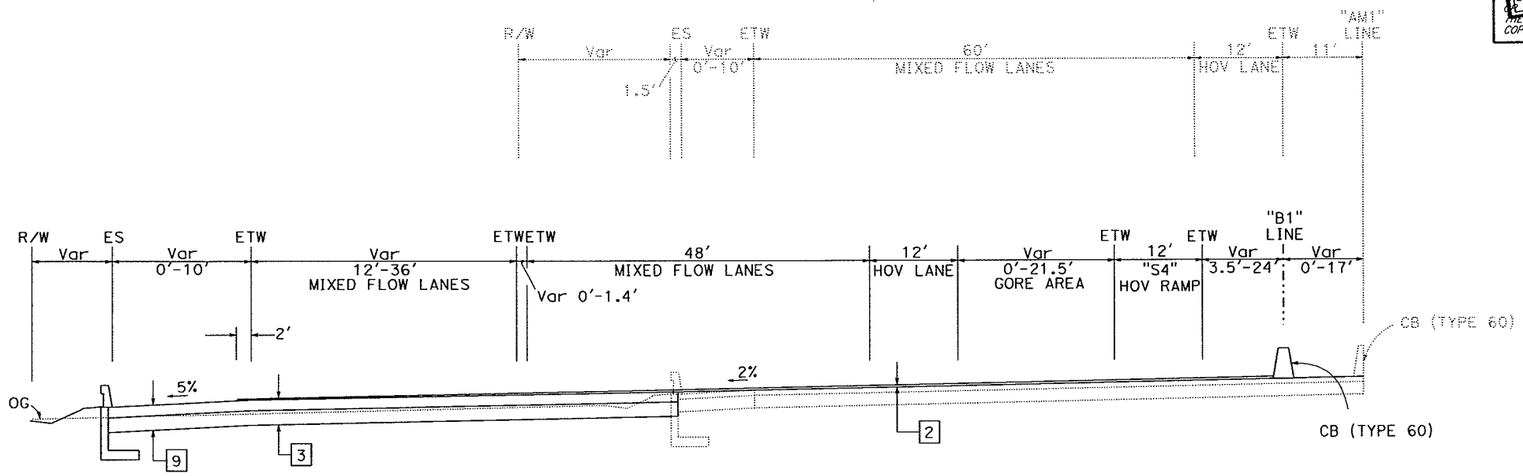
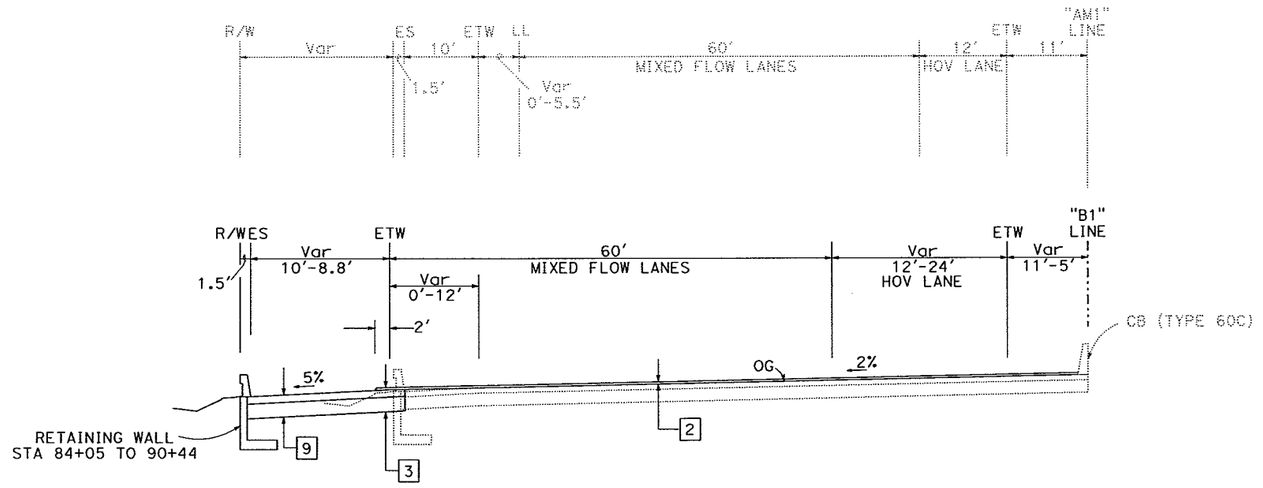


WB MAINLINE ROUTE 80

"B1" 90+44 TO 106+95



WB MAINLINE ROUTE 80

"B1" 84+40 TO 90+44

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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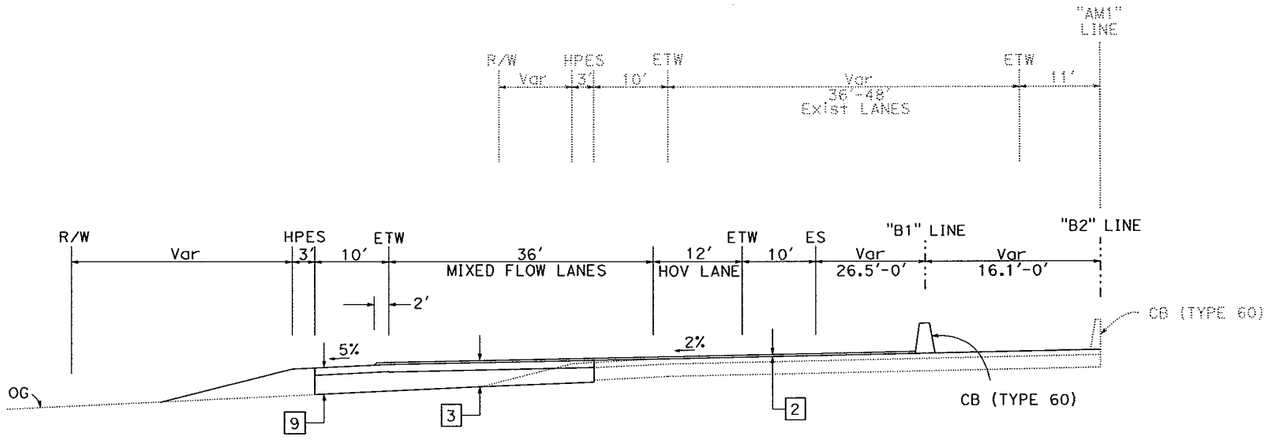
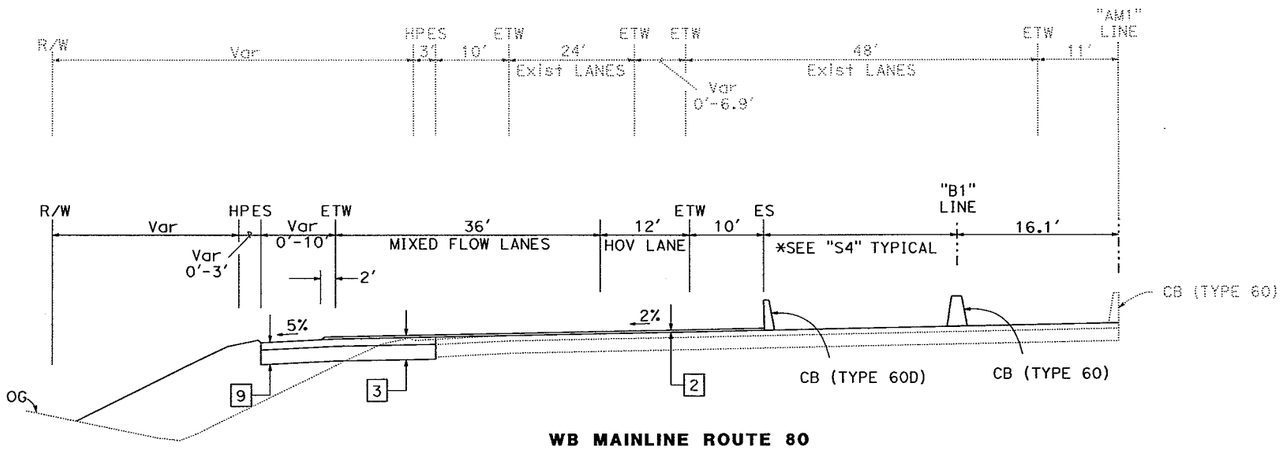


WB MAINLINE ROUTE 80

"B1" 113+.36 TO 124+51
"B2" 124+47 TO 133+02



WB MAINLINE ROUTE 80

"B1" 106+95 TO 113+36

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-8

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CHECKED BY

FUNCTIONAL SUPERVISOR
CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans **ADVANCE PLANNING**

LAST REVISION 03-04-08
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:30

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS APPROVAL DATE _____

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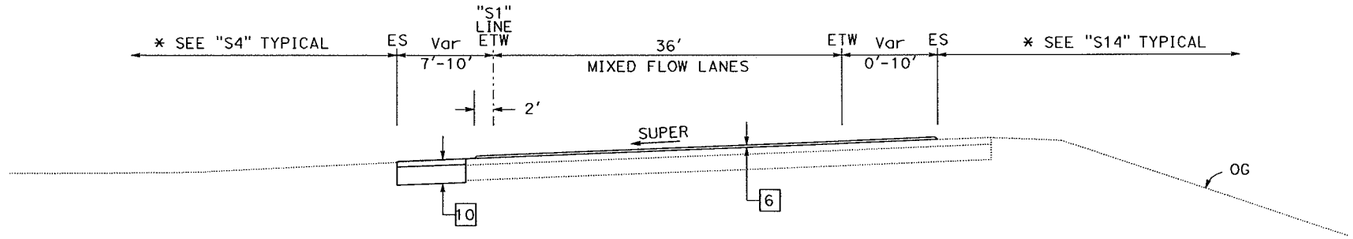
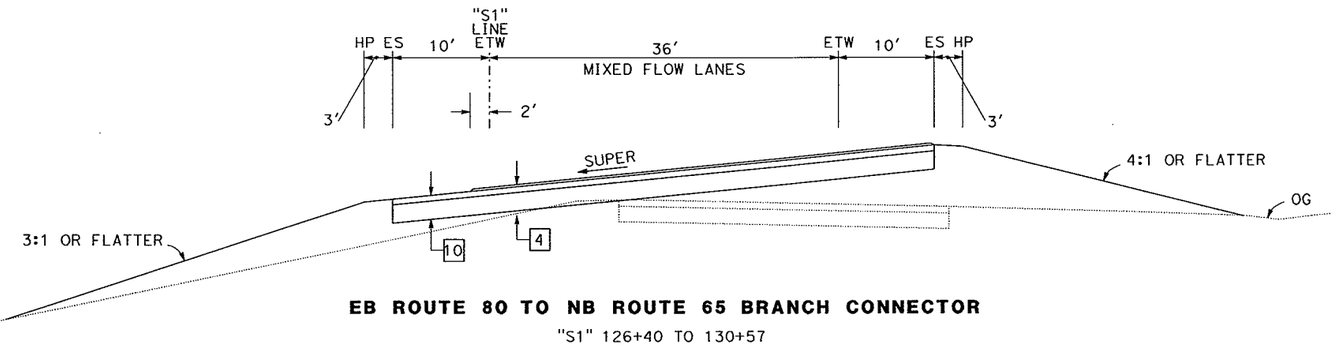
INCOMPLETE PLANS FOR DESIGN STUDY ONLY

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA



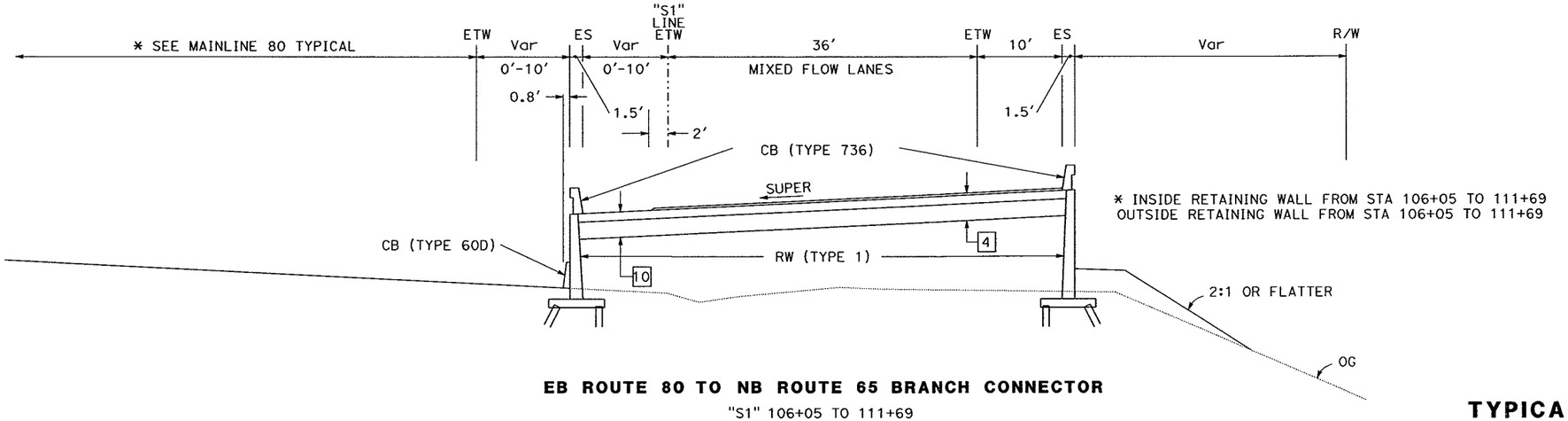
EB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S1" 130+57 TO 133+08



EB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S1" 126+40 TO 130+57



EB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S1" 106+05 TO 111+69

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-9

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans® ADVANCE PLANNING

LAST REVISION 03-14-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:30

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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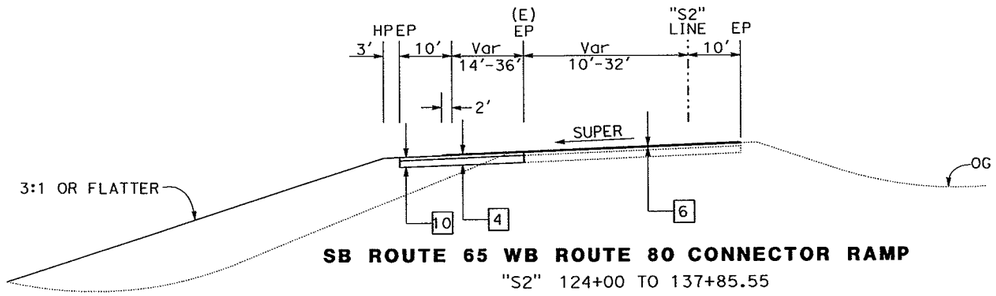
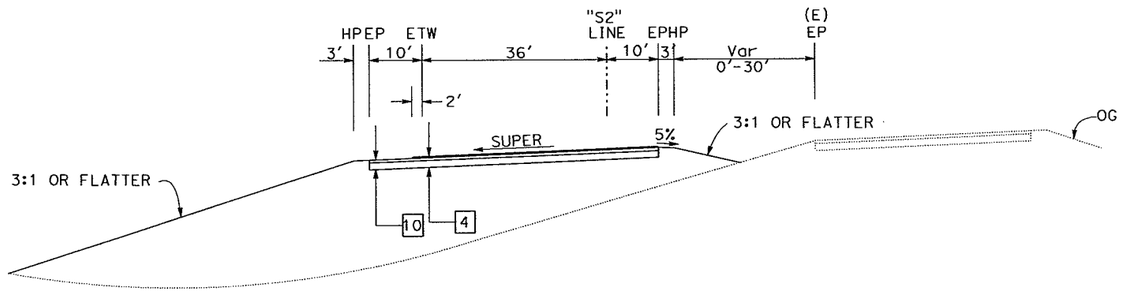


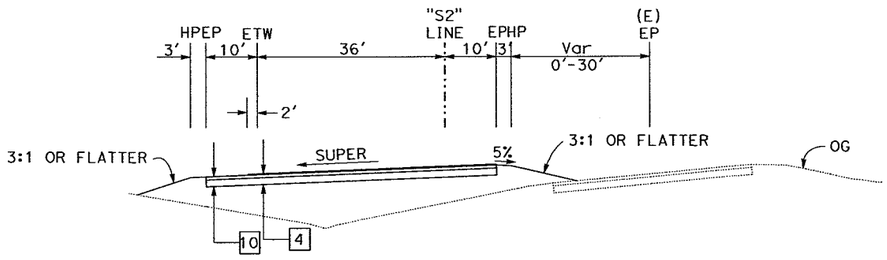
SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 124+00 TO 137+85.55



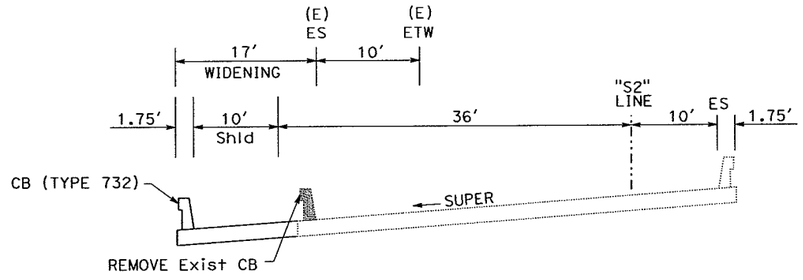
SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 121+00 TO 124+00



SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 108+65.83 TO 121+00



SB ROUTE 65 WB ROUTE 80 CONNECTOR RAMP

"S2" 115+75.74 TO 128+42.90

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-10

LAST REVISION 05-05-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:30

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BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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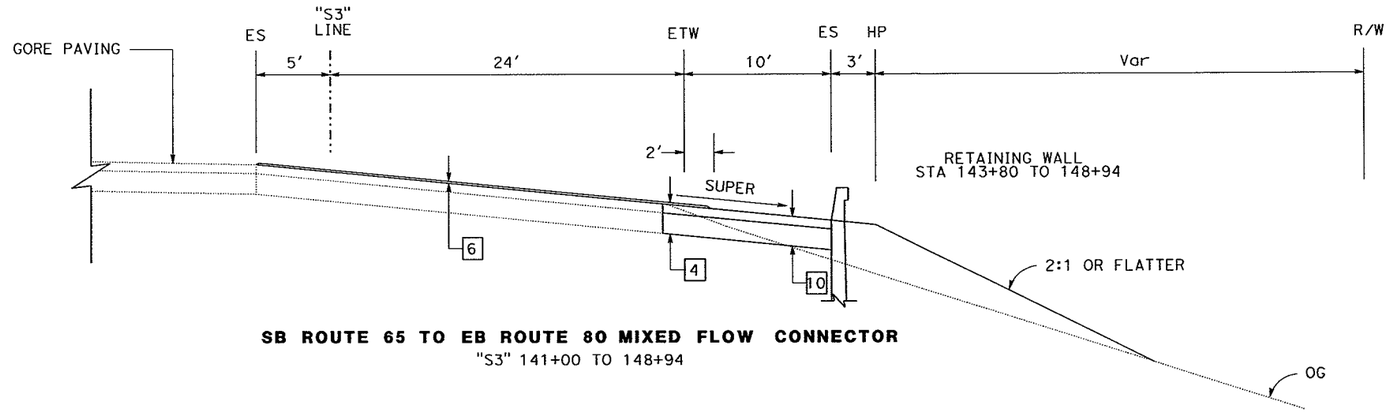
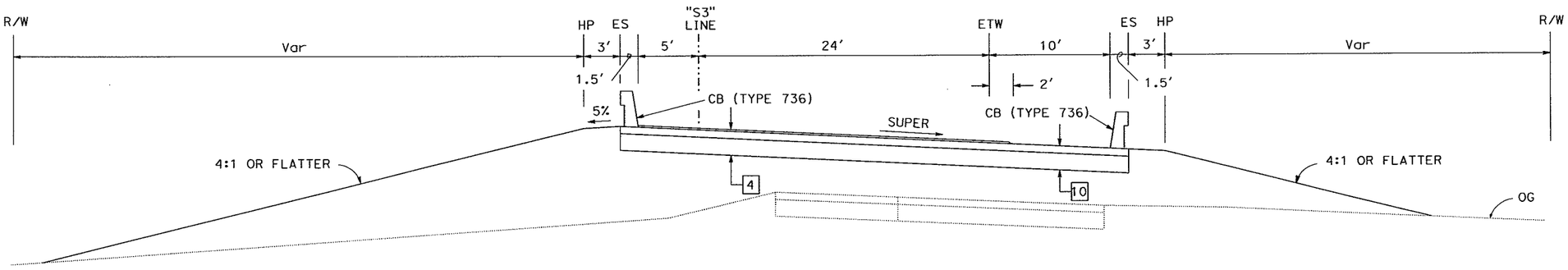
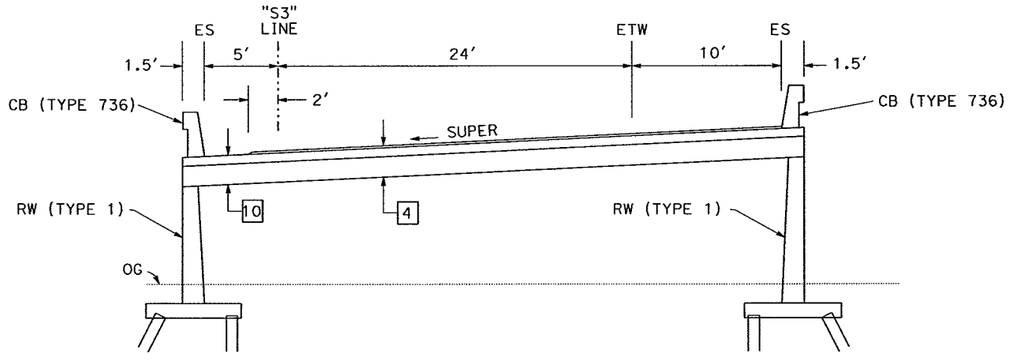


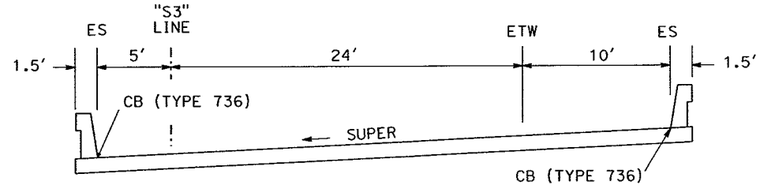
SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 141+00 TO 148+94



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 138+00 TO 141+00



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 109+25 TO 113+00



SB ROUTE 65 TO EB ROUTE 80 MIXED FLOW CONNECTOR
"S3" 113+00 TO 138+00

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-11

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ADVANCE PLANNING
FUNCTIONAL SUPERVISOR: CHAD BAKER
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LAST REVISION 03-31-09
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:30

BORDER LAST REVISED 4/11/2008
RELATIVE BORDER SCALE 0 1 2 3
USERNAME => s117031
CU 03216
EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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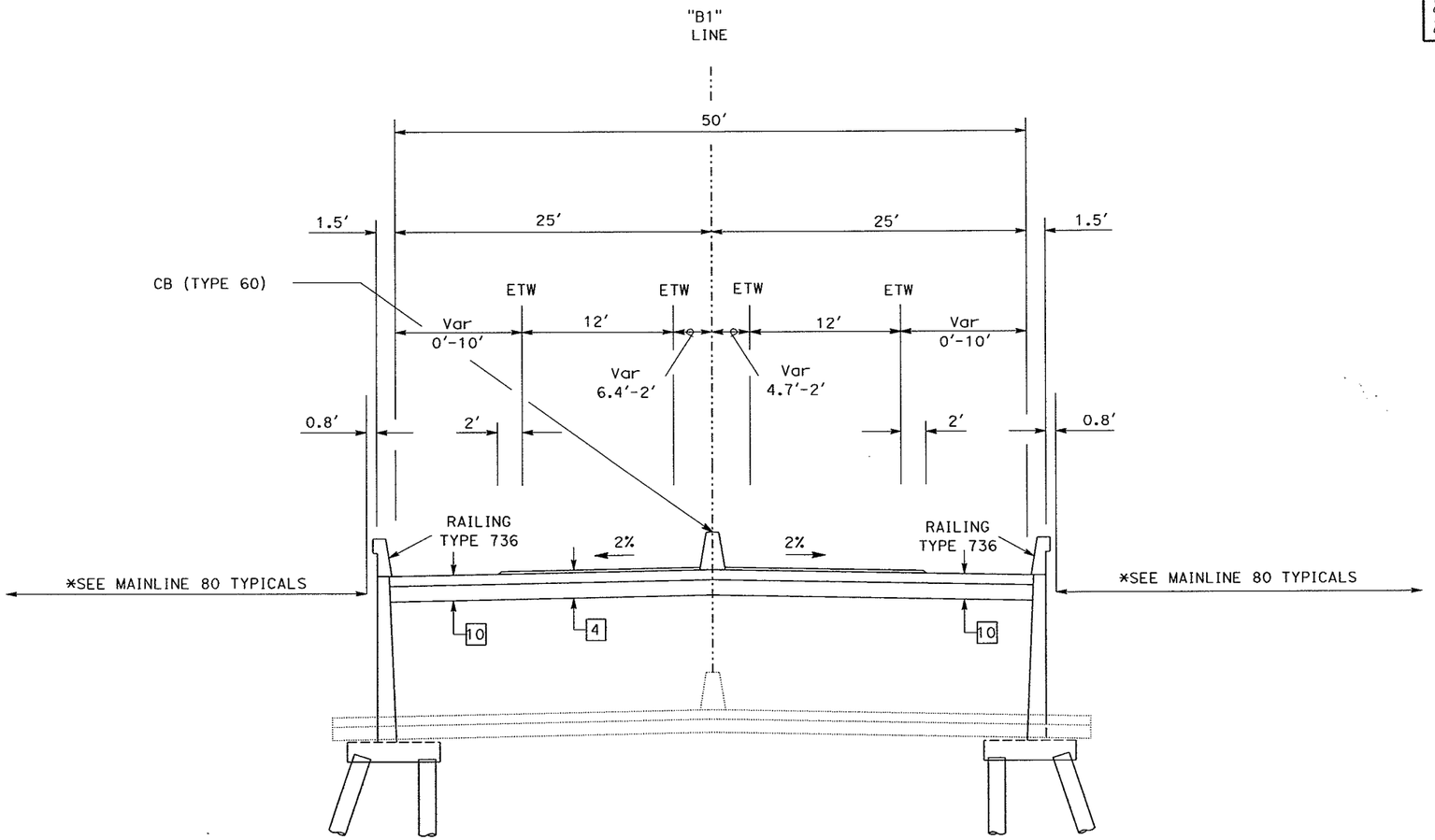

EB ROUTE 80 TO NB ROUTE 65/SB ROUTE 65 TO WB ROUTE 80
HOV DIRECT CONNECTOR "S4"

"B1" STA 106+95 TO STA 113+36

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-12

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Caltrans® ADVANCE PLANNING
FUNCTIONAL SUPERVISOR: CHAD BAKER
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LAST REVISION 03-31-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:30

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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STATE OF CALIFORNIA

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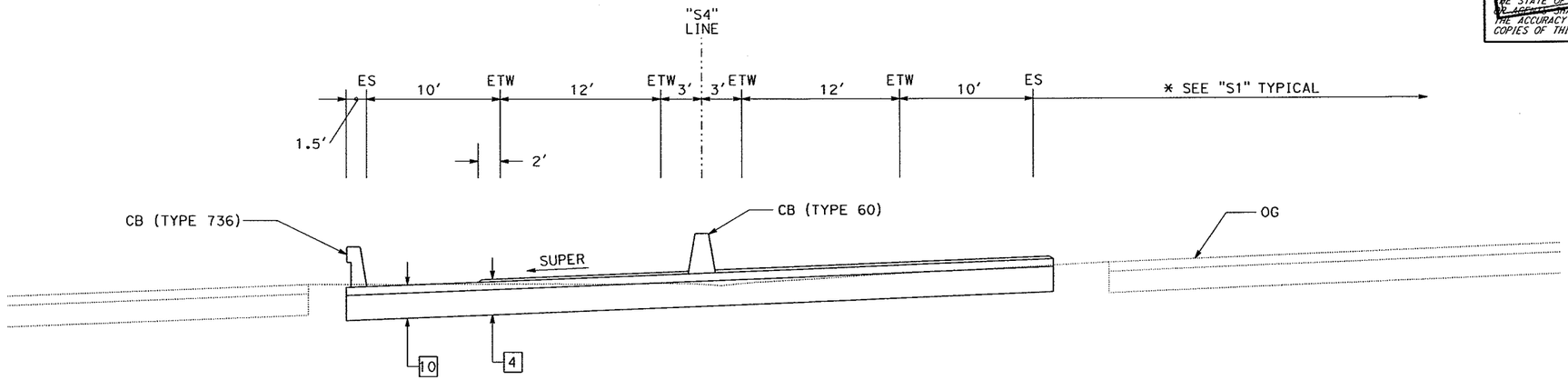
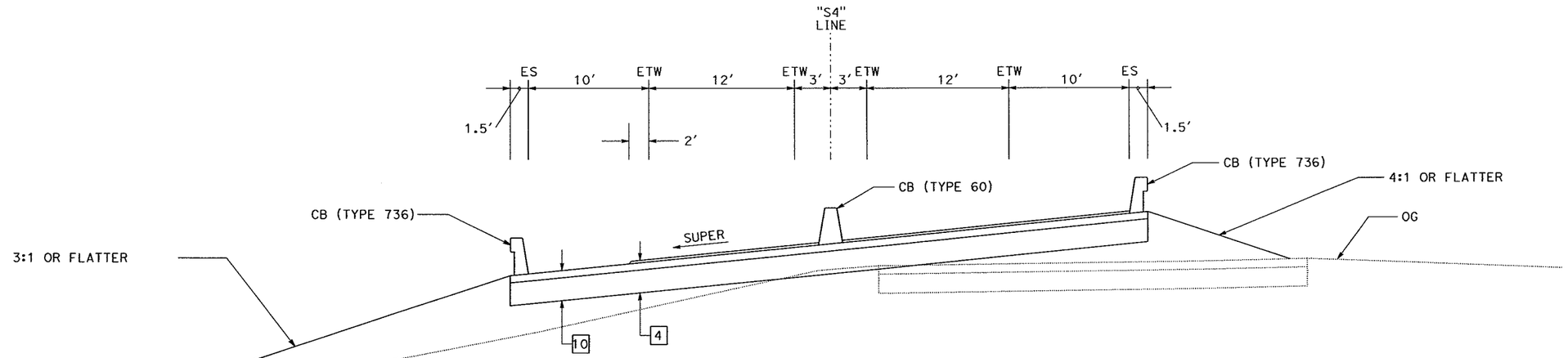


EB ROUTE 80 TO NB ROUTE 65/SB ROUTE 65 TO WB ROUTE 80
HOV DIRECT CONNECTOR "S4"

"S4" STA 130+68 TO STA 131+49



EB ROUTE 80 TO NB ROUTE 65/SB ROUTE 65 TO WB ROUTE 80
HOV DIRECT CONNECTOR "S4"

"S4" STA 127+09 TO STA 130+68

TYPICAL CROSS SECTIONS
ALTERNATIVE 3
NO SCALE

X-13

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Caltrans® ADVANCE PLANNING

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BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS INCOMPLETE FOR DESIGN STUDY ONLY

PLANS APPROVAL DATE

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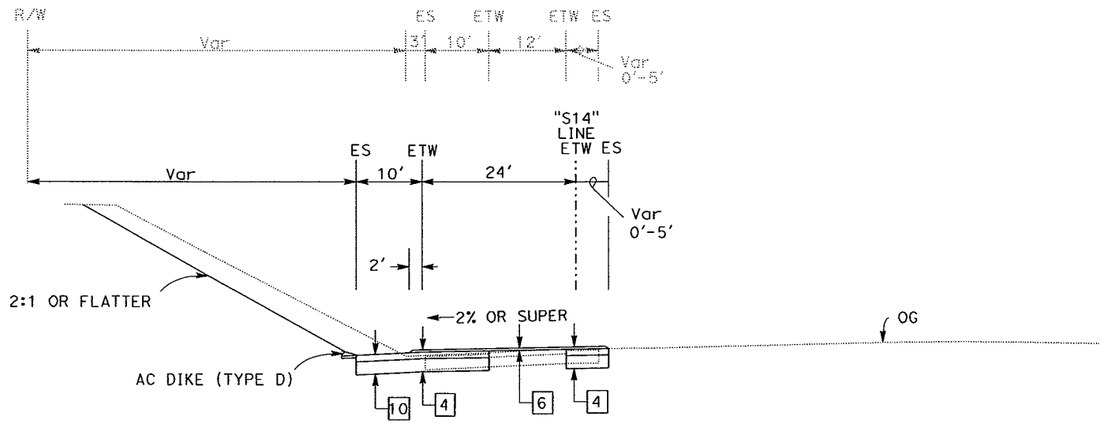
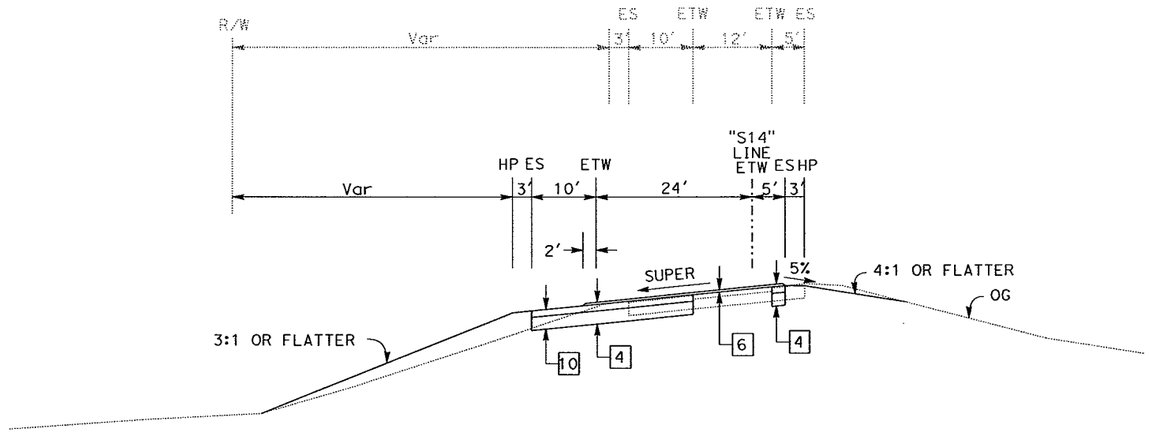
REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA — EXP.



WB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S14" 133+02 TO 137+28



WB ROUTE 80 TO NB ROUTE 65 BRANCH CONNECTOR

"S14" 119+85 TO 133+02

TYPICAL CROSS SECTIONS
ALTERNATIVE 3

NO SCALE

X-14

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

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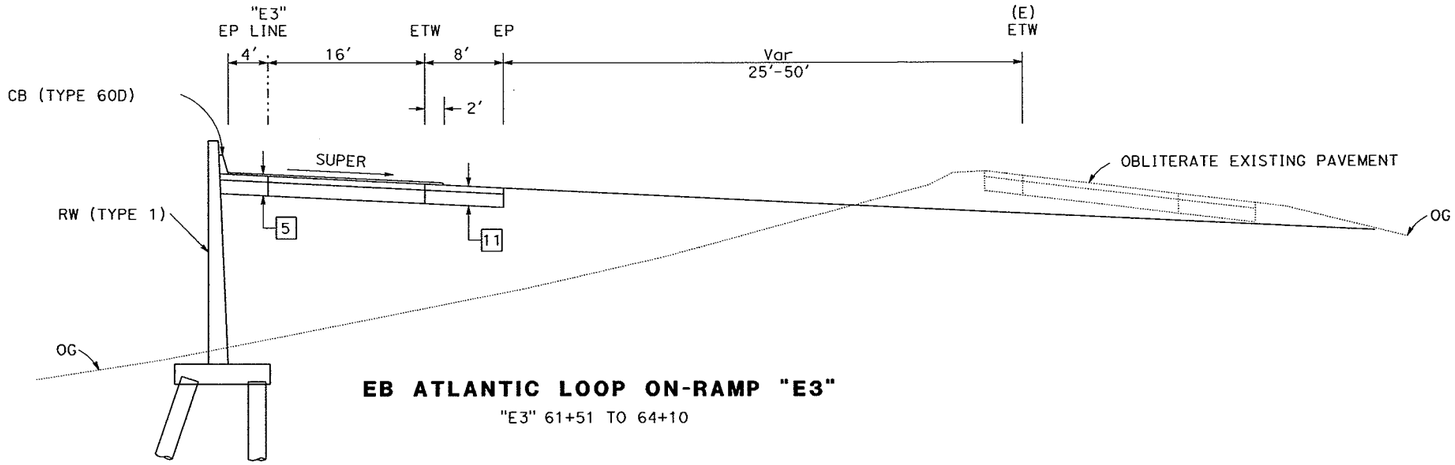
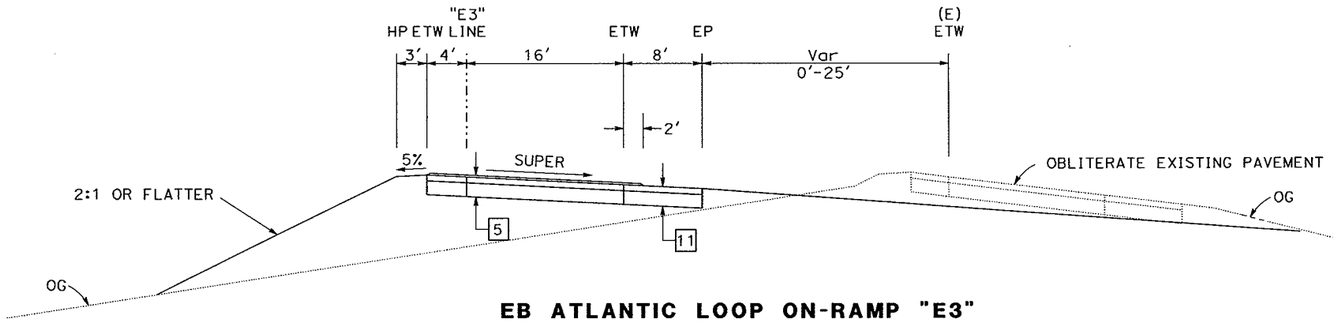


EB ATLANTIC LOOP ON-RAMP "E3"

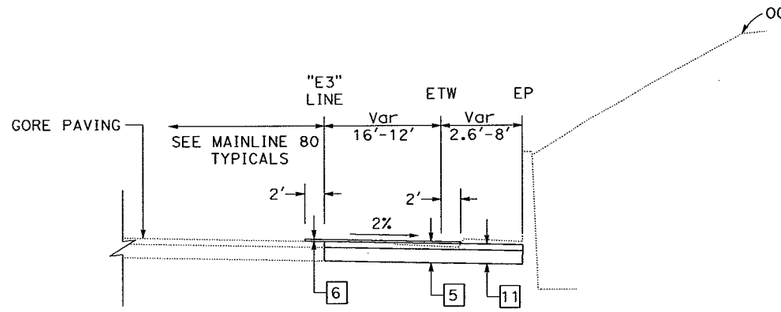
"E3" 61+51 TO 64+10



EB ATLANTIC LOOP ON-RAMP "E3"

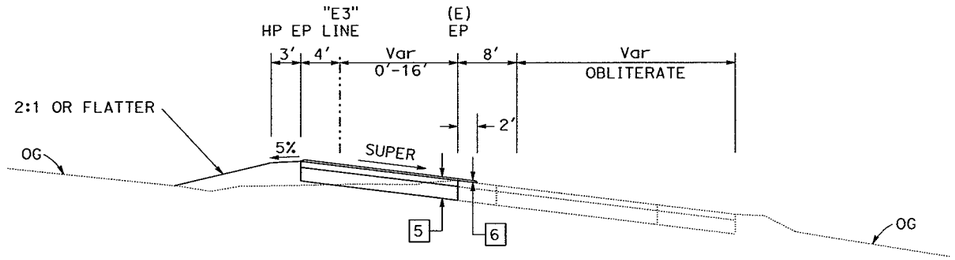
"E3" 59+30 TO 61+51

"E3" 64+10 TO 65+07



EB ATLANTIC LOOP ON-RAMP "E3"

"E3" 65+07 TO 70+19



EB ATLANTIC LOOP ON-RAMP "E3"

"E3" 56+43 TO 59+30

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-15

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER

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LAST REVISION 03-31-09

DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:30

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7 R4.8/R6.9		

REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS APPROVAL DATE _____

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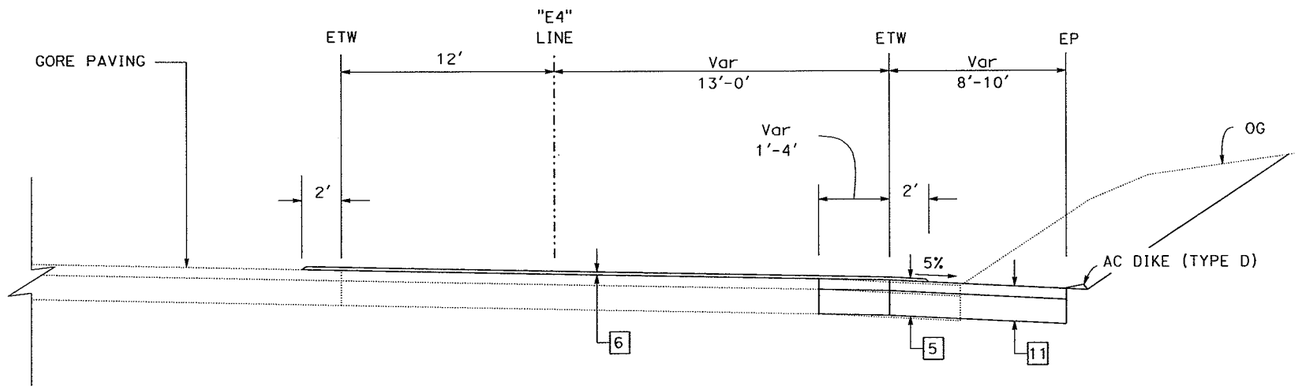
PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA



EB ATLANTIC SLIP ON-RAMP "E4"

"E4" 78+90 TO 82+05

TYPICAL CROSS SECTIONS
ALTERNATIVE 3

NO SCALE

X-16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER

CALCULATED-DESIGNED BY

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REVISED BY	DATE REVISED

LAST REVISION 03-31-09
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RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

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PLANS APPROVAL DATE

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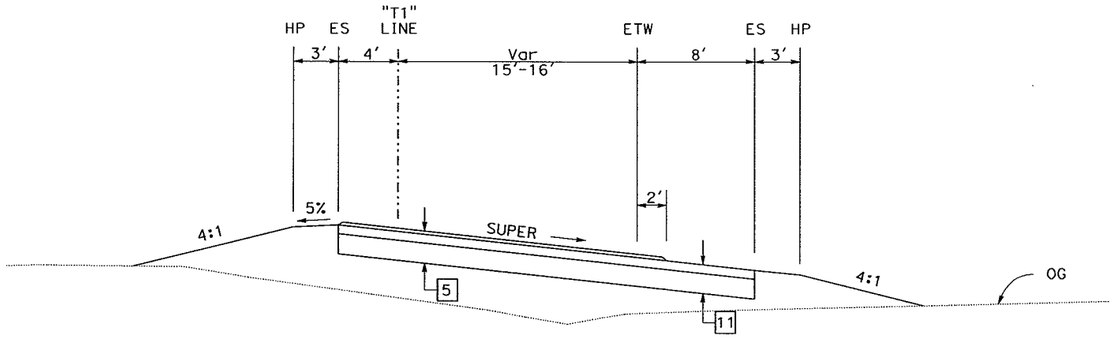
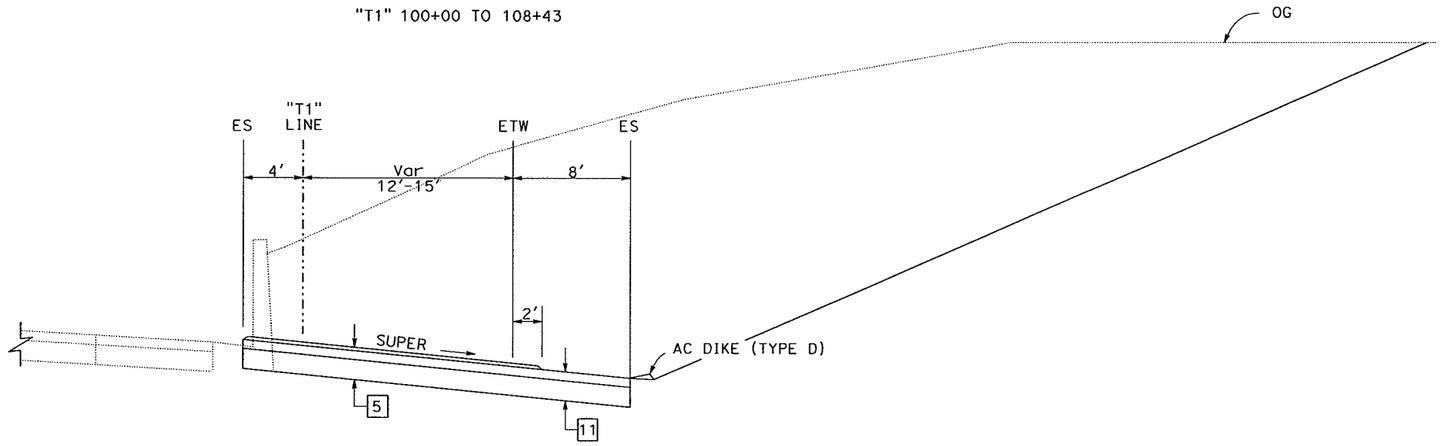
REGISTERED PROFESSIONAL ENGINEER

STATE OF CALIFORNIA



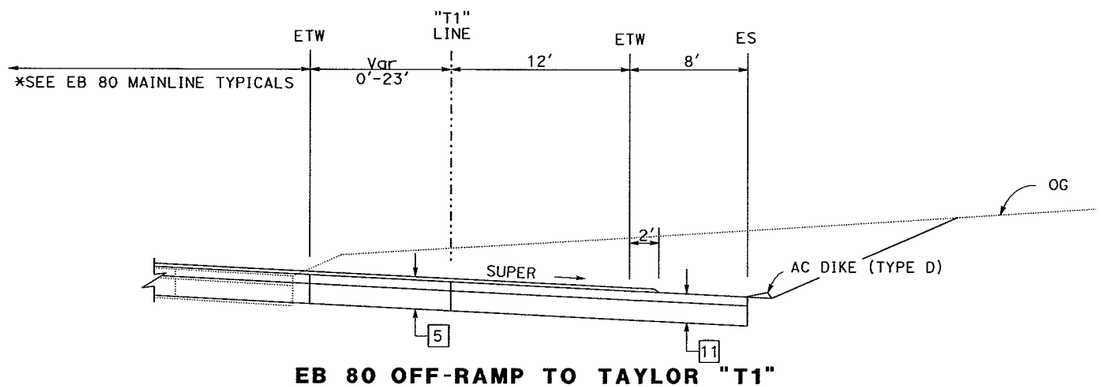
EB 80 OFF-RAMP TO TAYLOR "T1"

"T1" 100+00 TO 108+43



EB 80 OFF-RAMP TO TAYLOR "T1"

"T1" 96+17 TO 100+00



EB 80 OFF-RAMP TO TAYLOR "T1"

"T1" 93+09 TO 96+17

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-17

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LAST REVISION 03-31-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:30

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.1 R4.8/R6.9		

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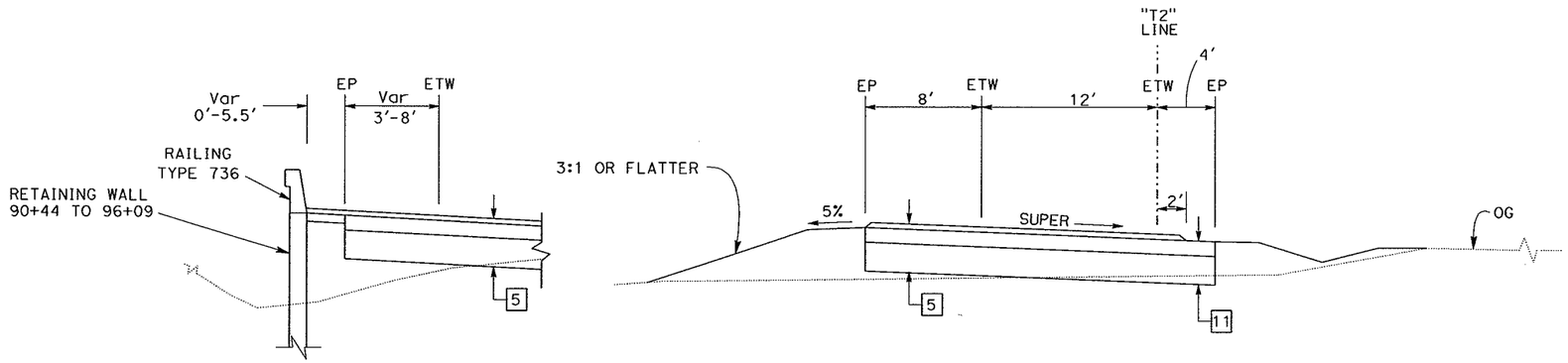

WB TAYLOR TO WB ROUTE 80 SLIP ON-RAMP "T2"

"T2" 90+44 TO 102+02

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-18

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LAST REVISION: DATE PLOTTED => 18-JUN-2009 TIME PLOTTED => 11:30 — 03-31-09

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

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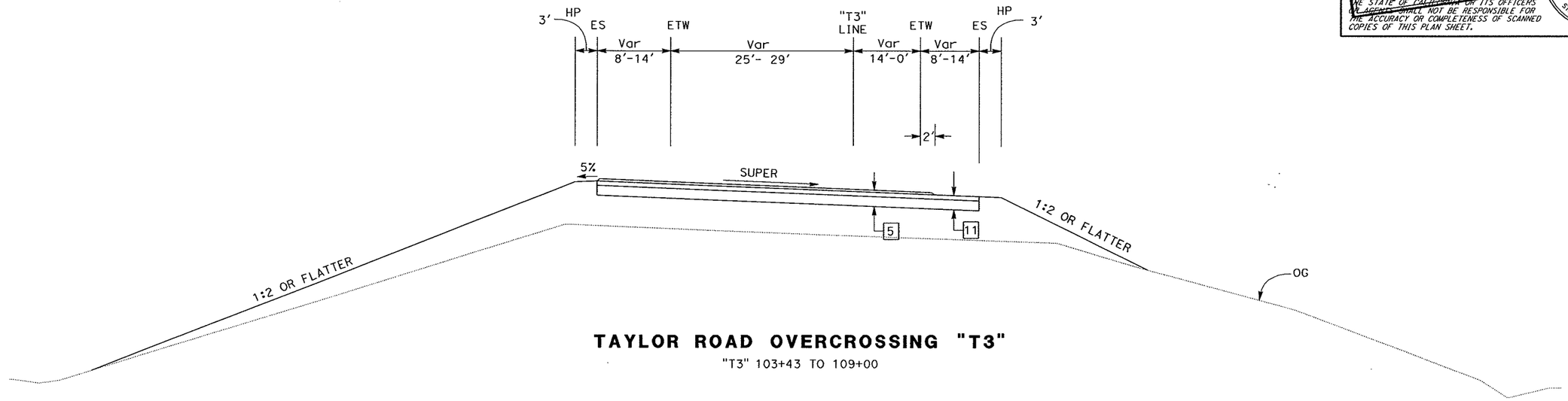
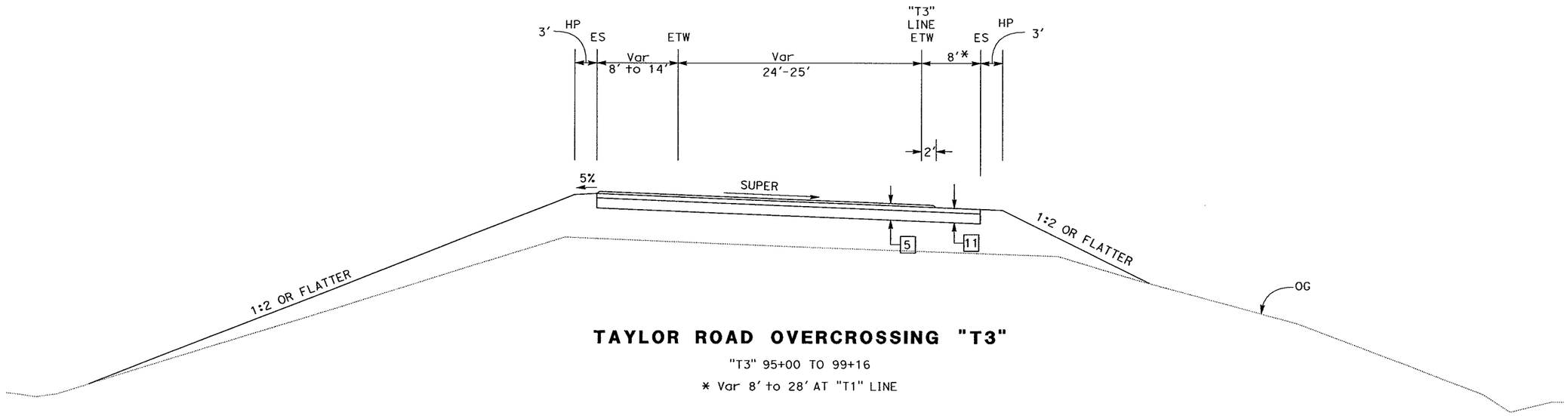


TAYLOR ROAD OVERCROSSING "T3"

"T3" 103+43 TO 109+00



TAYLOR ROAD OVERCROSSING "T3"

"T3" 95+00 TO 99+16

* Var 8' to 28' AT "T1" LINE

TYPICAL CROSS SECTIONS ALTERNATIVE 3

NO SCALE

X-19

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CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

LAST REVISION 05-13-09 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:30

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

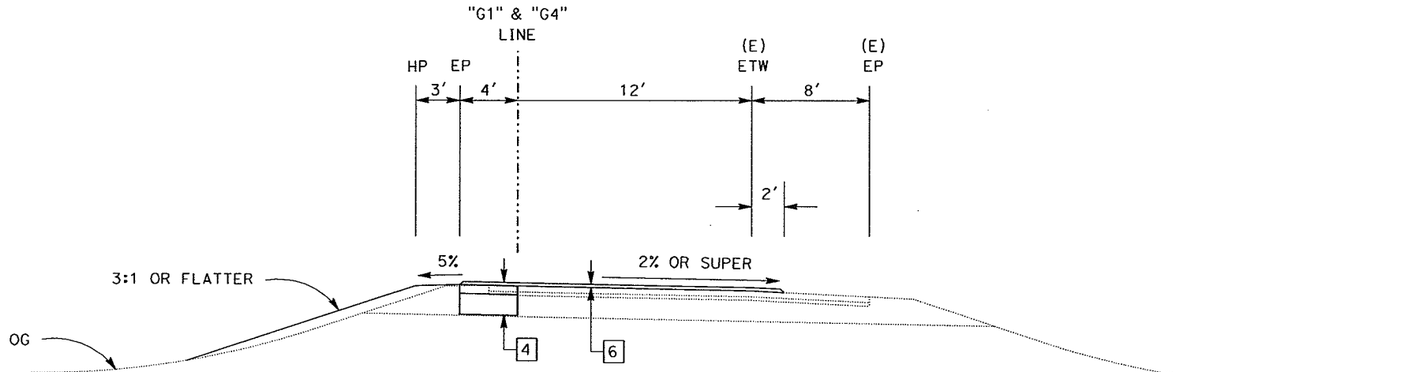
REGISTERED CIVIL ENGINEER _____ DATE _____

PLANS APPROVAL DATE _____

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

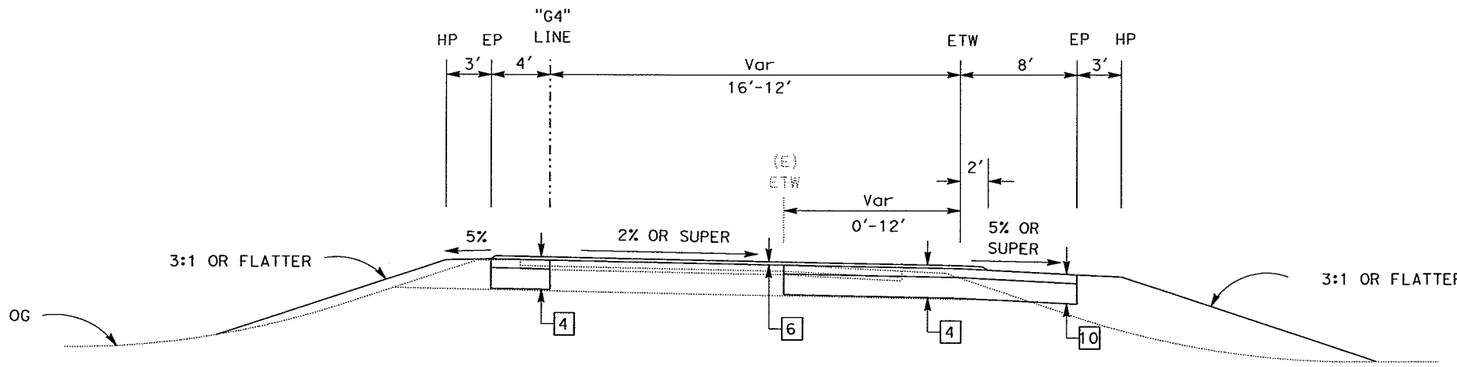
INCOMPLETE PLANS FOR DESIGN STUDY ONLY

REGISTERED PROFESSIONAL ENGINEER — CIVIL — Exp. — STATE OF CALIFORNIA



NB GALLERIA OFF-RAMP "G1" & "G4"

"G1" 148+26 TO 162+24
"G4" 149+41 TO 168+36



NB GALLERIA OFF-RAMP "G4"

"G4" 143+39 TO 149+41

TYPICAL CROSS SECTIONS
ALTERNATIVE 3

NO SCALE

X-20

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ADVANCE PLANNING

LAST REVISION 03-31-09
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:30

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

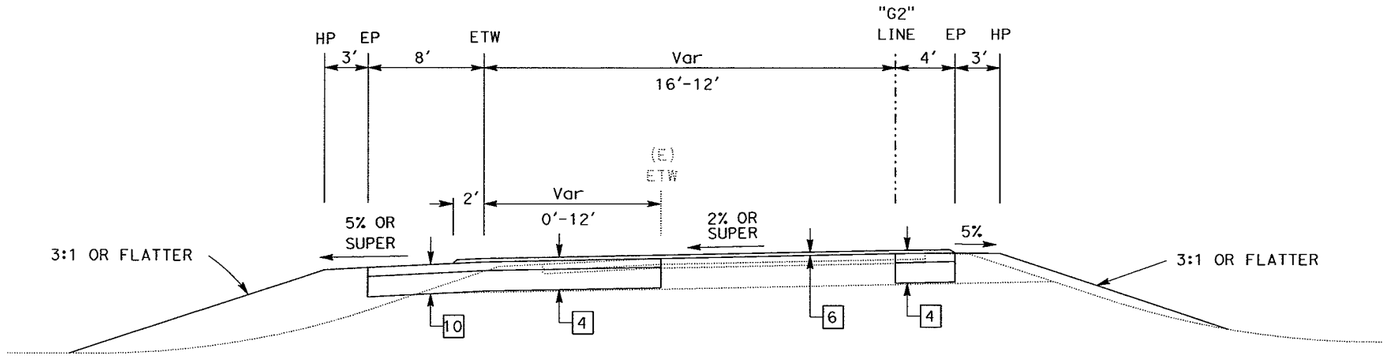
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

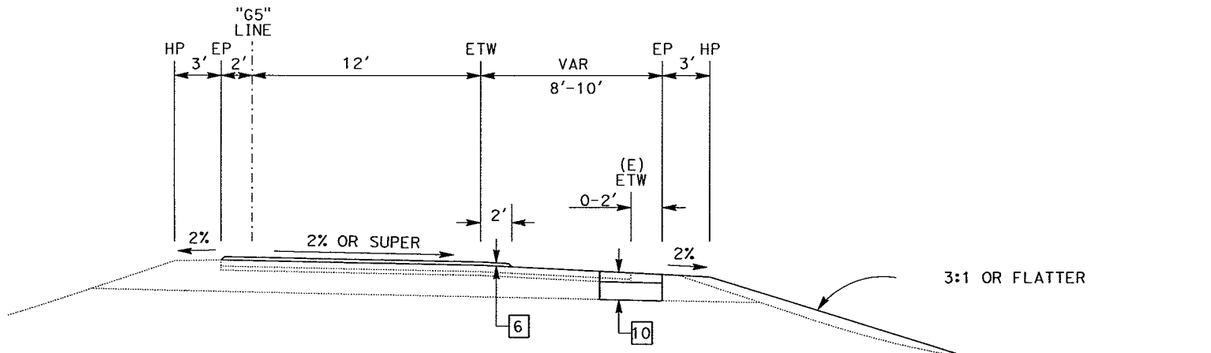
REG. NO. Exp. CIVIL STATE OF CALIFORNIA

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



SB GALLERIA SLIP ON-RAMP "G2"

"G2" 139+75 TO 153+50



NB GALLERIA SLIP ON-RAMP "G5"

"G5" 173+17 TO 174+15

TYPICAL CROSS SECTIONS
ALTERNATIVE 3

NO SCALE

X-21

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ADVANCE PLANNING
FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

LAST REVISION 03-31-09
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:30

ATTACHMENT 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

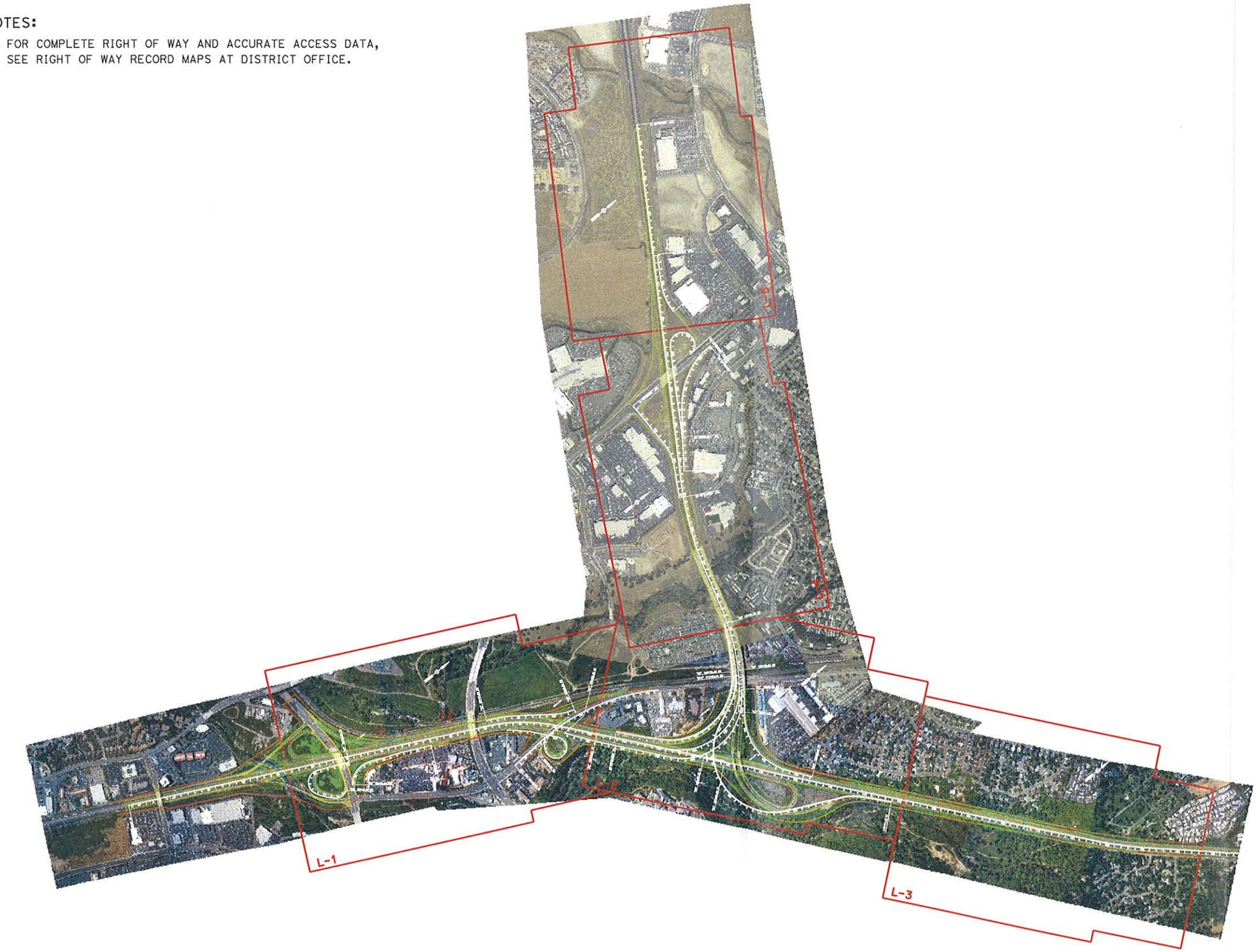
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA

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

NOTES:

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



KEYMAP
NO SCALE **K-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ADVANCE PLANNING

FUNCTIONAL SUPERVISOR
CHAD BAKER

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

LAST REVISION 03-04-08
DATE PLOTTED => 28-MAY-2009
TIME PLOTTED => 16:18

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320da001.dgn

CU 03216

EA 4e320k

ALTERNATIVE 1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

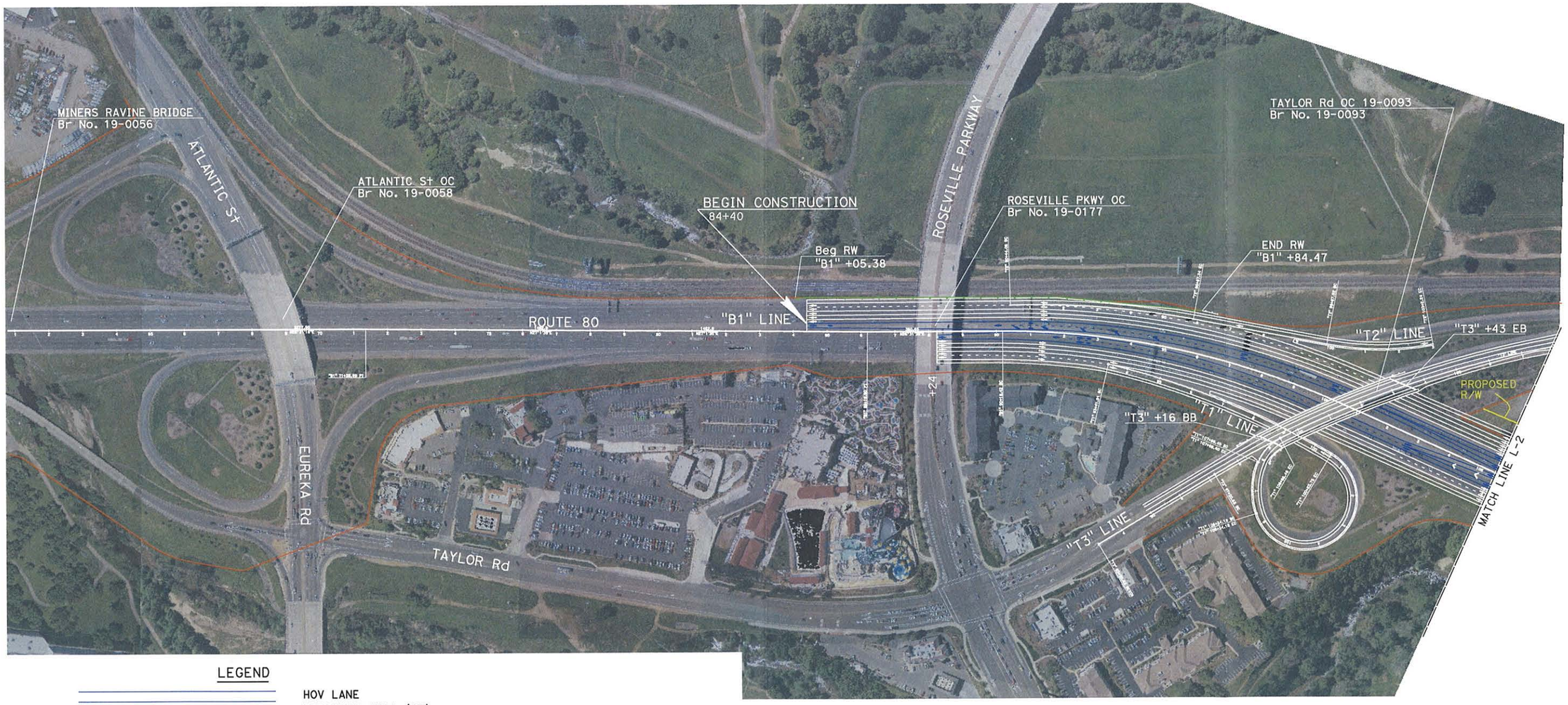
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA



LEGEND

- HOV LANE
- RETAINING WALL (RW)
- LANE LINE
- RIGHT OF WAY (R/W)
- PROPOSED RIGHT OF WAY
- ELIMINATE

LAYOUT
ALTERNATIVE 1
SCALE: 1" = 150'

L-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans **ADVANCE PLANNING**

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:32

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea001.dgn

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

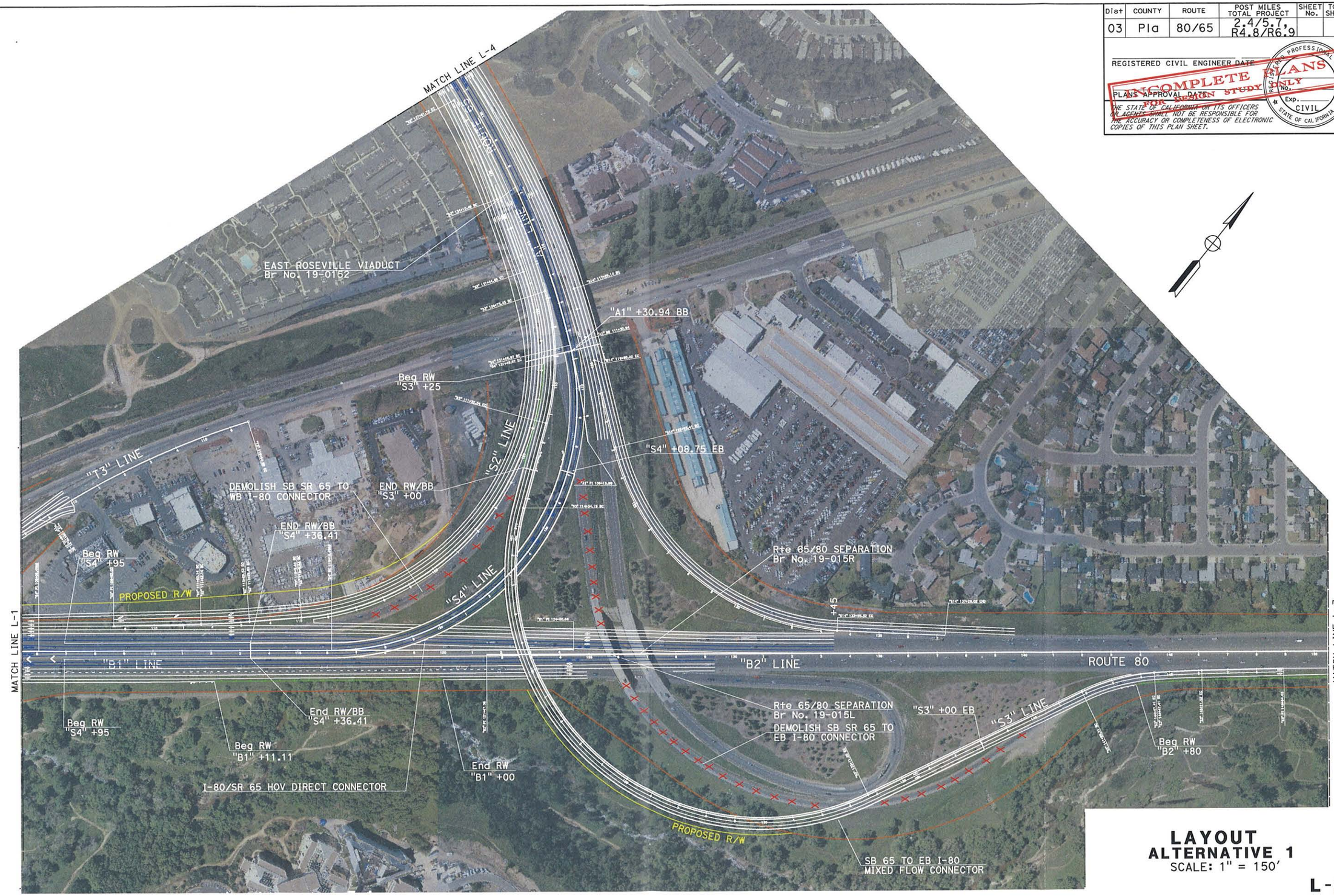
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PROFESSIONAL ENGINEER * STATE OF CALIFORNIA * No. Exp. CIVIL

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



LAYOUT
ALTERNATIVE 1
SCALE: 1" = 150'

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY	
Caltrans ADVANCE PLANNING	CHAD BAKER	CHECKED BY	DATE REVISED	

LAST REVISION | DATE PLOTTED => 18-JUN-2009 | 03-04-08 | TIME PLOTTED => 11:32

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s117031 | DGN FILE => 34e320ea002.dgn | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 1
SCALE: 1" = 150'

L-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY

REVISED BY
DATE REVISED

LAST REVISION: DATE PLOTTED => 18-JUN-2009
03-04-08 TIME PLOTTED => 11:32

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea003.dgn

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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PROFESSIONAL ENGINEER — REGISTERED — No. — Exp. — CIVIL — STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 1
SCALE: 1" = 150'

L-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

LAST REVISION | DATE PLOTTED => 18-JUN-2009 | 03-04-08 | TIME PLOTTED => 11:32

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea004.dgn

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 1
SCALE: 1" = 150'

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans **ADVANCE PLANNING**

FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

LAST REVISION: DATE PLOTTED => 18-JUN-2009
03-04-08 TIME PLOTTED => 11:32

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea005.dgn

CU 03216

EA 4e320k

ALTERNATIVE 2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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INCOMPLETE PLANS FOR DISCUSSION ONLY

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

LEGEND

- HOV LANE
- RETAINING WALL (RW)
- LANE LINE
- RIGHT OF WAY (R/W)
- PROPOSED RIGHT OF WAY
- ELIMINATE

LAYOUT
ALTERNATIVE 2
SCALE: 1" = 150'

L-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

LAST REVISION | DATE PLOTTED => 18-JUN-2009
03-04-08 | TIME PLOTTED => 11:35

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea001.dgn

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

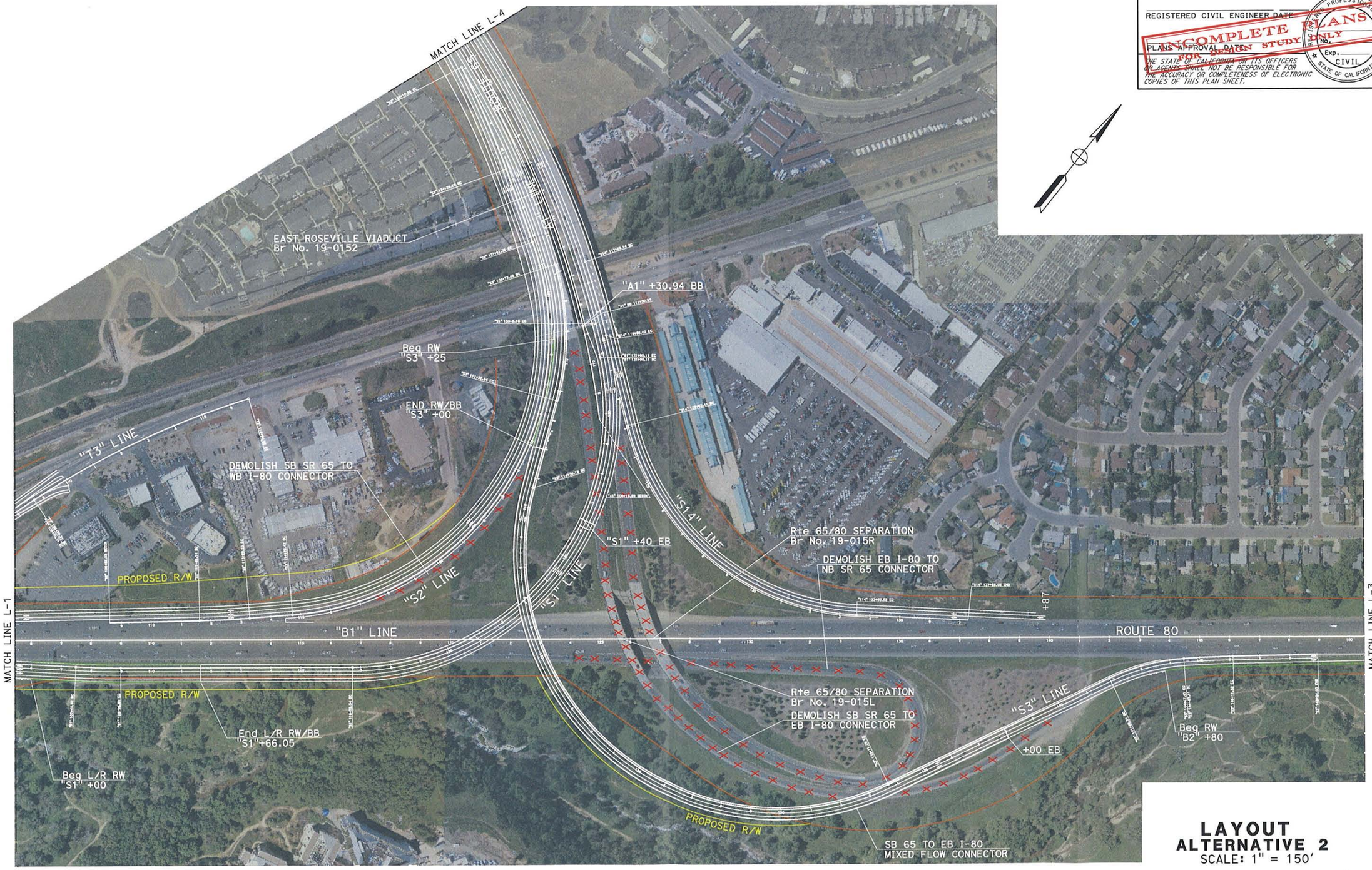
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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



LAYOUT
ALTERNATIVE 2
SCALE: 1" = 150'

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

LAST REVISION DATE PLOTTED => 18-JUN-2009
03-04-08 TIME PLOTTED => 11:33

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea002.dgn

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 2
SCALE: 1" = 150'

L-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY

REVISED BY
DATE REVISED

LAST REVISION
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:34

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea003.dgn

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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

REGISTERED PROFESSIONAL ENGINEER — No. EXP. CIVIL — STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 2
SCALE: 1" = 150'

L-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
Caltrans ADVANCE PLANNING	CHAD BAKER	CHECKED BY	DATE REVISED

LAST REVISION: DATE PLOTTED => 18-JUN-2009, TIME PLOTTED => 11:34 — 03-04-08

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES (0 1 2 3) | USERNAME => s117031, DGN FILE => 34e320ea004.dgn | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

INCOMPLETE PLANS ONLY — NOT FOR CONSTRUCTION OR RIGHT OF WAY DESIGN STUDY

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 2
SCALE: 1" = 150'

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
Caltrans ADVANCE PLANNING	CHAD BAKER	CHECKED BY	DATE REVISED

LAST REVISION: DATE PLOTTED => 18-JUN-2009
03-04-08 TIME PLOTTED => 11:34

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea005.dgn

CU 03216

EA 4e320k

ALTERNATIVE 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

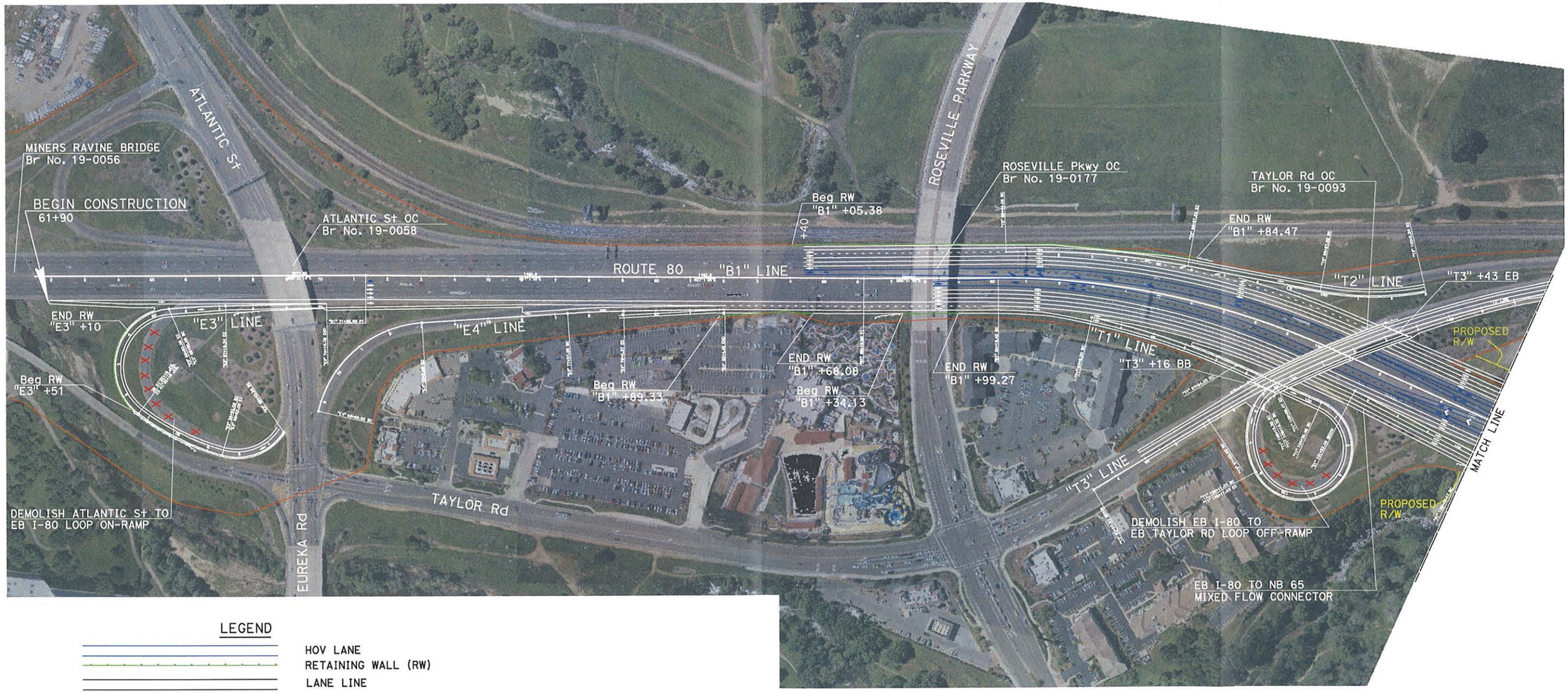
REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans ADVANCE PLANNING



LEGEND

- HOV LANE
- RETAINING WALL (RW)
- LANE LINE
- RIGHT OF WAY (R/W)
- PROPOSED RIGHT OF WAY
- ELIMINATE

LAYOUT
ALTERNATIVE 3
SCALE: 1" = 150'

L-1

LAST REVISION | DATE PLOTTED => 18-JUN-2009
03-04-08 | TIME PLOTTED => 11:35

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s117031 DGN FILE => 34e320ea001.dgn | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER — INCOMPLETE PLANS FOR DESIGN STUDY ONLY — No. Exp. CIVIL — STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 3
SCALE: 1" = 150'

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
Caltrans ADVANCE PLANNING	CHAD BAKER	CHECKED BY	DATE REVISED

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:35

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s117031 | DGN FILE => 34e320ea002.dgn | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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

REGISTERED PROFESSIONAL ENGINEER No. EXP. CIVIL STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 3
SCALE: 1" = 150'

L-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY

REVISED BY
DATE REVISED

LAST REVISION: DATE PLOTTED => 18-JUN-2009
03-04-08 TIME PLOTTED => 11:35

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea003.dgn

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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PROFESSIONAL ENGINEER — REGISTERED CIVIL — No. — Exp. — STATE OF CALIFORNIA

LAYOUT
ALTERNATIVE 3
SCALE: 1" = 150'

L-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
Caltrans ADVANCE PLANNING	CHAD BAKER	CHECKED BY	DATE REVISED

LAST REVISION: DATE PLOTTED => 18-JUN-2009; TIME PLOTTED => 11:35; 03-04-08

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s117031; DGN FILE => 34e320ea004.dgn | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

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

LAYOUT
ALTERNATIVE 3
SCALE: 1" = 150'

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY

REVISED BY
DATE REVISED

LAST REVISION
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:35
03-04-08

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s117031
DGN FILE => 34e320ea005.dgn

CU 03216

EA 4e320k

ATTACHMENT 4

ALTERNATIVE 1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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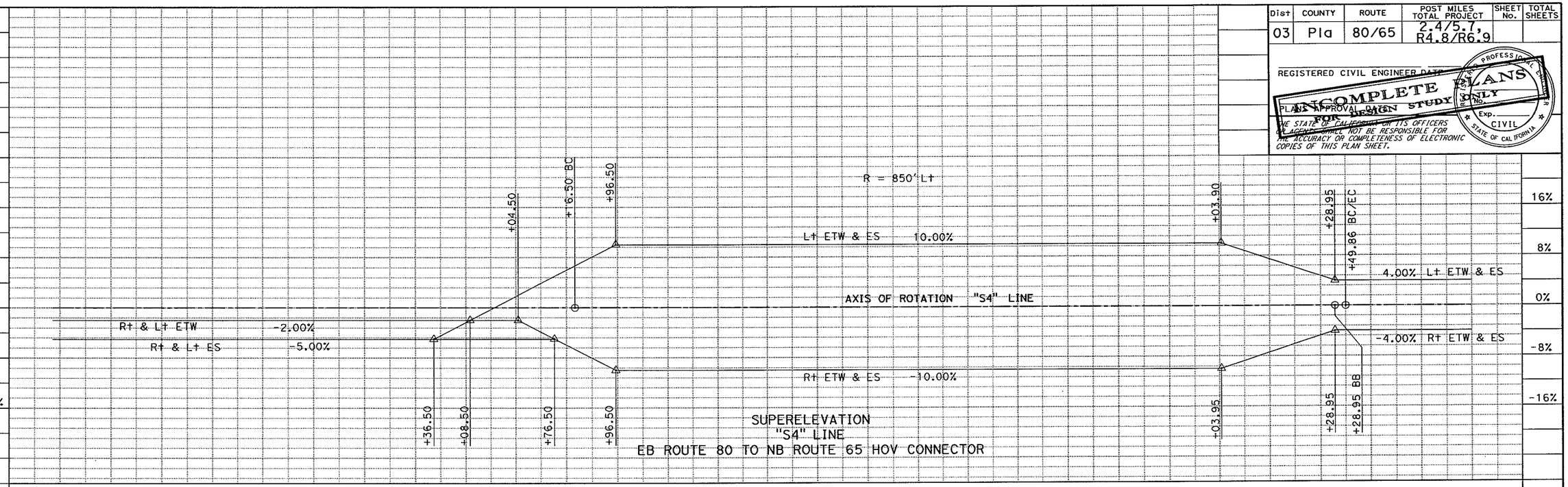

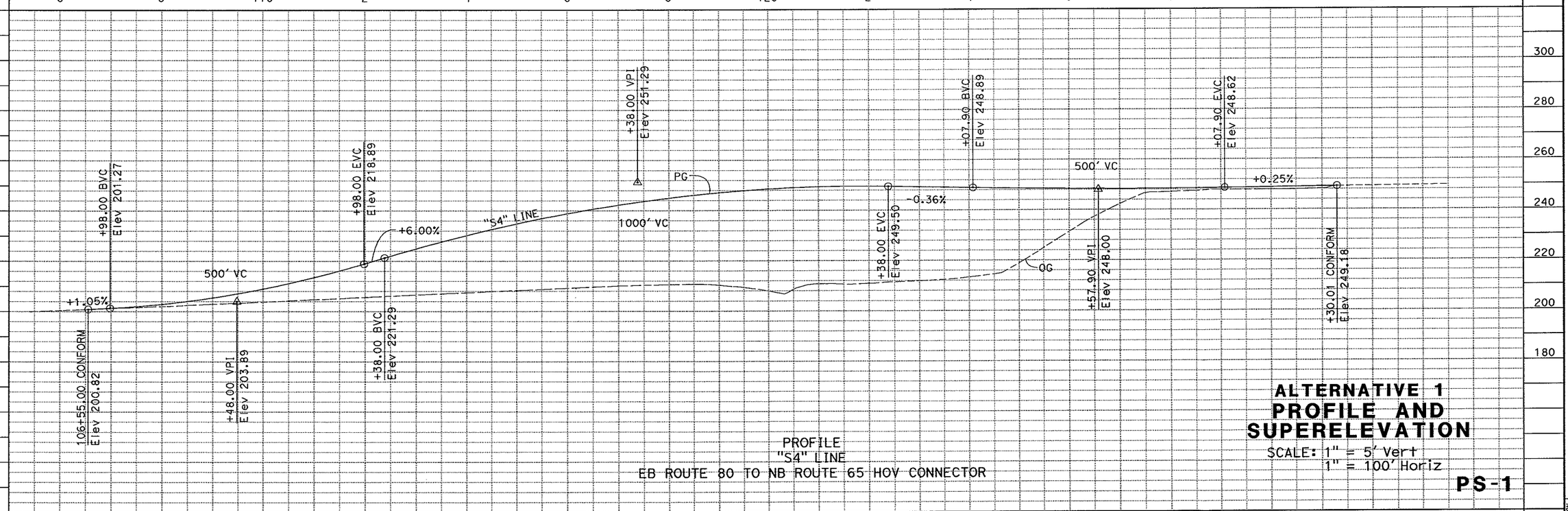

ALTERNATIVE 1
PROFILE AND SUPERELEVATION
SCALE: 1" = 5' Vert
1" = 100' Horiz

PS-1

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ADVANCE PLANNING

STATION | CY Exc | CY Emb | TOTAL

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:42

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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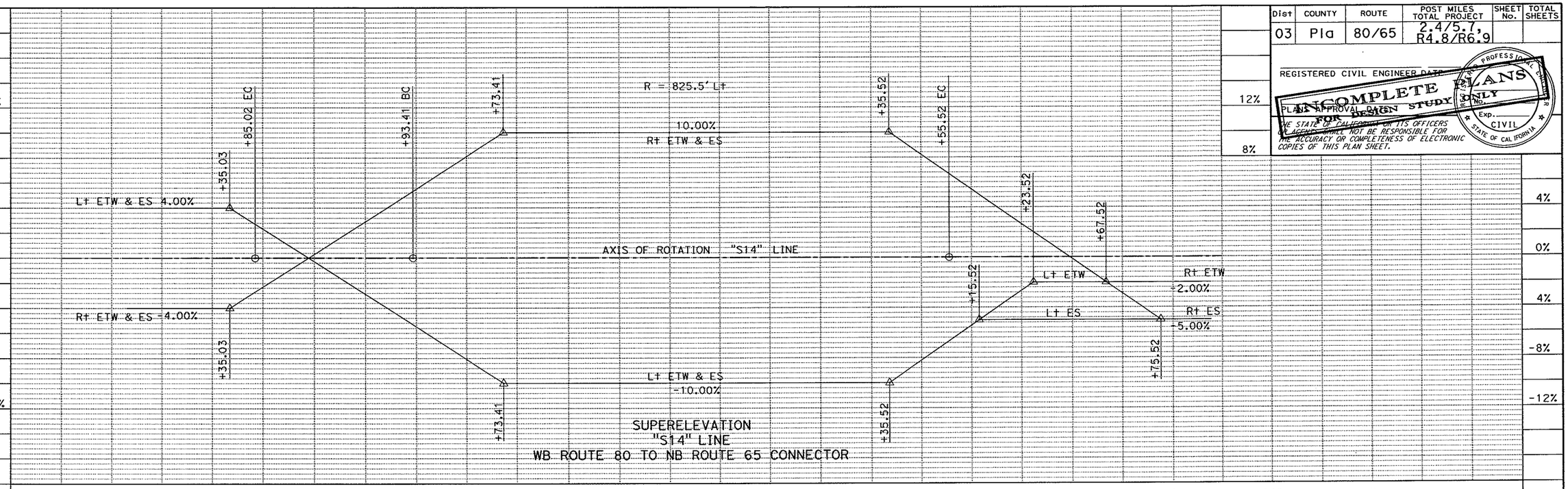
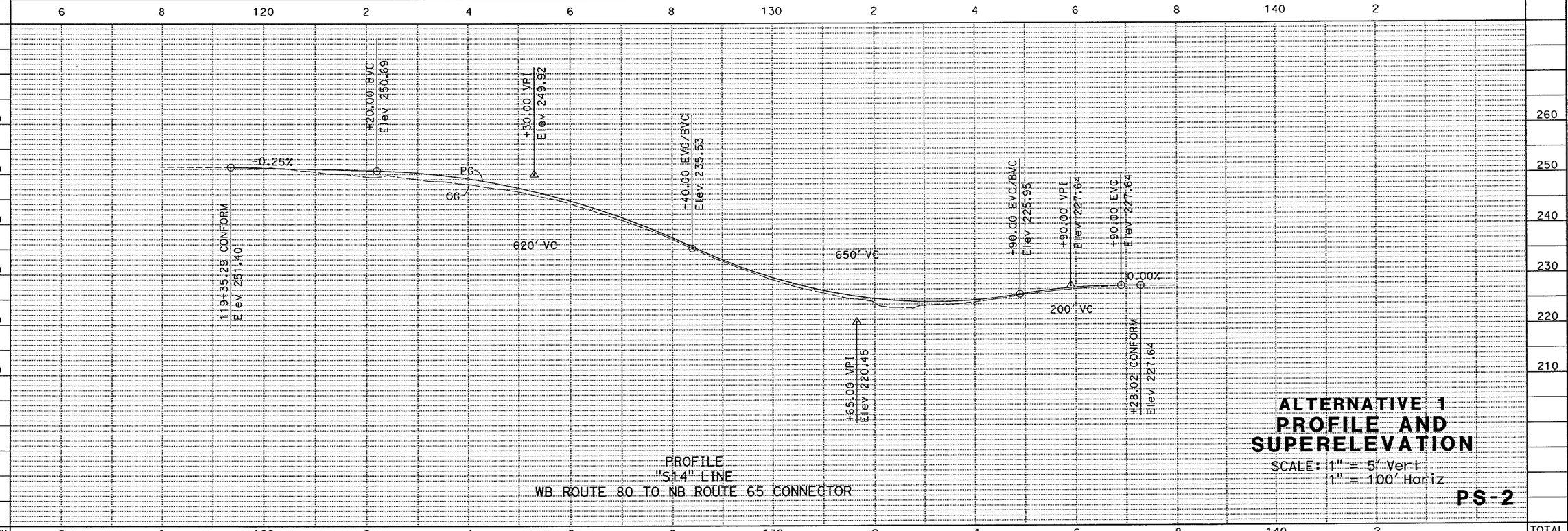
INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA





ALTERNATIVE 1
PROFILE AND SUPERELEVATION
SCALE: 1" = 5' Vert
1" = 100' Horiz

PS-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ADVANCE PLANNING
FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

STATION
CY Exc
CY Emb
TOTAL

LAST REVISION 03-04-08
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BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE 0 1 2 3
USERNAME => s117031
CU 03216
EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

R = 3000' Lt

+62.14 BC

+29.53 EC

+09.44 BC

+50 CORE

+2%

R = 890' Lt

+50

Rt ES

+00

+83

+44.88 EC

+10%

+5%

0%

-5%

-10%

AXIS OF ROTATION "S2" LINE Rt ETW

+62.14

+19.44

L+ ETW & ES

+72

+01.19

SUPERELEVATION
"S2" LINE
SB ROUTE 65 TO WB ROUTE 80 CONNECTOR

+39 BB CONFORM

+01.40 EVC/BVC (E)
Elev 246.07

+01.40 VPI (E)
Elev 245.61

+00 EVC
Elev 244.58
+01.40 BVC
Elev 244.59

+1.0%

+00.00 VPI
Elev 241.52

+00.00 BVC
Elev 226.79

PC

600' VC

+4.9%

OG

+50.00 BVC
Elev 224.79

+50.00 VPI
Elev 209.60

600' VC

+1.1%

+0.8%

"B1" FG

+00.00 VPI
Elev 205.58

+50.00 BVC
Elev 206.15

108+62.93 CONFORM
Elev 200.25

PROFILE
"S2" LINE
SB ROUTE 65 TO WB ROUTE 80 CONNECTOR

ALTERNATIVE 1

PROFILE AND SUPERELEVATION

SCALE: 1" = 10' Vert
1" = 100' Horiz

PS-3

STATION	8	9	110	1	2	3	4	115	6	7	8	9	120	1	2	3	4	125	6	7	8	9	130	1	2	TOTAL
CY Exc																										
CY Emb																										

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

LAST REVISION 03-04-08
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:42

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

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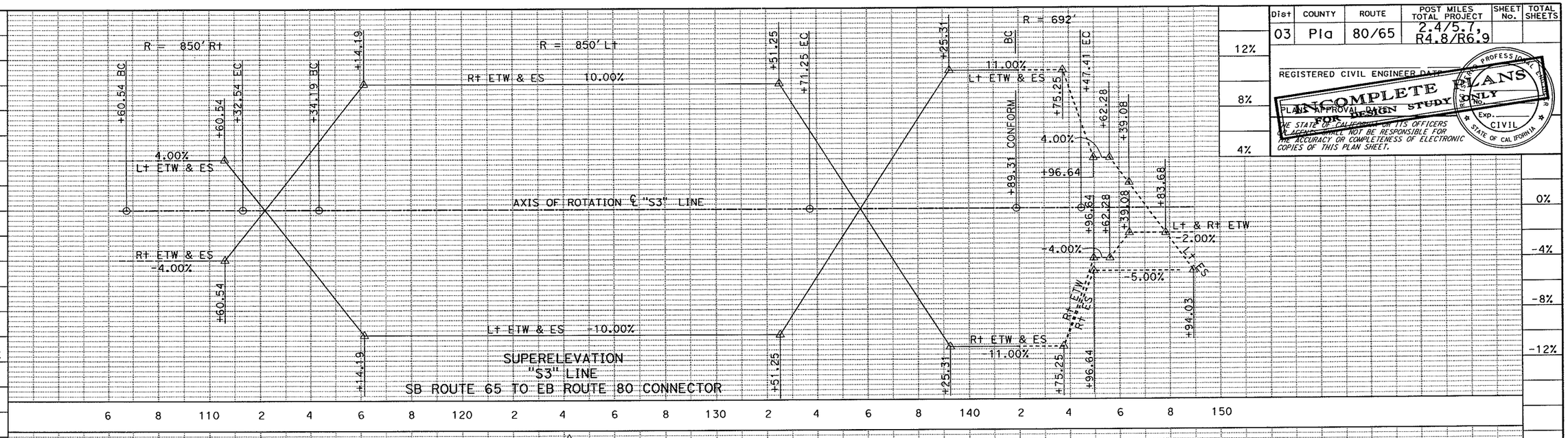

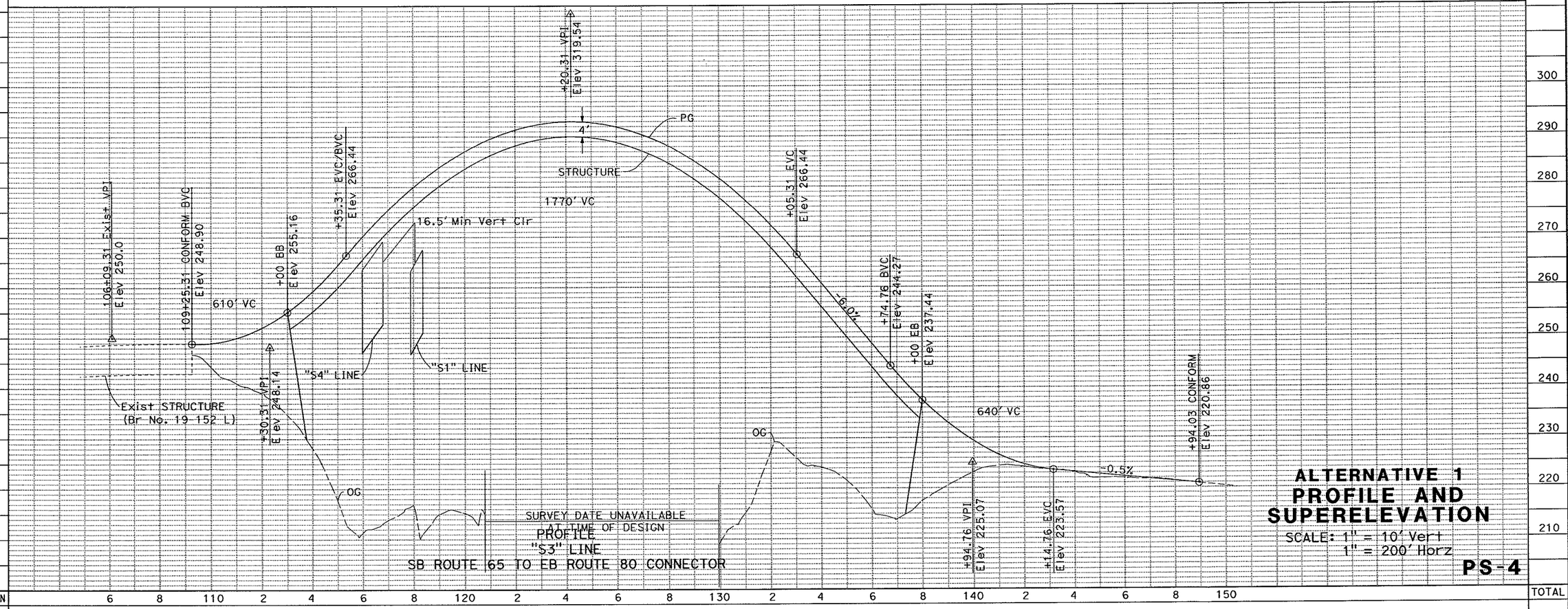

ALTERNATIVE 1
PROFILE AND SUPERELEVATION
SCALE: 1" = 10' Vert
1" = 200' Horz

PS-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ADVANCE PLANNING
FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED
LAST REVISION 03-04-08
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:42

STATION
CY Exc
Emb
TOTAL

BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE 0 1 2 3
USERNAME => s117031
CU 03216
EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

Exp. CIVIL

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FUNCTIONAL SUPERVISOR: CHAD BAKER

ADVANCE PLANNING

R = 3000' Rt

R = 2800' Rt

+50.00 CONFORM

+20.65' BC

+70.311 PCC

+50.00 CONFORM

+70

+70

+70

+70

4%

2%

0%

-2%

-4%

Rt ETW & EP

Lt ETW & EP 4.00%

AXIS OF ROTATION "T3" LINE

Lt ETW & EP

Rt ETW & EP 4.00%

SUPERELEVATION
"T3" LINE
TAYLOR Rd OVERCROSSING

+50.00 VPI Elev 240.55

+30.00 BVC Elev 224.23

820' VC

PG

OG

+50.00 EVC/BVC Elev 216.67

3.98%

3.60%

600' VC

1.06%

+50.00 VPI Elev 211.07

93+50.00 CONFORM Elev 206.27

APPROX OG

+50.00 VPI Elev 199.20

+50.00 EVC CONFORM Elev 202.38

PROFILE
"T3" LINE
TAYLOR Rd OVERCROSSING

ALTERNATIVE 1
PROFILE AND SUPERELEVATION

SCALE: 1" = 10' Vert
1" = 100' Horiz

PS-5

STATION		93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	TOTAL
CY	Exc																											
	Emb																											

4% 2% 0% -2% -4 %

240 230 220 210 200 190 180 170

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:42

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

ALTERNATIVE 2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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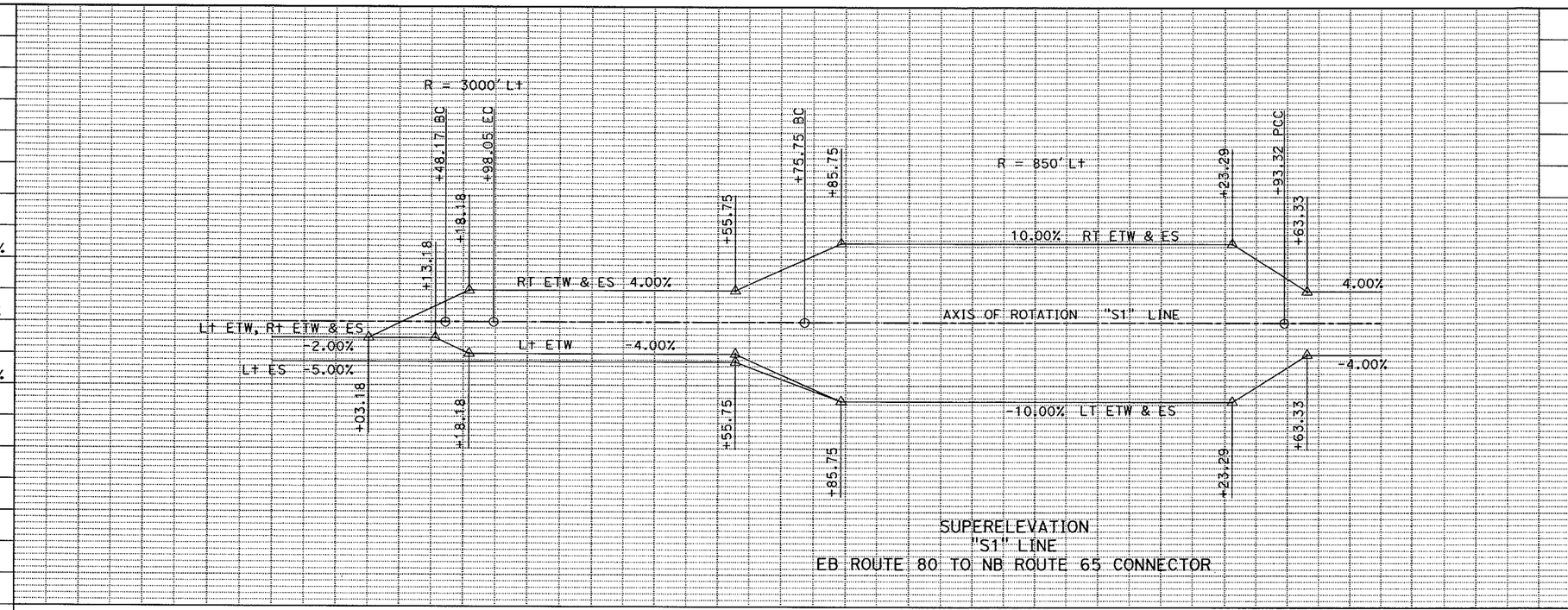
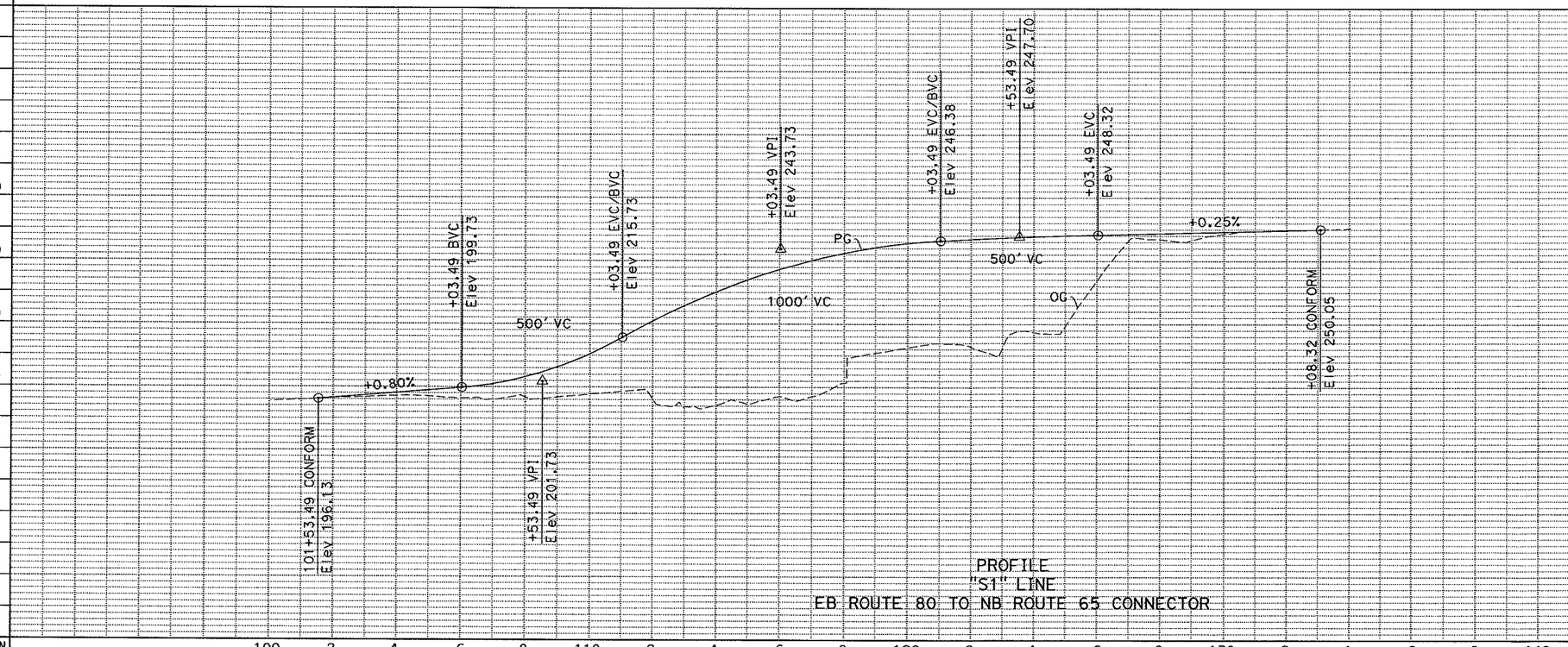
PROFESSIONAL ENGINEER — Exp. — CIVIL — STATE OF CALIFORNIA



SUPERELEVATION
"S1" LINE
EB ROUTE 80 TO NB ROUTE 65 CONNECTOR



PROFILE
"S1" LINE
EB ROUTE 80 TO NB ROUTE 65 CONNECTOR

ALTERNATIVE 2
PROFILE AND SUPERELEVATION
SCALE: 1" = 10' Vert
1" = 200' Horiz

PS-1

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FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

STATION | CY Exc | Emb | TOTAL

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:46

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA EXP.

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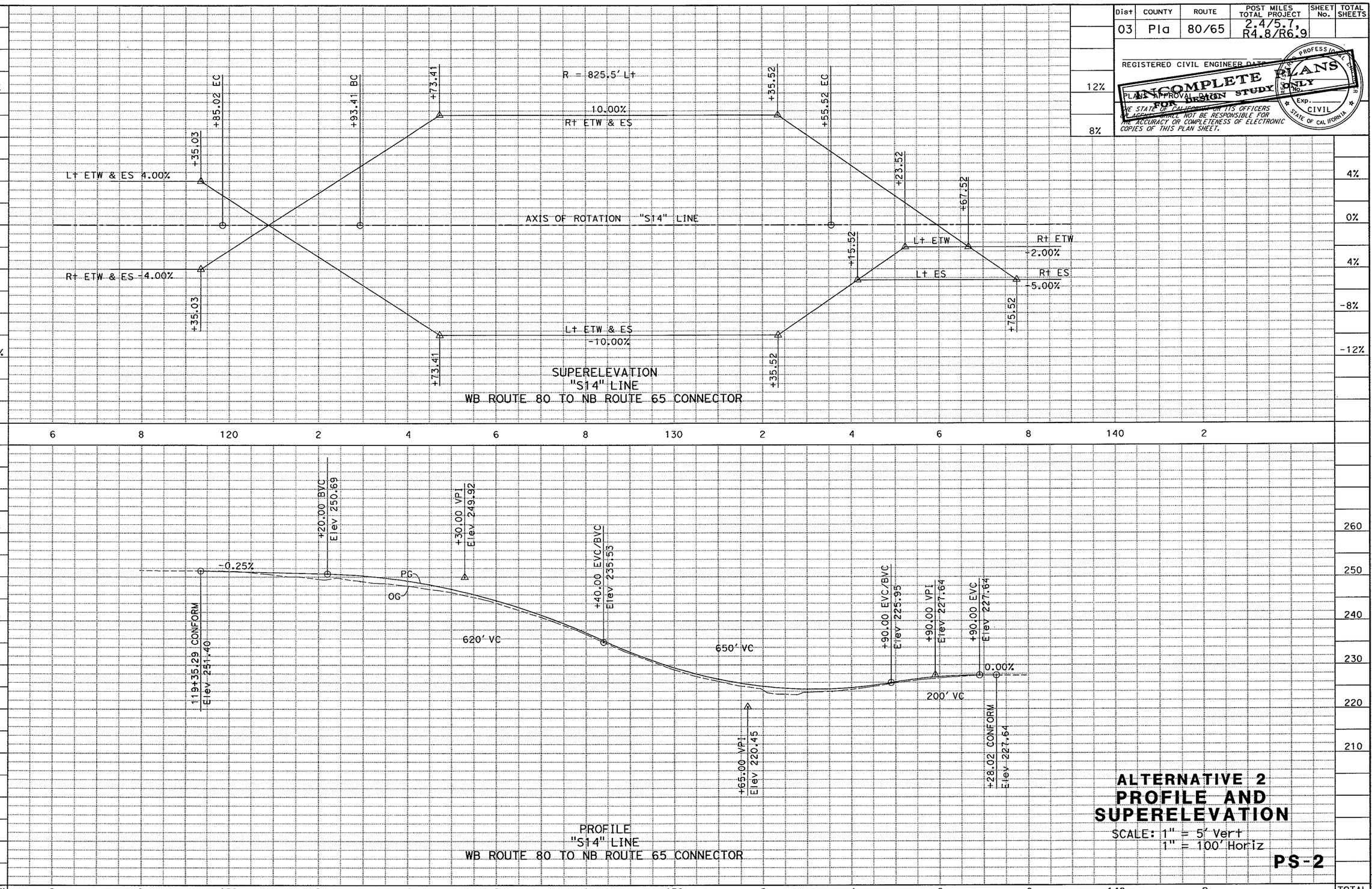

ALTERNATIVE 2
PROFILE AND SUPERELEVATION
SCALE: 1" = 5' Vert
1" = 100' Horiz

PS-2

STATION 6 8 120 2 4 6 8 130 2 4 6 8 140 2 TOTAL

CY Exc

Emb

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
FUNCTIONAL SUPERVISOR: CHAD BAKER
ADVANCE PLANNING
CALCULATED-DESIGNED BY
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INCOMPLETE PLANS ONLY FOR DESIGN STUDY

PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

R = 3000' L+

R = 925' L+

+62.03 CONFORM

+62.14 BC

+29.53 EC

+78.97 BC

+50 CORE

+50

+00

+72.15 CONFORM

+78.73 EC

+10%

+5%

0%

-5%

-10%

R+ ES

AXIS OF ROTATION "S2" LINE R+ ETW

+62.14

+88.97

L+ ETW & ES

+34

+04

SUPERELEVATION
"S2" LINE
SB ROUTE 65 TO WB ROUTE 80 CONNECTOR

+72.15 BB CONFORM

108+62.03 CONFORM
Elev 201.51

+00.00 VPI
Elev 204.60

+00.00 BVC
Elev 207.98

+50.00 VPI
Elev 210.10

+00.00 EVC
Elev 222.18

+00.00 BVC
Elev 227.01

+00.00 VPI
Elev 241.50

+00.00 EVC
Elev 244.40

+34.12 BVC
Elev 244.72

+34.12 VPI (E)
Elev 245.69

+34.12 EVC (E)
Elev 246.10

+0.9 %

+0.8 %

+4.8 %

+0.8 %

500' VC

600' VC

PG

OG

PROFILE
"S2" LINE
SB ROUTE 65 TO WB ROUTE 80 CONNECTOR

ALTERNATIVE 2

PROFILE AND SUPERELEVATION

SCALE: 1" = 10' Vert
1" = 100' Horiz

PS-3

STATION: 8 9 110 1 2 3 4 115 6 7 8 9 120 1 2 3 4 125 6 7 8 9 130 1 2 TOTAL

CY Exc

CY Emb

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FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ADVANCE PLANNING

LAST REVISION 03-04-08

DATE PLOTTED => 18-JUN-2009
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BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA EXP.

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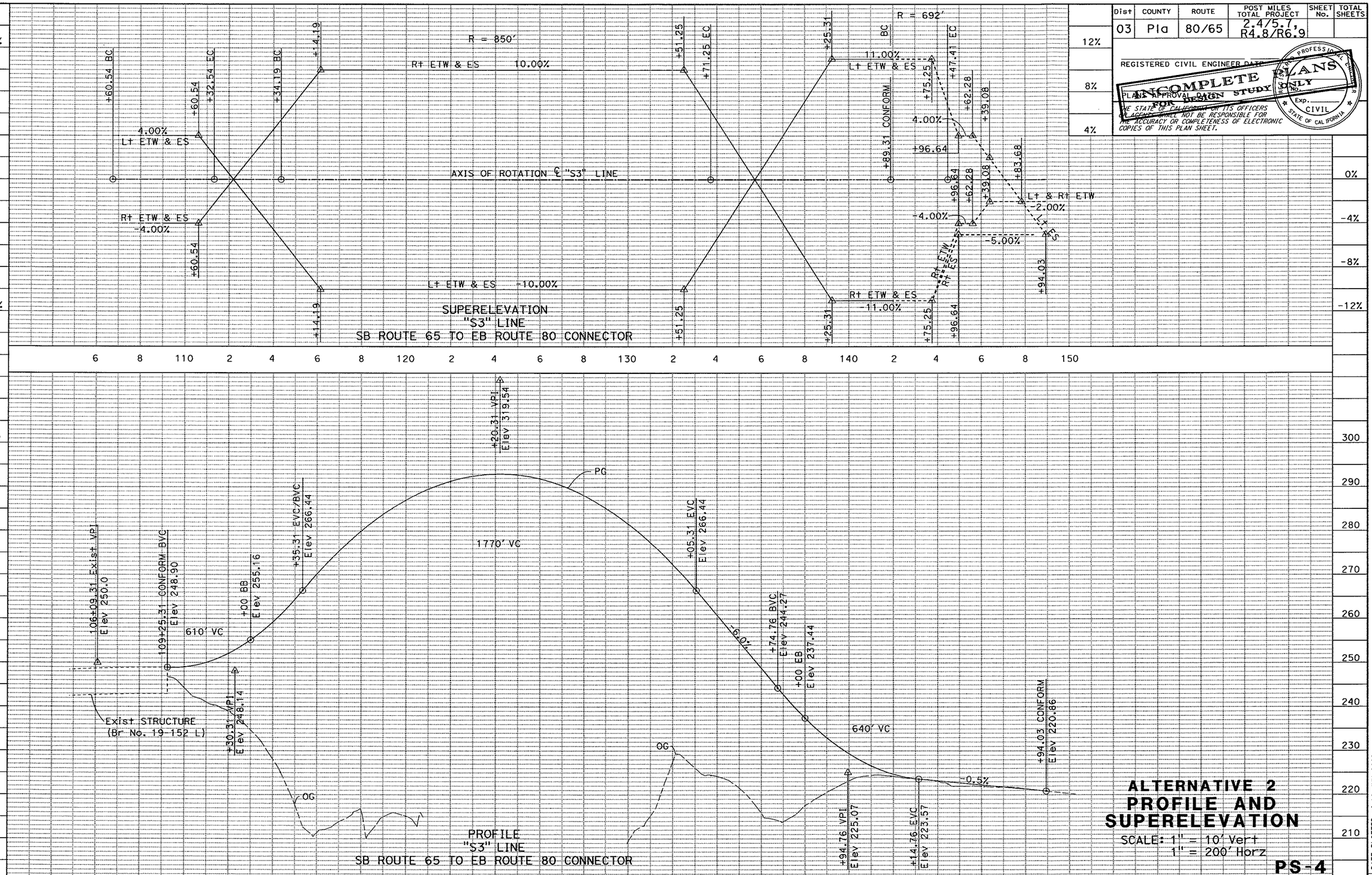

ALTERNATIVE 2
PROFILE AND SUPERELEVATION
SCALE: 1" = 10' Vert
1" = 200' Horz

PS-4

DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:46
LAST REVISION 03-04-08

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING
FUNCTIONAL SUPERVISOR CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

STATION
CY Exc
Emb
TOTAL

BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE 0 1 2 3
USERNAME => s117031
CU 03216
EA 4e320k

ALTERNATIVE 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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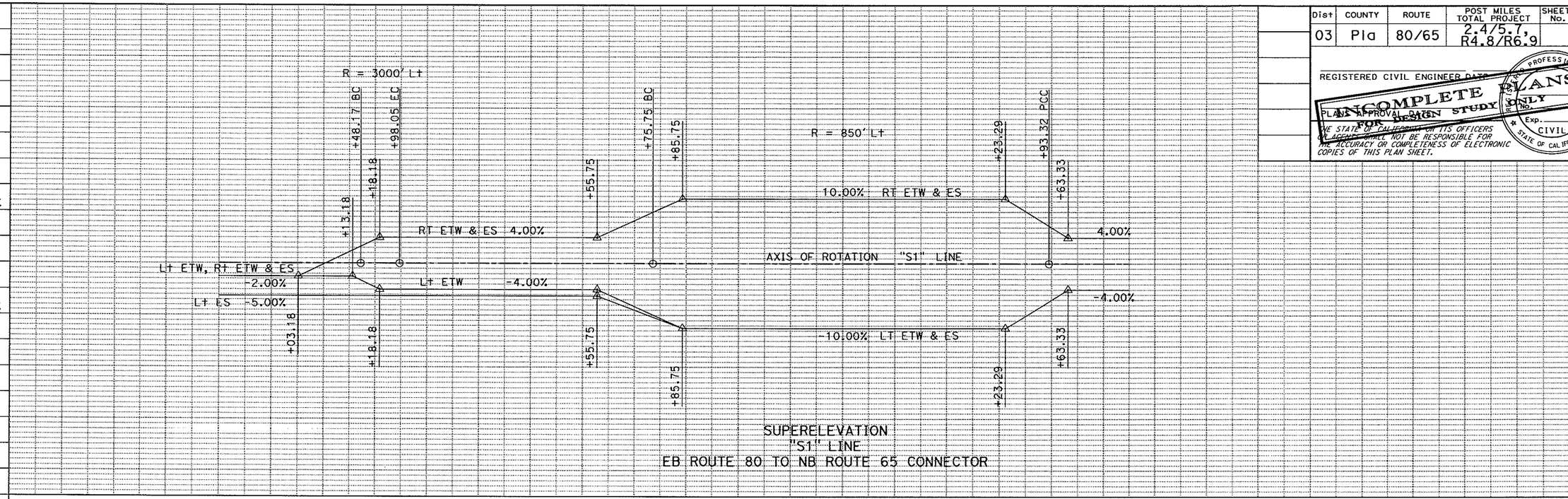
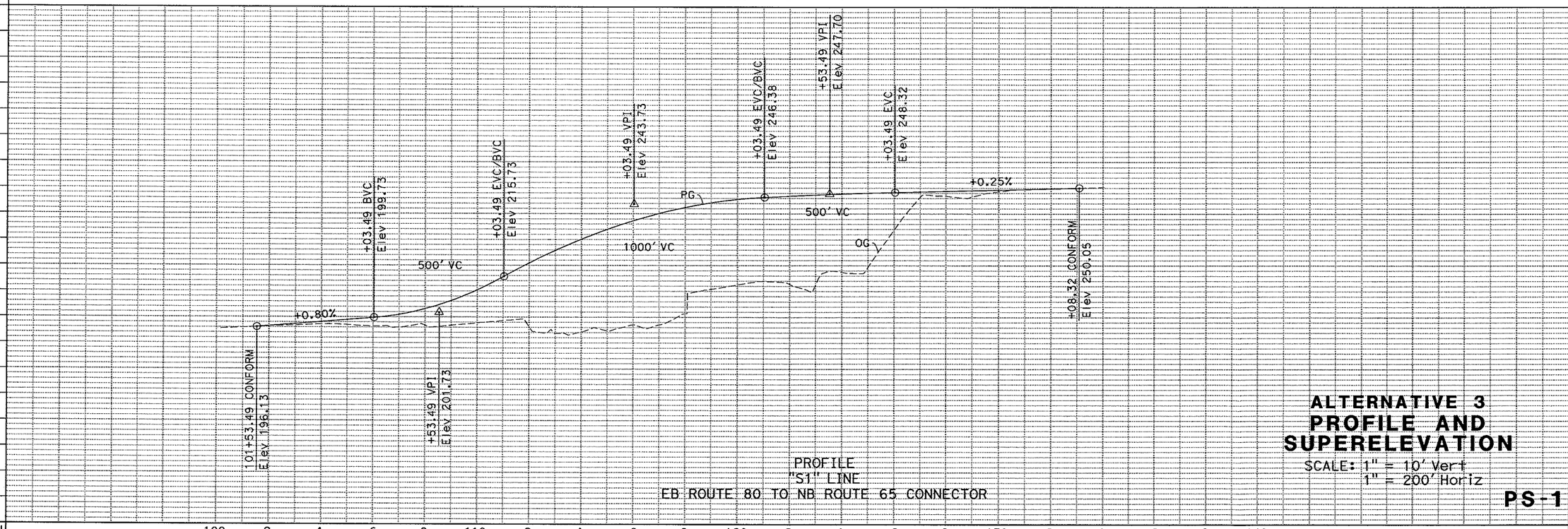


SUPERELEVATION
"S1" LINE
EB ROUTE 80 TO NB ROUTE 65 CONNECTOR



PROFILE
"S1" LINE
EB ROUTE 80 TO NB ROUTE 65 CONNECTOR

ALTERNATIVE 3
PROFILE AND SUPERELEVATION

SCALE: 1" = 10' Vert
1" = 200' Horiz

PS-1

STATION 100 2 4 6 8 110 2 4 6 8 120 2 4 6 8 130 2 4 6 8 140 TOTAL

CY Exc

Emb

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

FUNCTIONAL SUPERVISOR: CHAD BAKER

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CHECKED BY

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DATE REVISED

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BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE 0 1 2 3

USERNAME => s117031

CU 03216

EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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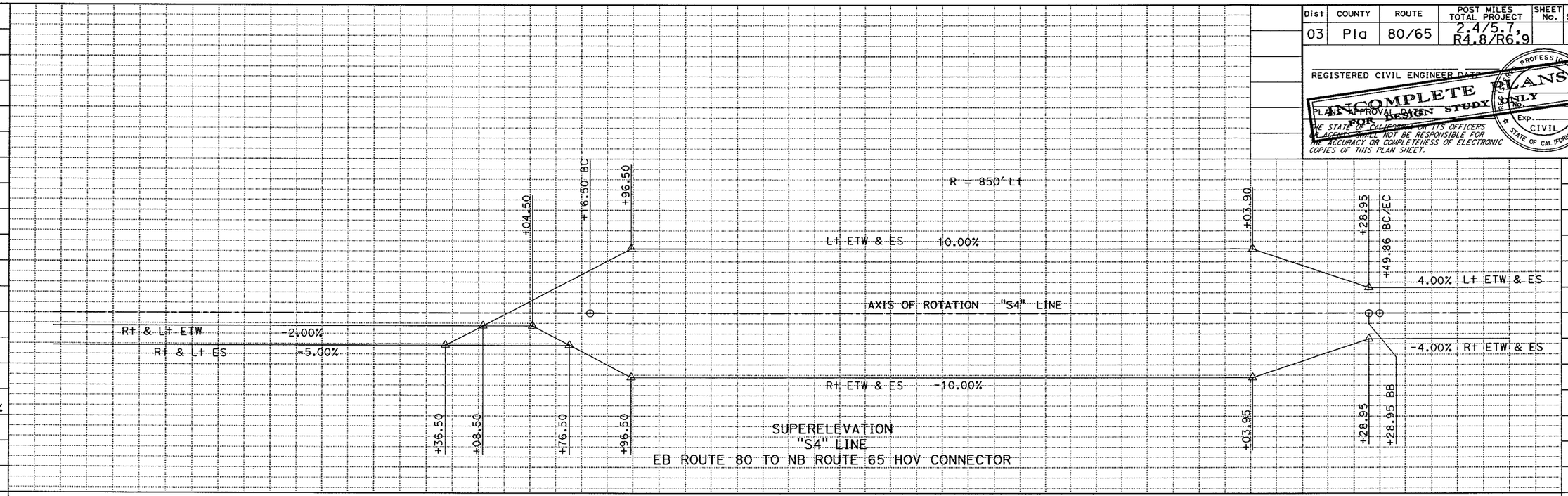

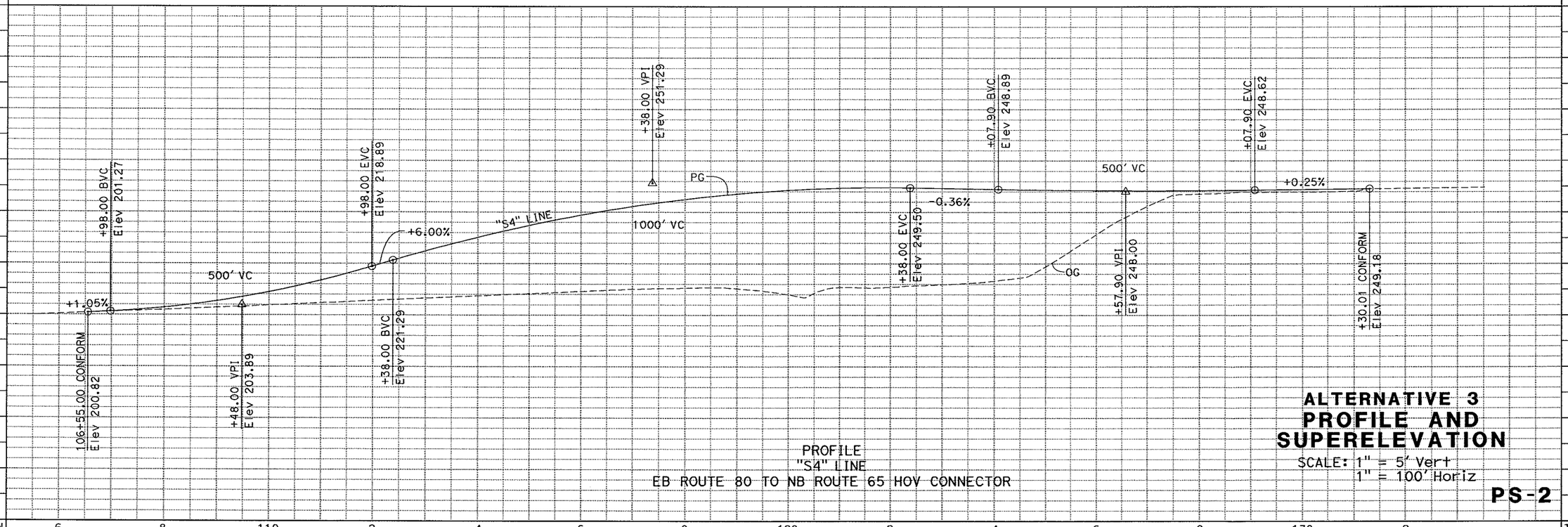

ALTERNATIVE 3
PROFILE AND SUPERELEVATION
SCALE: 1" = 5' Vert
1" = 100' Horiz

PS-2

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

STATION | CY Exc | CY Emb | TOTAL

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:47

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

REGISTERED CIVIL ENGINEER DATE

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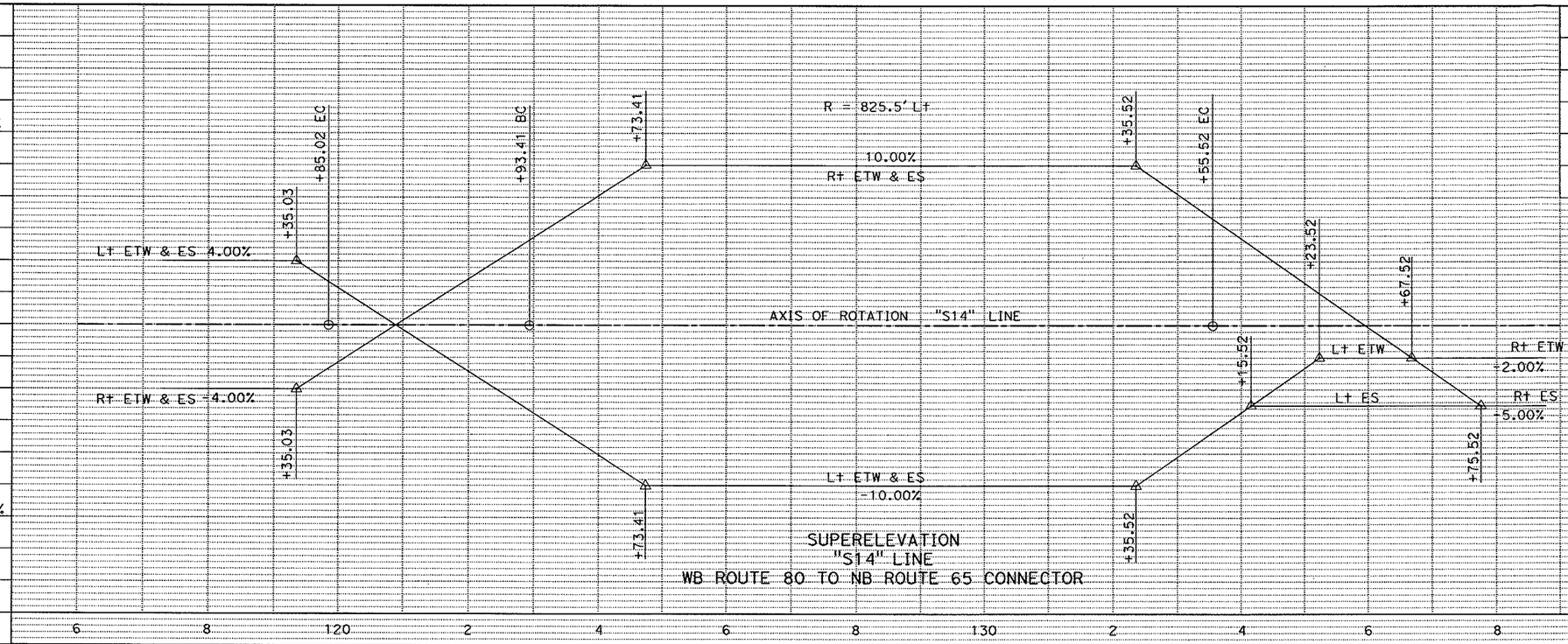
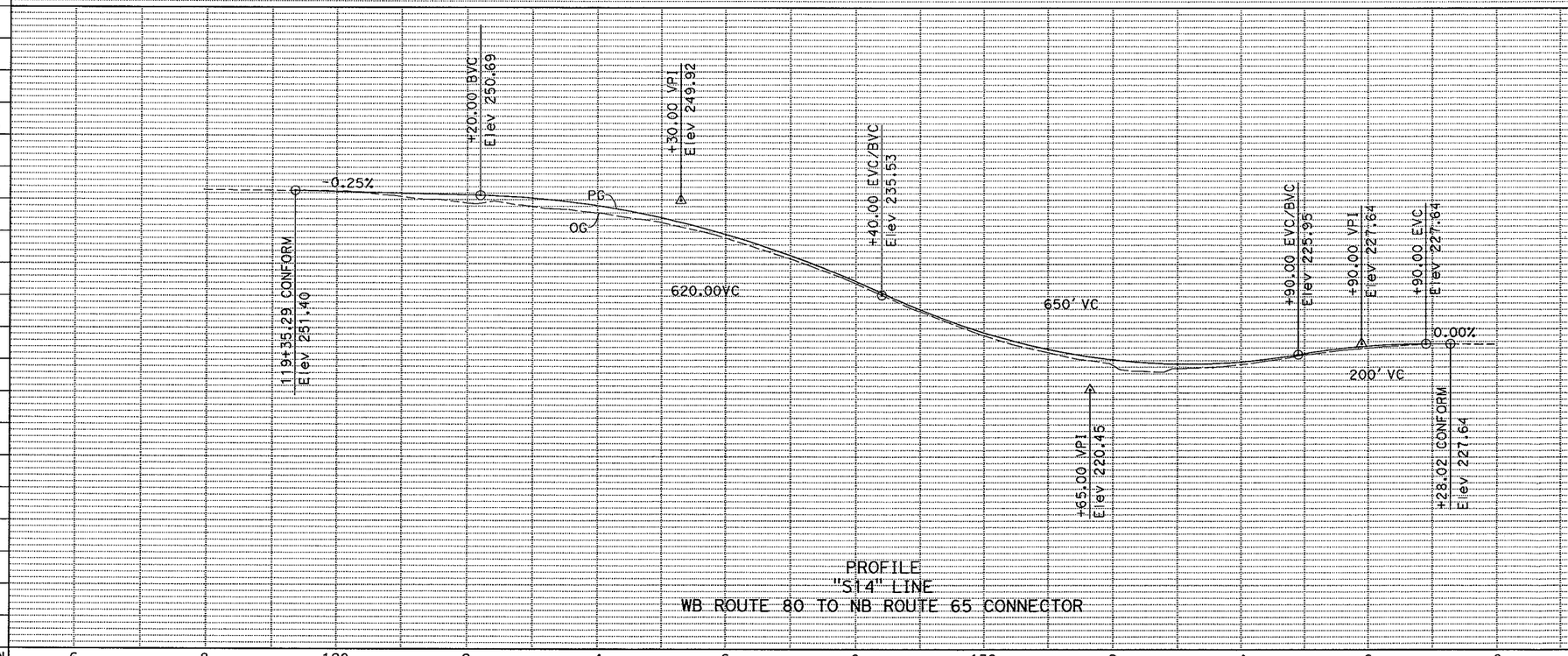
REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA



SUPERELEVATION
"S14" LINE
WB ROUTE 80 TO NB ROUTE 65 CONNECTOR



PROFILE
"S14" LINE
WB ROUTE 80 TO NB ROUTE 65 CONNECTOR

ALTERNATIVE 3
PROFILE AND SUPERELEVATION
SCALE: 1" = 5' Vert
1" = 100' Horiz

PS-3

STATION	6	8	120	2	4	6	8	130	2	4	6	8	140	2	TOTAL
CY Exc															
CY Emb															

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ADVANCE PLANNING

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03	Pla	80/65	2.4/5.7, R4.8/R6.9		

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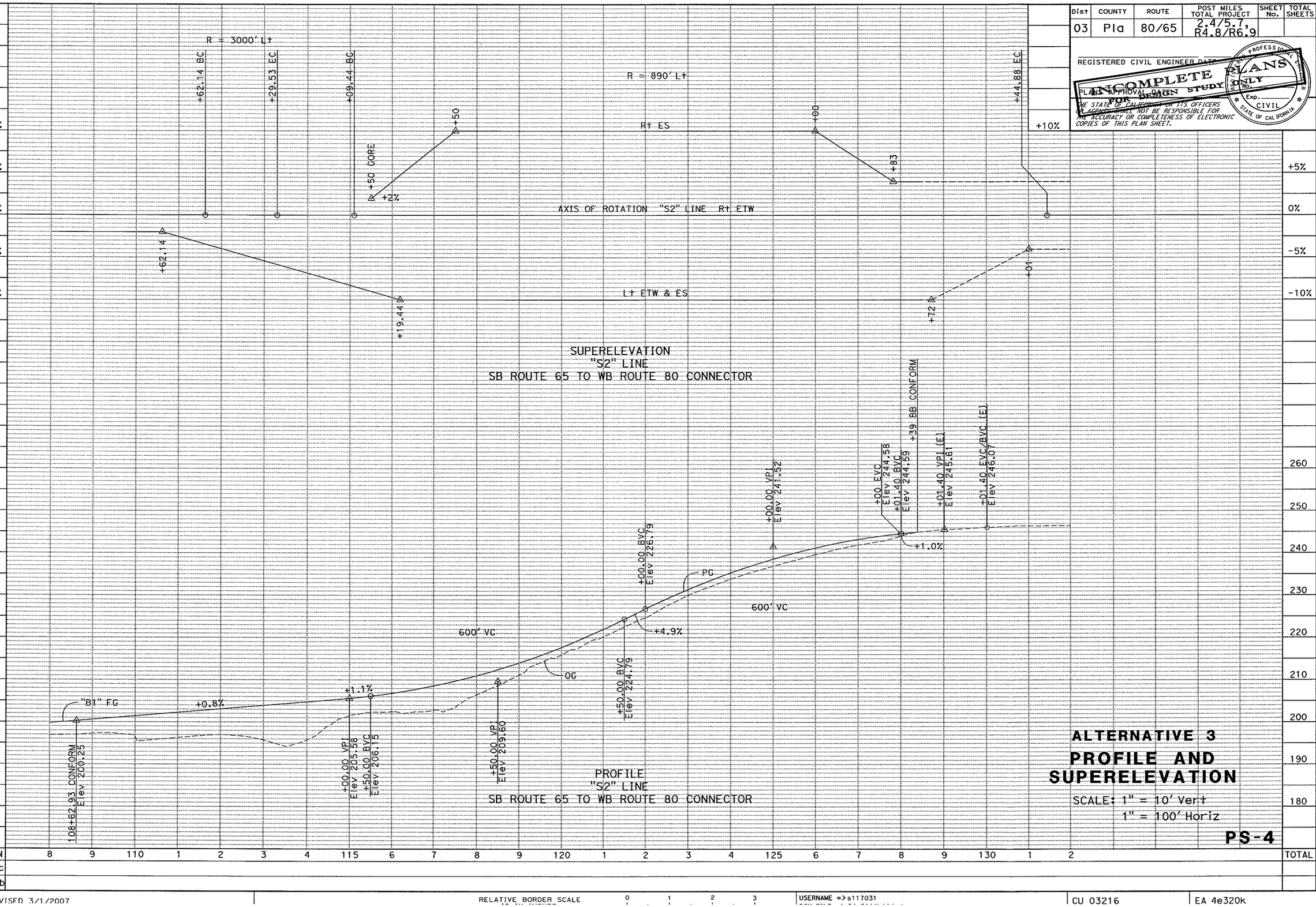
INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PROFESSIONAL ENGINEER — EXP. — CIVIL — STATE OF CALIFORNIA



ALTERNATIVE 3

PROFILE AND SUPERELEVATION

SCALE: 1" = 10' Vert
1" = 100' Horiz

PS-4

REVISED BY | DATE REVISED

CALCULATED-
DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ADVANCE PLANNING

LAST REVISION 03-04-08
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:47

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

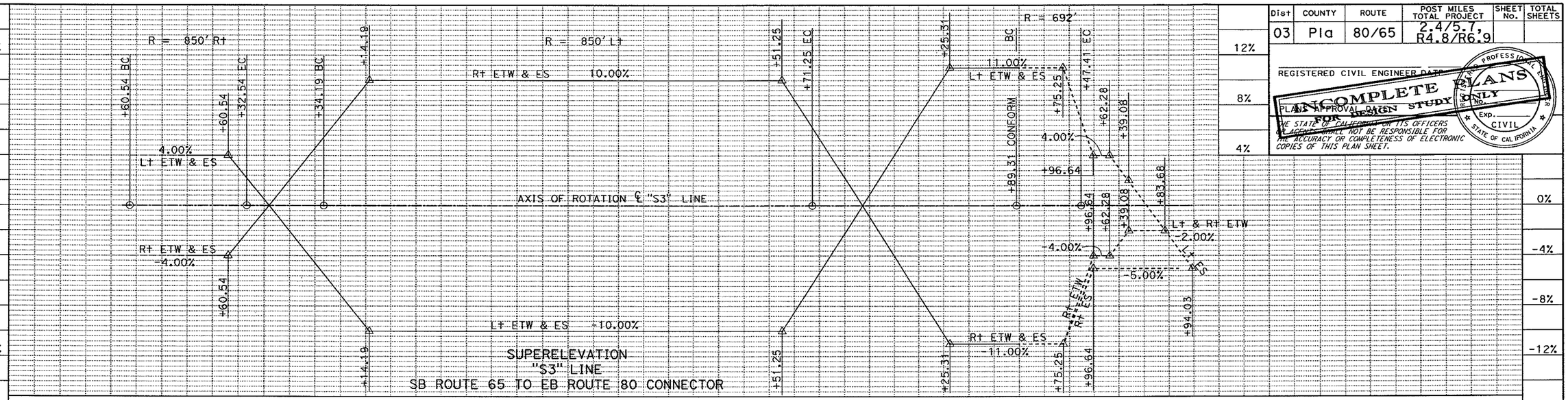
REGISTERED CIVIL ENGINEER DATE

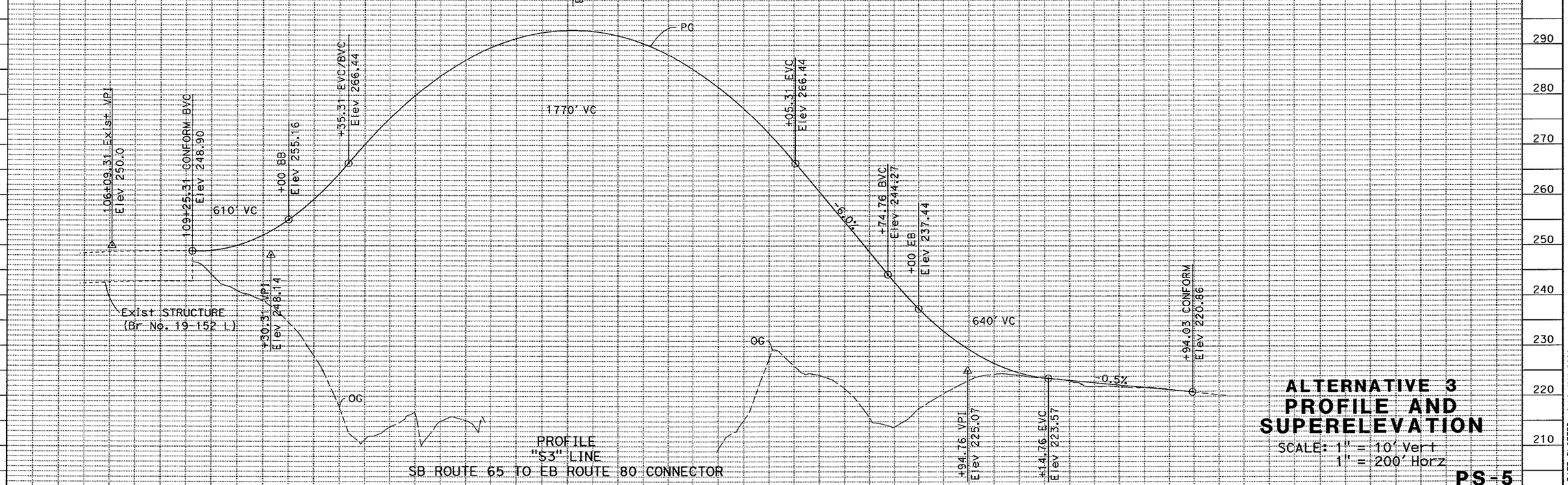
PLANS APPROVAL DATE

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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





ALTERNATIVE 3
PROFILE AND SUPERELEVATION
SCALE: 1" = 10' Vert
1" = 200' Horz

PS-5

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: CHAD BAKER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ADVANCE PLANNING

STATION | CY Exc | CY Emb | TOTAL

LAST REVISION 03-04-08 | DATE PLOTTED => 18-JUN-2009 | TIME PLOTTED => 11:47

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE 0 1 2 3 | USERNAME => s117031 | CU 03216 | EA 4e320k

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Pla	80/65	2.4/5.7, R4.8/R6.9		

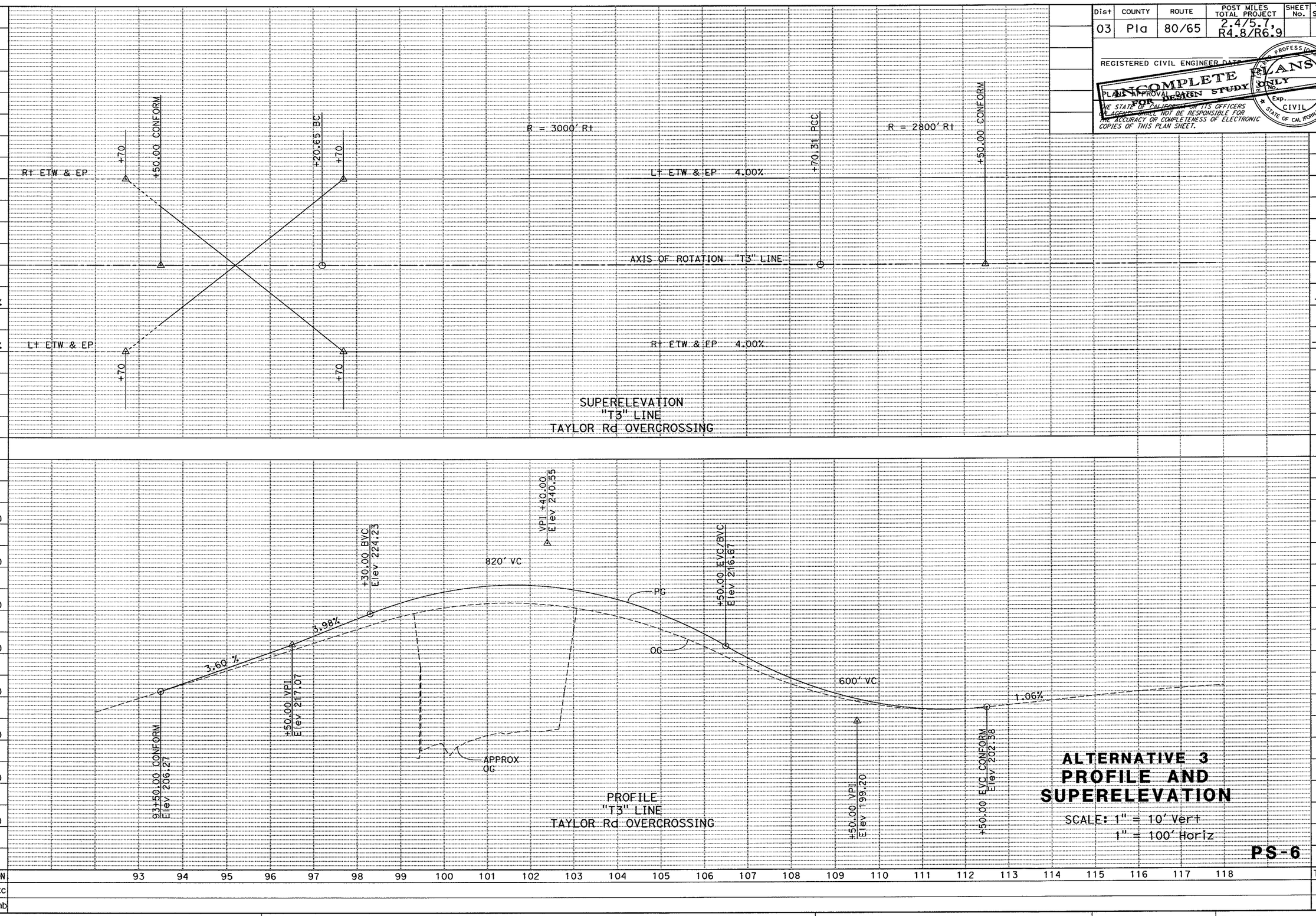
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

INCOMPLETE PLANS FOR DESIGN STUDY ONLY

PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA



ALTERNATIVE 3
PROFILE AND SUPERELEVATION

SCALE: 1" = 10' Vert
1" = 100' Horiz

PS-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ADVANCE PLANNING
FUNCTIONAL SUPERVISOR: CHAD BAKER
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED

LAST REVISION 03-04-08
DATE PLOTTED => 18-JUN-2009
TIME PLOTTED => 11:47

BORDER LAST REVISED 3/1/2007
RELATIVE BORDER SCALE 0 1 2 3
USERNAME => s117031
CU 03216
EA 4e320k

ATTACHMENT 5

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: CHAD BAKER
Office of Advance Planning
District 3

Date: May 28., 2009

File: 03-Pla-80/65-PM2.4/5.7,R4.8/6.9
03-4E320K

From: JOE DOWNING, Chief FOR JED
Design Branch 3
OFFICE OF BRIDGE DESIGN NORTH
DIVISION OF ENGINEERING SERVICES

Subject: Advance Planning Study for the 80/65 Interchange Project

Attached is copy of Advance Planning Study for the above referenced project as submitted to the Division of Engineering Services from District 3 Advance Planning.

The following are the cost estimates for the structures on the 80/65 Interchange Project.

Structure Name	Bridge Number	Scope of Work	Estimated Cost
S1 Connector	N/A	New Structure	$22,801,000
S3 Connector	N/A	New Structure	$21,876,000
S4 Connector	N/A	New Structure	$14,574,000
East Roseville Viaduct (Alt1&3)	19-0152L/R	Widening	$41,205,000
East Roseville Viaduct (Alt 2)	19-0152L/R	Widening	$33,969,000
Taylor Road OC	19-0093	Replacement	$ 6,702,000

The estimated construction cost includes 10% mobilization and 25% contingencies.

If you have any questions regarding this study, please contact Lewis Shen, Senior Project Engineer at 916-227-8234.

Attachment

c: KHolden, Acting Bridge Design North Office Chief, MS9-4/11G
SWiman, Technical Liaison Engineer, MS9
JRutenberg, PCE, MS9-5/12F
EKaslan, Structure Maintenance, MS9-1/9I
DSpeer, Structure Construction
RBibbens, Geotechnical Services, MS5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov

BVC Sta 106+03.49
Elev 199.73
+0.80%
VC = 500.00
RC = +0.960%/ Station

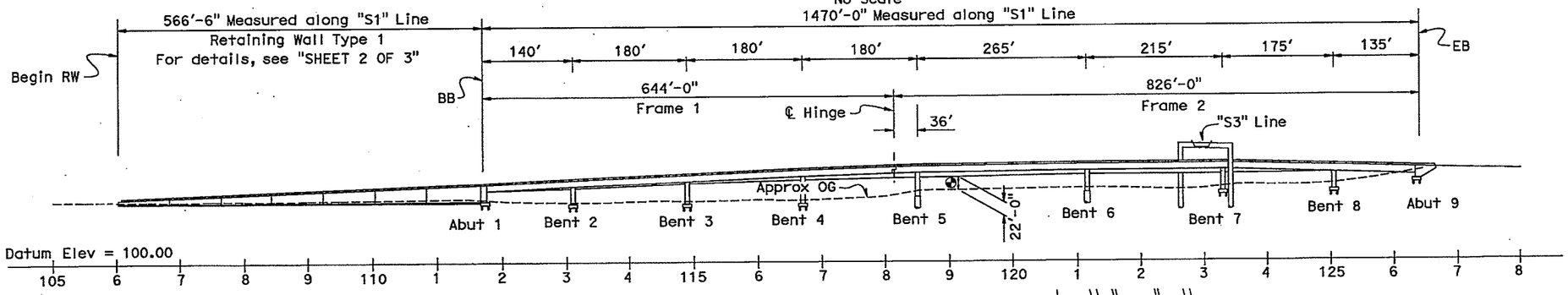
EVC/BVC Sta 111+03.49
Elev 215.73
VC = 1000.00
RC = -0.507%/ Station

EVC/BVC Sta 121+03.49
Elev 246.38
VC = 500.00
RC = -0.506%/ Station

BVC Sta 126+03.49
Elev 248.32
+0.25%

PROFILE GRADE

No Scale



DEVELOPED ELEVATION

1" = 200'

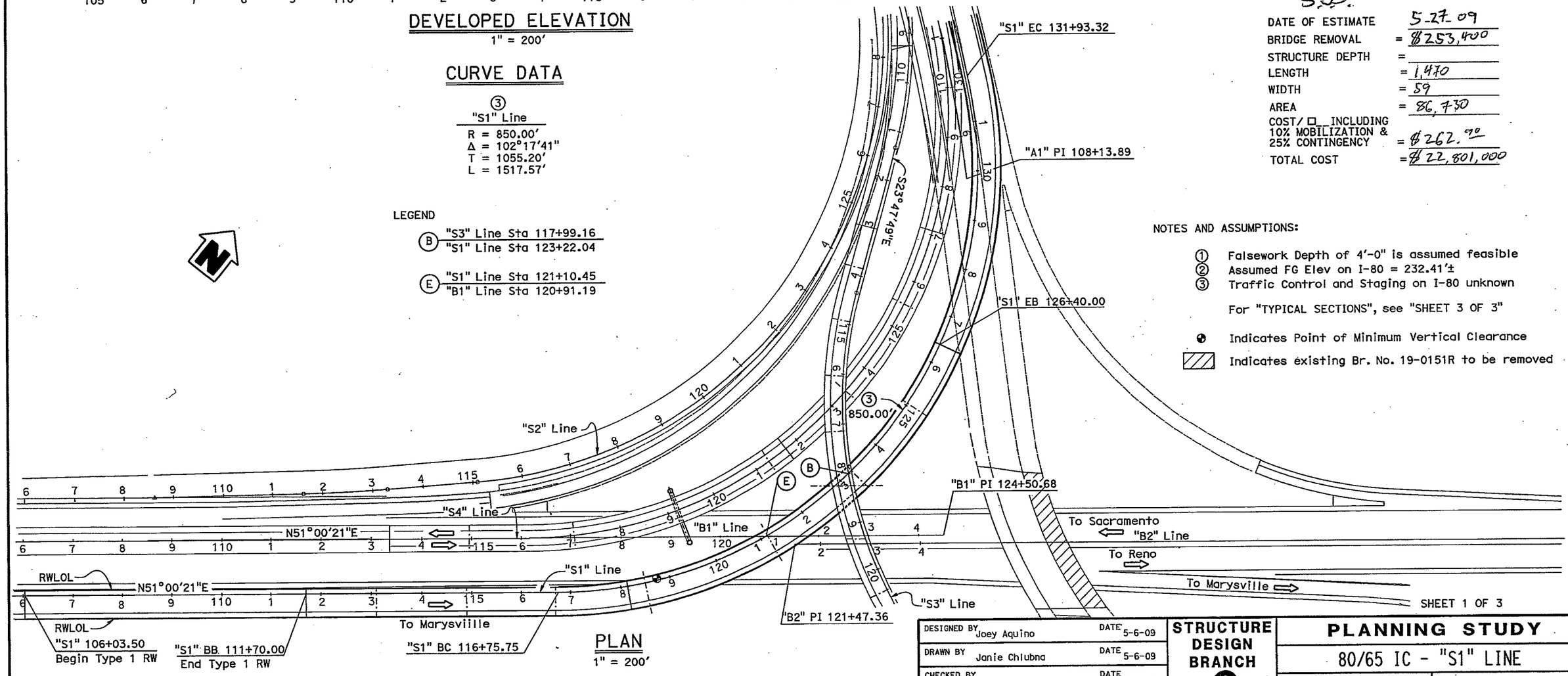
CURVE DATA

③
"S1" Line
R = 850.00'
Δ = 102°17'41"
T = 1055.20'
L = 1517.57'

LEGEND

Ⓑ "S3" Line Sta 117+99.16
"S1" Line Sta 123+22.04

Ⓔ "S1" Line Sta 121+10.45
"B1" Line Sta 120+91.19



PLAN

1" = 200'

S.J.S.

DATE OF ESTIMATE	5-27-09
BRIDGE REMOVAL	= $253,400
STRUCTURE DEPTH	=
LENGTH	= 1,470
WIDTH	= 59
AREA	= 86,730
COST/ □ INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $262.90
TOTAL COST	= $22,801,000

NOTES AND ASSUMPTIONS:

① Falsework Depth of 4'-0" is assumed feasible
② Assumed FG Elev on I-80 = 232.41'±
③ Traffic Control and Staging on I-80 unknown

For "TYPICAL SECTIONS", see "SHEET 3 OF 3"

Indicates Point of Minimum Vertical Clearance

Indicates existing Br. No. 19-0151R to be removed

DESIGNED BY Joey Aquino	DATE 5-6-09	STRUCTURE DESIGN BRANCH 3
DRAWN BY Janie Chlubna	DATE 5-6-09	
CHECKED BY Lewis L Shen	DATE 5-6-09	
APPROVED Joseph Downing	DATE 5-6-09	

PLANNING STUDY

80/65 IC - "S1" LINE

BRIDGE NO.	CU 03
SCALE: As Shown	EA 4E320K

SHEET 1 OF 3

FILE => s1-aps-01.dgn

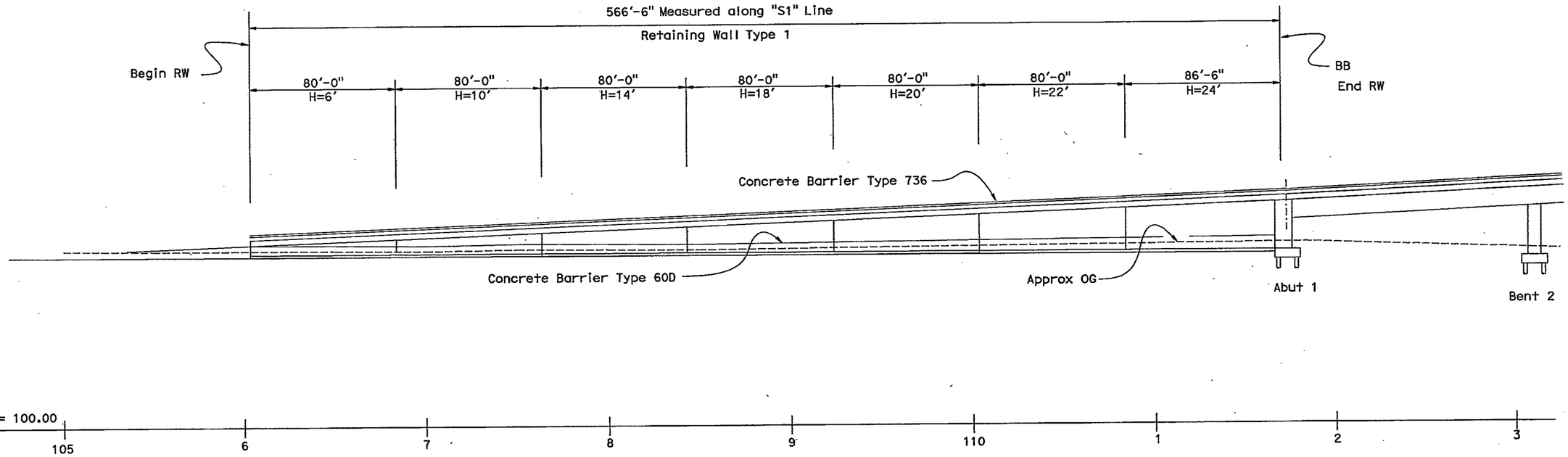
STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

USERNAME => s136693 DATE PLOTTED => 27-MAY-2009 TIME PLOTTED => 14:40

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov



Sta 106+03.50 THRU Sta 111+70.00

ELEVATION

1" = 60'

NOTE:

For "PLAN" view, see "SHEET 1 OF 3"

SHEET 2 OF 3

DESIGNED BY Joey Aquino	DATE 5-6-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chiubna	DATE 5-6-09		80/65 IC - "S1" LINE
CHECKED BY Lewis L Shen	DATE 5-6-09		BRIDGE NO. CU 03
APPROVED Joseph Downing	DATE 5-6-09		SCALE: As Shown EA 4E320K

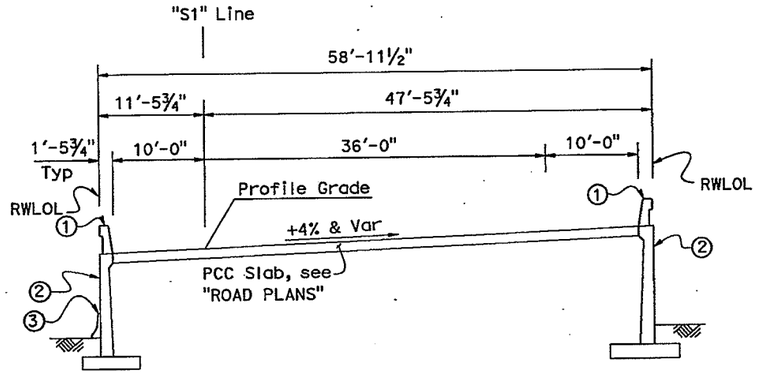
FILE => s1-aps-02.dgn

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

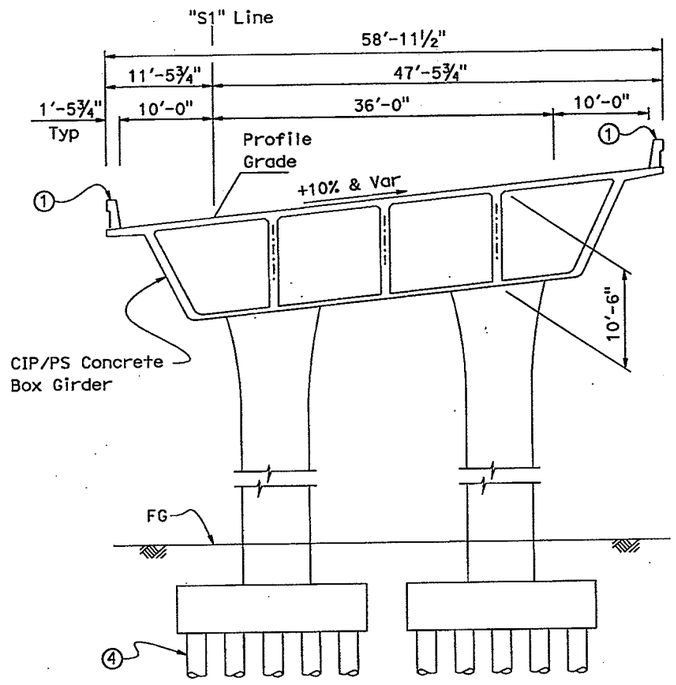
USERNAME => jchiubna DATE PLOTTED => 06-MAY-2009 TIME PLOTTED1@x12

DIST.	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

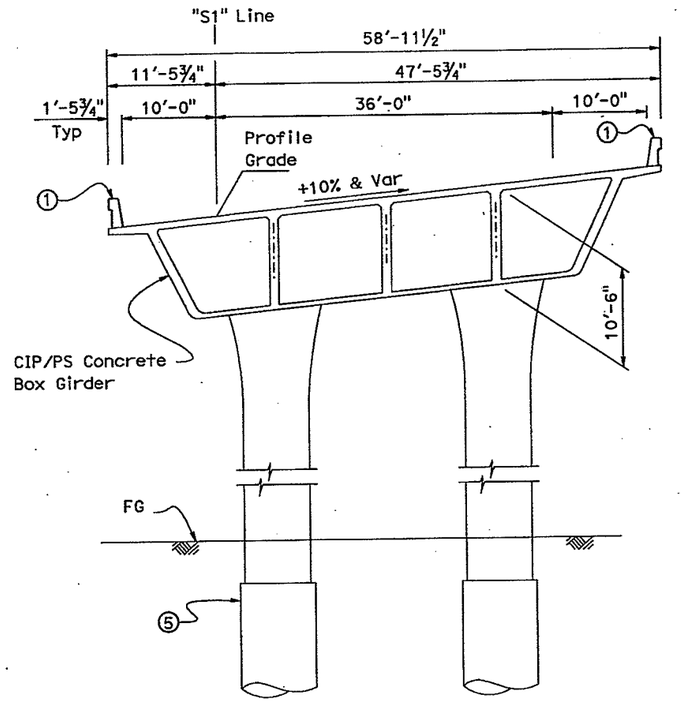
To get to the Caltrans web site, go to: http://www.dot.ca.gov



RETAINING WALL TYPE 1
Sta 106+03.50 THRU Sta 111+70.00
TYPICAL SECTION
⅛" = 1'-0"



BENTS 2, 3, 4, 7 & 8



BENTS 5 & 6

Sta 111+70.00 THRU Sta 126+40.00
TYPICAL SECTION
⅛" = 1'-0"

NOTES AND ASSUMPTIONS:

① Concrete Barrier Type 736
② Retaining Wall Type 1 (Assume no piles req'd)
③ Concrete Barrier Type 60D
④ Assume Pile Cap Foundations with 24" ø CIDH Piles
⑤ Assume 8' ø CIDH Foundations at Bent 5 & 6

SHEET 3 OF 3

DESIGNED BY Joey Aquino	DATE 5-6-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chiubna	DATE 5-6-09		80/65 IC - "S1" LINE
CHECKED BY Lewis L Shen	DATE 5-6-09		BRIDGE NO. CU 03
APPROVED Joseph Downing	DATE 5-6-09		SCALE: As Shown EA 4E320K

FILE => s1-aps-03.dgn

USERNAME => jchiubna DATE PLOTTED => 20-MAY-2009 TIME PLOTTED => 14:32

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

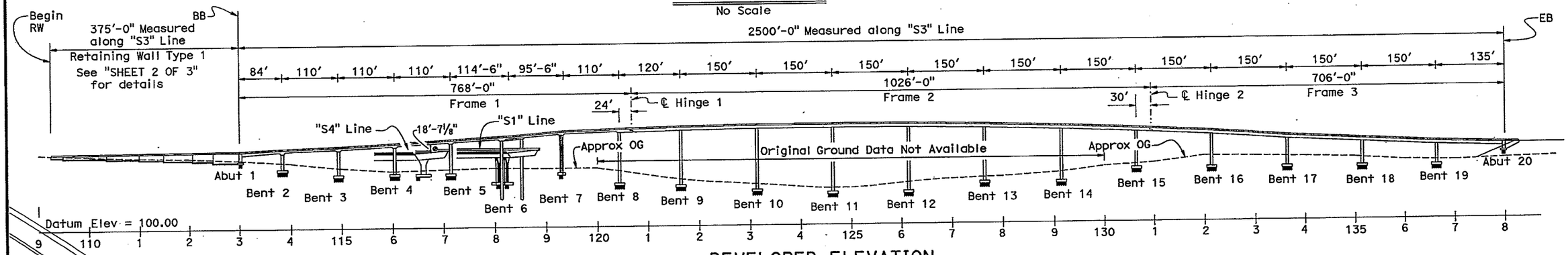
DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov

BVC Sta 109+25.31
Elev 248.90
-0.25%
VC = 610.00
RC = +0.0102%/ Station
EVC/BVC Sta 115+35.31
Elev 266.44
VC = 1770.00
RC = -0.678%/ Station
EVC Sta 133+05.31
Elev 266.44
BVC Sta 136+74.76
Elev 244.27
-6.00%
VC = 640.00
RC = -1.016%/ Station
EVC Sta 143+14.76
Elev 223.57
+0.500%

PROFILE GRADE

No Scale

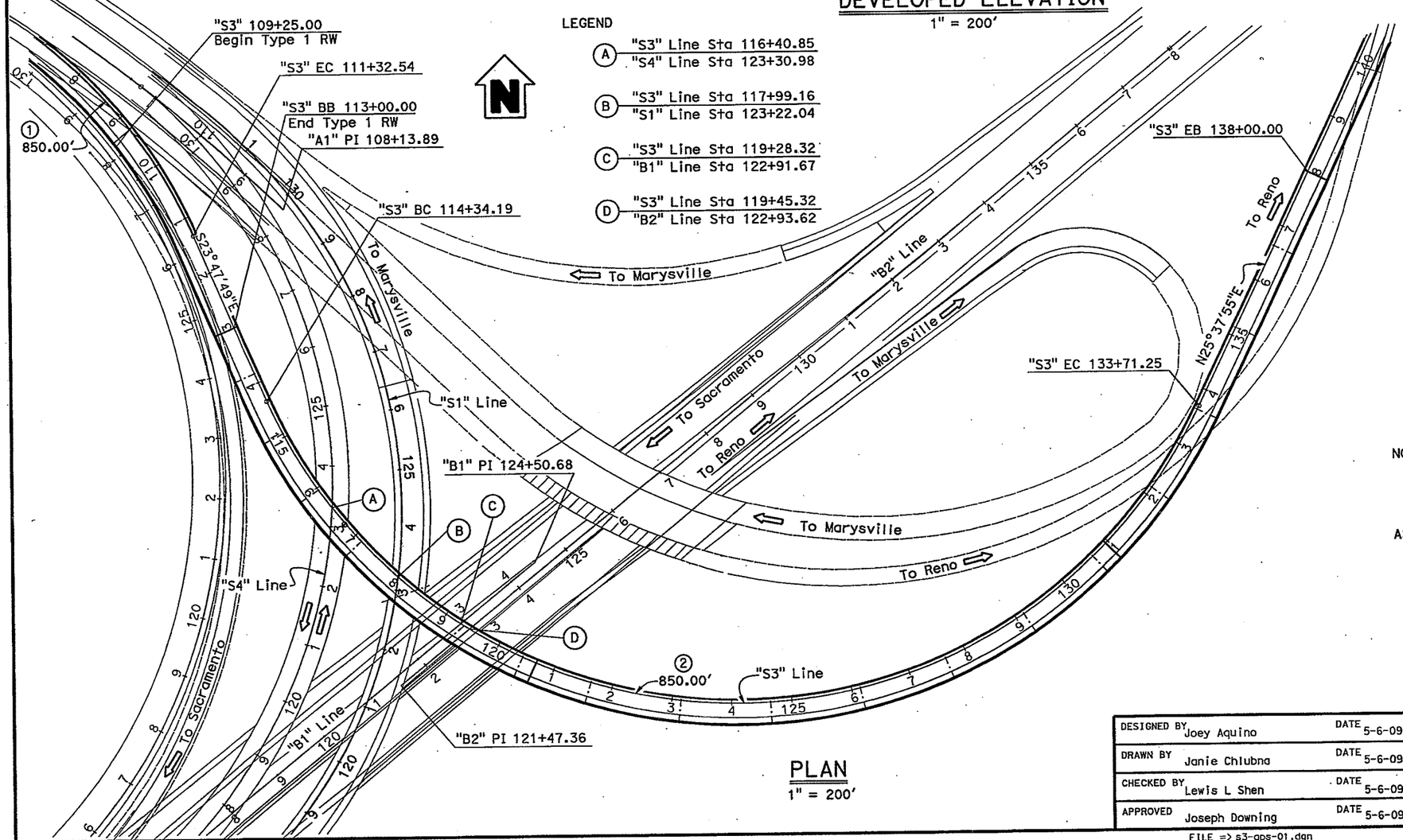


DEVELOPED ELEVATION

1" = 200'

LEGEND

- (A) "S3" Line Sta 116+40.85 / "S4" Line Sta 123+30.98
- (B) "S3" Line Sta 117+99.16 / "S1" Line Sta 123+22.04
- (C) "S3" Line Sta 119+28.32 / "B1" Line Sta 122+91.67
- (D) "S3" Line Sta 119+45.32 / "B2" Line Sta 122+93.62



PLAN

1" = 200'

CURVE DATA

① "S3" Line	② "S3" Line
R = 850.00'	R = 850.00'
Δ = 33°00'21"	Δ = 130°34'16"
T = 251.83'	T = 1846.81'
L = 489.65'	L = 1937.06'

S.J.S.

DATE OF ESTIMATE	5-27-09
BRIDGE REMOVAL	= $186,400
STRUCTURE DEPTH	=
LENGTH	= 2,500
WIDTH	= 42
AREA	= 105,000
COST/ □ INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $208.34
TOTAL COST	= $21,876,000

NOTE: For "TYPICAL SECTIONS", see "SHEET 3 OF 3"

⊕ Indicates Point of Minimum Vertical Clearance

ASSUMPTIONS:

1. FG Elevations on I-80 Assumed @ 210'-0"±
2. OG Elevations beyond Right-Of-Way not available
3. Traffic control and staging on I-80 unknown

▨ Indicates existing Br. No. 19-0151L to be removed

SHEET 1 OF 3

DESIGNED BY Joey Aquino	DATE 5-6-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chlubna	DATE 5-6-09		80/65 IC -"S3" LINE
CHECKED BY Lewis L Shen	DATE 5-6-09		BRIDGE NO. / CU 03
APPROVED Joseph Downing	DATE 5-6-09		SCALE: As Shown / EA 4E320K

FILE => s3-aps-01.dgn

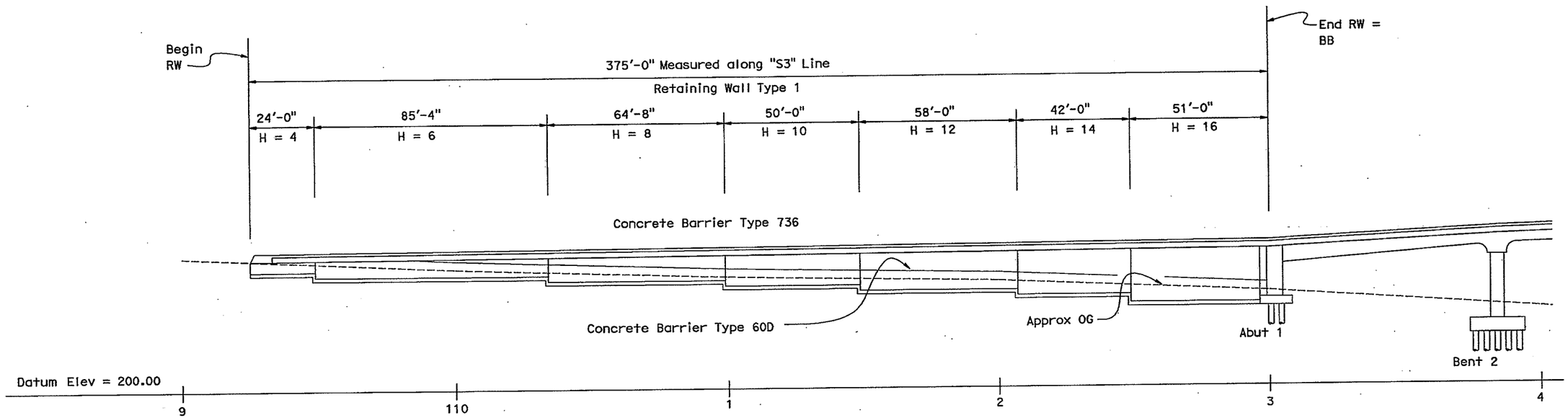
STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

USERNAME => s136693 DATE PLOTTED => 27-MAY-2009 TIME PLOTTED => 14:40

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov



Sta 109+35.00 THRU Sta 113+00.00

ELEVATION

1" = 40'

NOTE:

For "PLAN" view, see "SHEET 1 OF 3"

SHEET 2 OF 3

DESIGNED BY Joey Aquino	DATE 5-6-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chlubna	DATE 5-6-09		80/65 IC -"S3" LINE
CHECKED BY Lewis L Shen	DATE 5-6-09		BRIDGE NO. / CU 03
APPROVED Joseph Downing	DATE 5-6-09		SCALE: As Shown / EA 4E320K

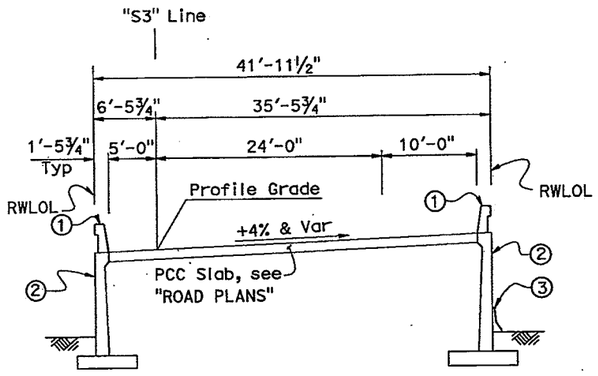
FILE => s3-aps-02.dgn

USERNAME => jchlubna DATE PLOTTED => 06-MAY-2009 TIME PLOTTED => 12:42

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov

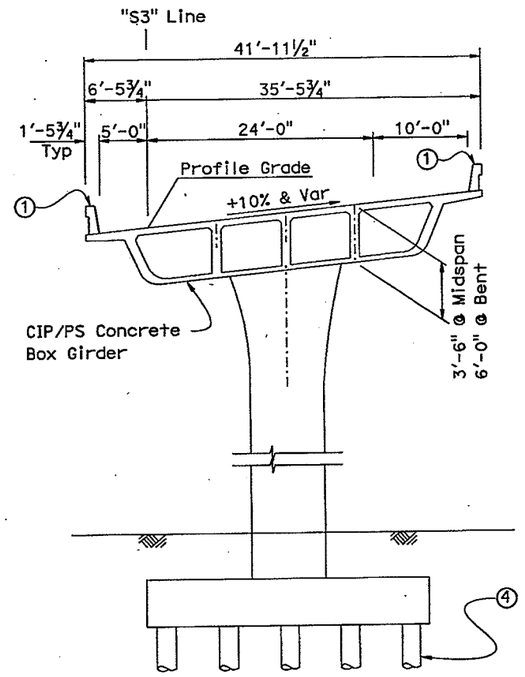


RETAINING WALL TYPE 1

Sta 109+25.00 THRU Sta 113+00.00

TYPICAL SECTION

⅛" = 1'-0"

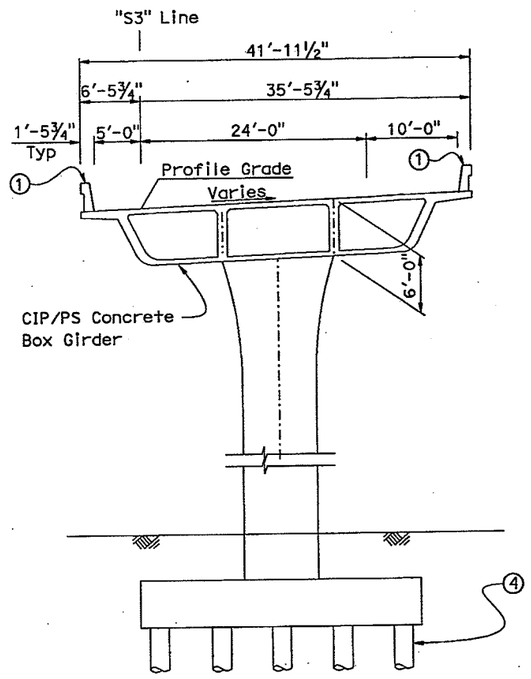


BENTS 2, 3, 4, 5 & 7

Sta 113+00.00 THRU Sta 120+45.00

TYPICAL SECTION

⅛" = 1'-0"

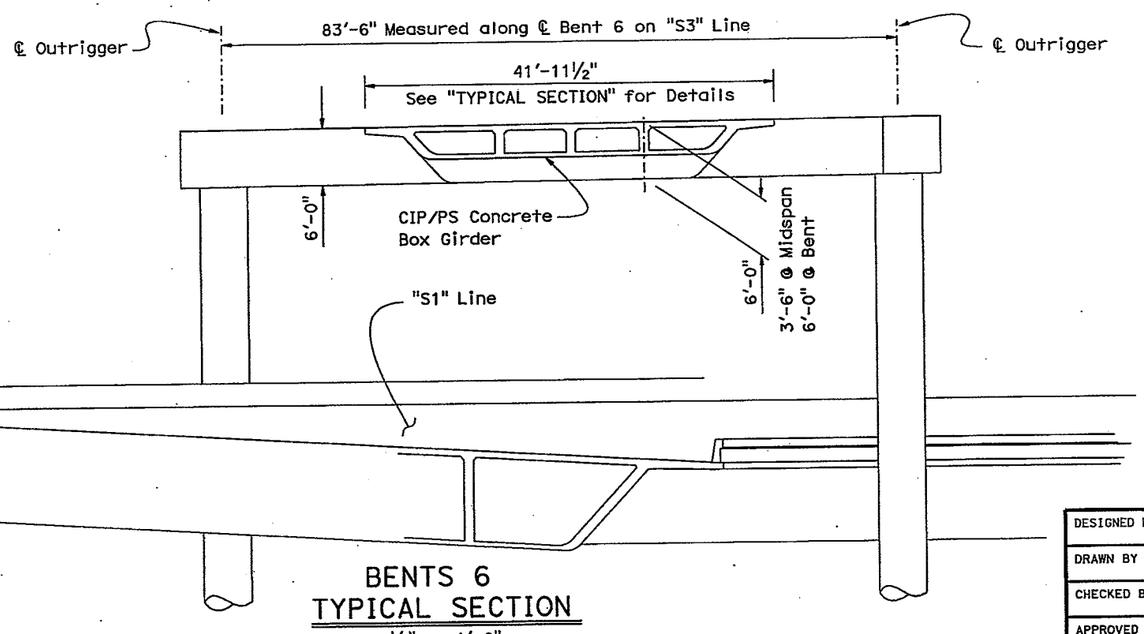


BENTS 8 THRU 19

Sta 120+45.00 THRU Sta 138+00.00

TYPICAL SECTION

⅛" = 1'-0"



BENTS 6

TYPICAL SECTION

⅛" = 1'-0"

NOTES:

① Concrete Barrier Type 736
② Retaining Wall Type 1 (Assumed Spread Footing Foundations)
③ Concrete Barrier Type 60D
④ Assumed 24" ø CIDH Pile Foundation

SHEET 3 OF 3

DESIGNED BY Joey Aquino	DATE 5-6-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chlubna	DATE 5-6-09		80/65 IC -"S3" LINE
CHECKED BY Lewis L Shen	DATE 5-6-09		BRIDGE NO. CU 03
APPROVED Joseph Downing	DATE 5-6-09		SCALE: As Shown EA 4E320K

FILE => s3-aps-03.dgn

USERNAME => jchlubna DATE PLOTTED => 20-MAY-2009 TIME PLOTTED => 14:33

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

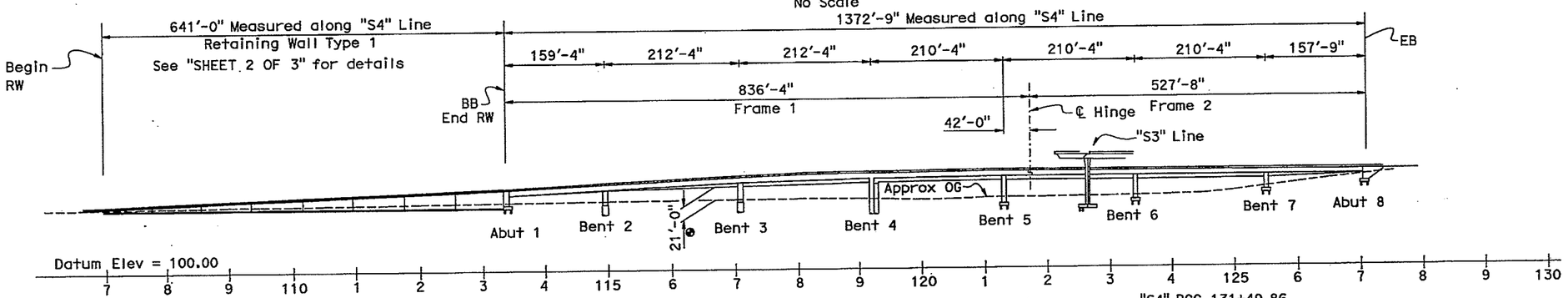
DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov

BVC Sta 106+98.00
Elev 201.27
+1.05%
VC = 500.00
RC = +0.990%/ Station
EVC Sta 111+98.00
Elev 218.89
+6.00%
BVC Sta 112+38.00
Elev 221.29
VC = 1000.00
RC = -0.636%/ Station
EVC Sta 122+38.00
Elev 249.50
-0.36%
BVC Sta 124+07.90
Elev 248.89
VC = 500.00
RC = +0.122%/ Station
EVC Sta 129+07.90
Elev 248.62
+0.25%

PROFILE GRADE

No Scale

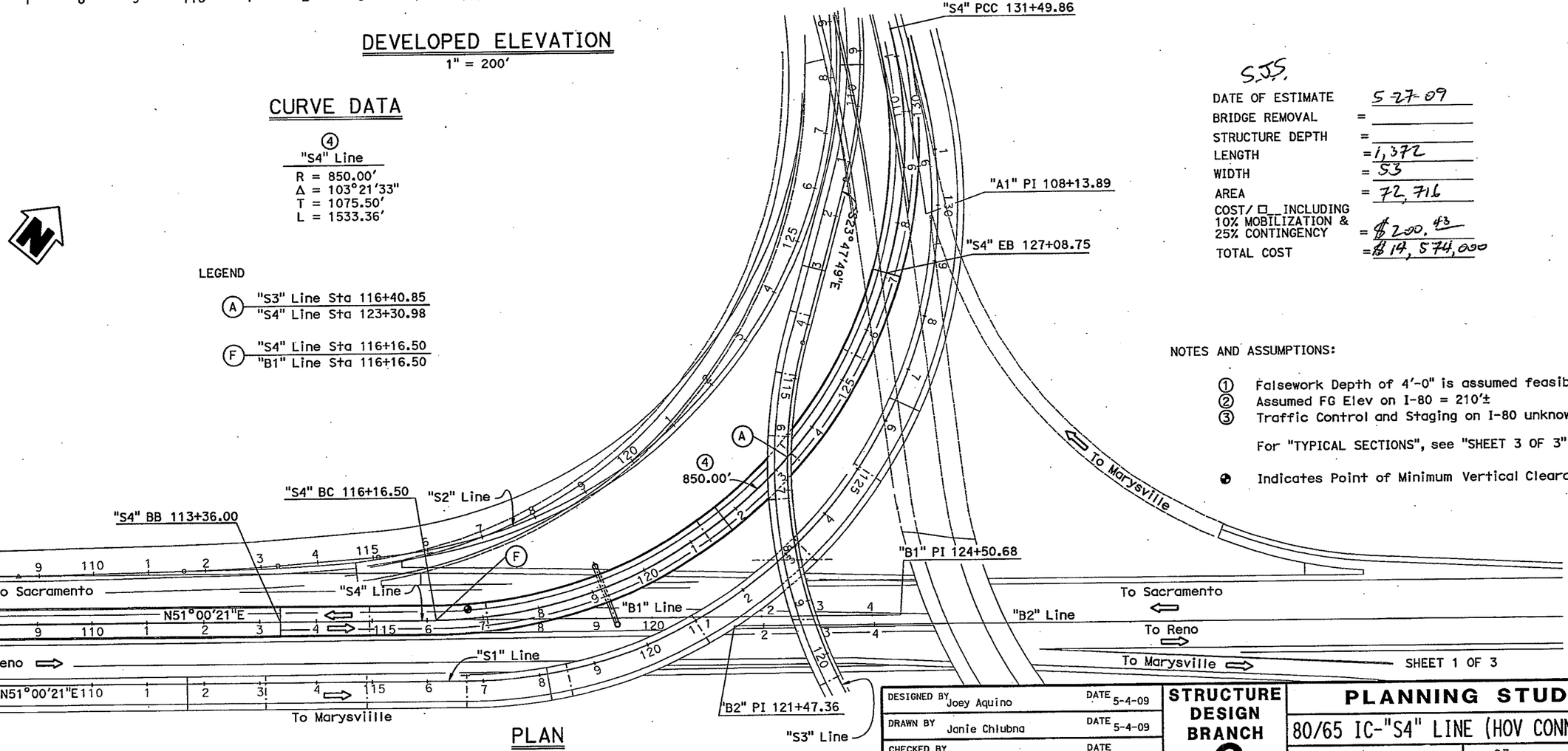


DEVELOPED ELEVATION

1" = 200'

CURVE DATA

④
"S4" Line
R = 850.00'
Δ = 103°21'33"
T = 1075.50'
L = 1533.36'



PLAN

1" = 200'

LEGEND

Ⓐ "S3" Line Sta 116+40.85
"S4" Line Sta 123+30.98

Ⓕ "S4" Line Sta 116+16.50
"B1" Line Sta 116+16.50

S.J.S.

DATE OF ESTIMATE	5-27-09
BRIDGE REMOVAL	=
STRUCTURE DEPTH	=
LENGTH	= 1,372
WIDTH	= 53
AREA	= 72,716
COST/ □ INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $200.43
TOTAL COST	= $14,574,000

NOTES AND ASSUMPTIONS:

① Falsework Depth of 4'-0" is assumed feasible
② Assumed FG Elev on I-80 = 210'±
③ Traffic Control and Staging on I-80 unknown

For "TYPICAL SECTIONS", see "SHEET 3 OF 3"

◒ Indicates Point of Minimum Vertical Clearance

SHEET 1 OF 3

DESIGNED BY Joey Aquino	DATE 5-4-09	STRUCTURE DESIGN BRANCH 3
DRAWN BY Janie Chiubna	DATE 5-4-09	
CHECKED BY Lewis L Shen	DATE 5-4-09	
APPROVED Joseph Downing	DATE 5-4-09	

PLANNING STUDY

80/65 IC-"S4" LINE (HOV CONNECTOR)

BRIDGE NO.	CU 03
SCALE: As Shown	EA 4E320K

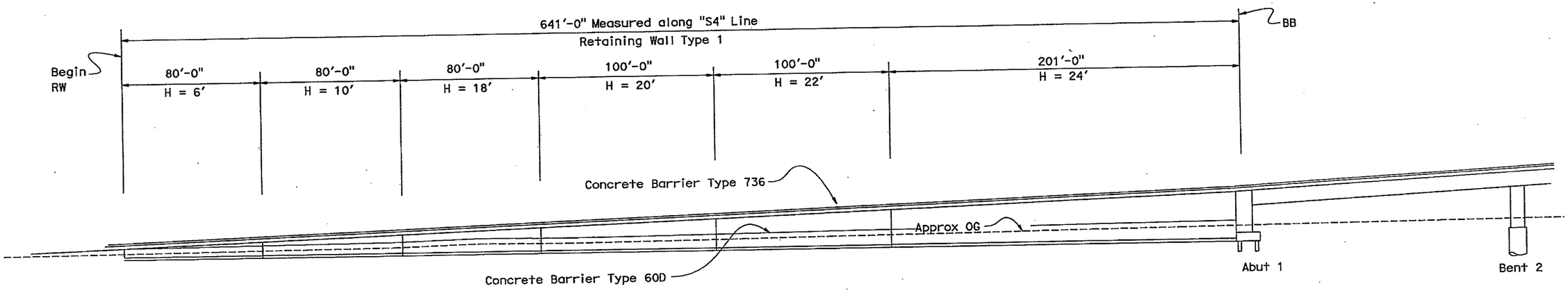
FILE => s4-aps-01.dgn

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

USERNAME => s136693 DATE PLOTTED => 27-MAY-2009 TIME PLOTTED => 14:40

DIST.	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov



Sta 106+95.00 THRU Sta 113+36.00

ELEVATION

1" = 30'

NOTE:

For "PLAN" view, see "SHEET 1 OF 3"

SHEET 2 OF 3

DESIGNED BY Joey Aquino	DATE 5-4-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chlubna	DATE 5-4-09		80/65 IC-"S4" LINE (HOV CONNECTOR)
CHECKED BY Lewis L Shen	DATE 5-4-09		BRIDGE NO. / CU 03
APPROVED Joseph Downing	DATE 5-4-09		SCALE: As Shown / EA 4E320K

FILE => s4-aps-02.dgn

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

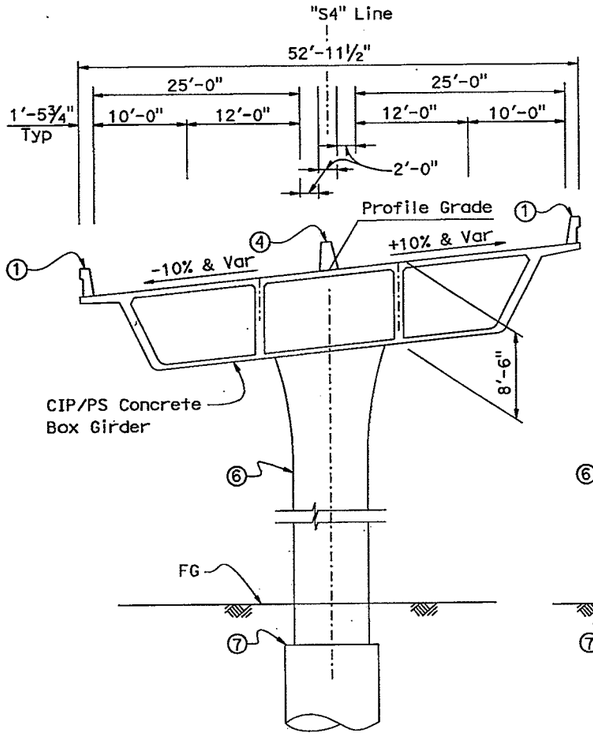
USERNAME => jchlubna DATE PLOTTED => 06-MAY-2009 TIME PLOTTED 10:12

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

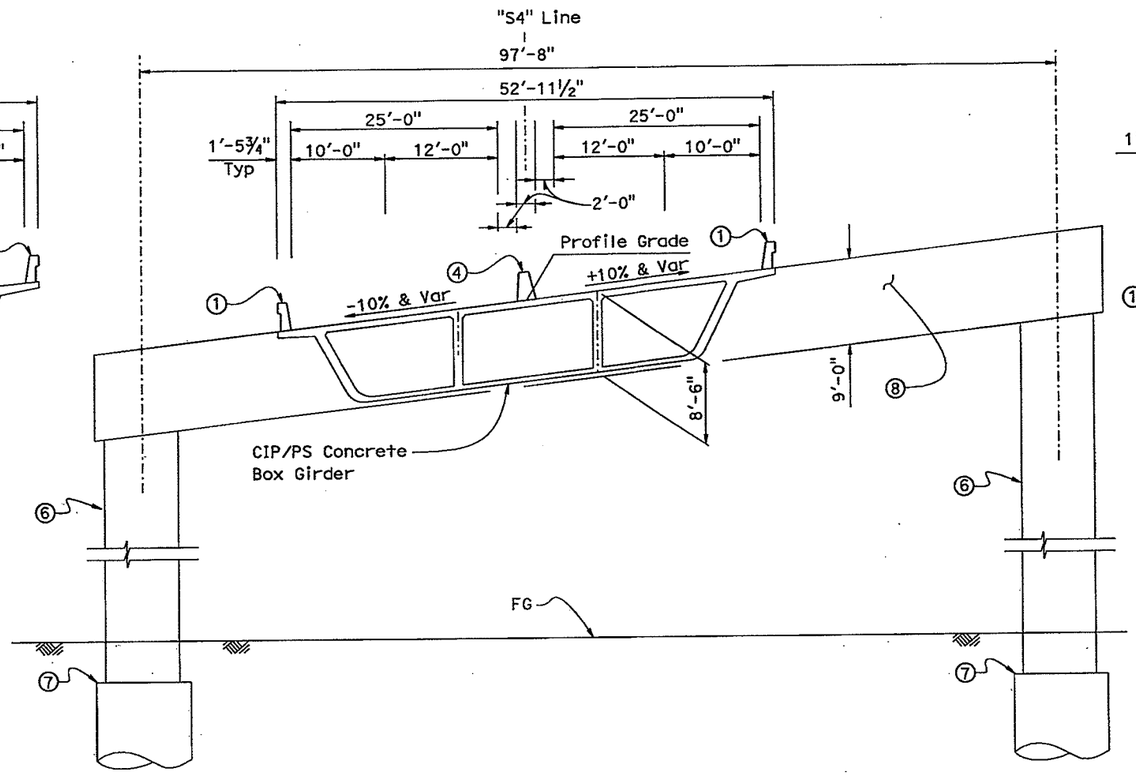
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov



BENTS 2 & 3

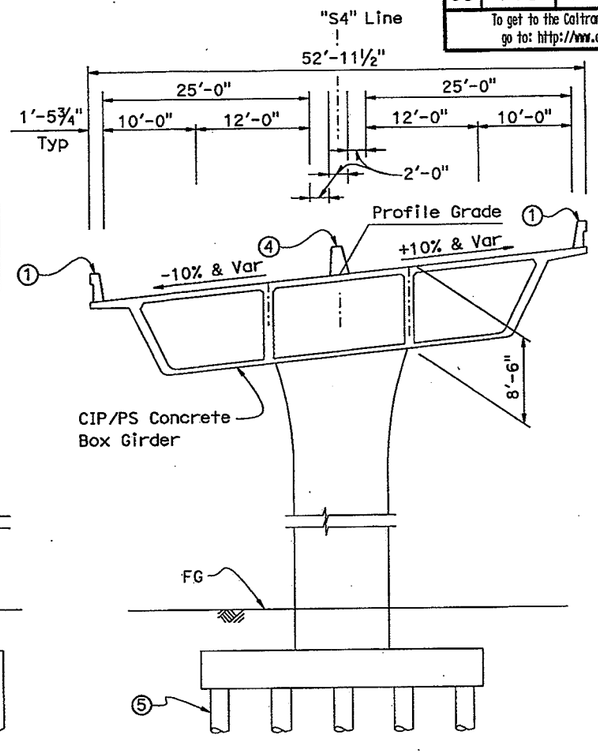


BENT 4

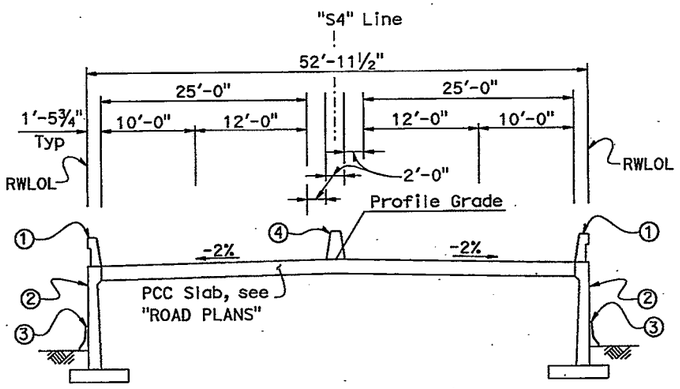
Sta 113+36.00 THRU Sta 127+08.75

TYPICAL SECTIONS

⅛" = 1'-0"



BENTS 5, 6, 7, 8 & 9



Sta 106+95.00 THRU Sta 113+36.00

TYPICAL SECTION

⅛" = 1'-0"

NOTES AND ASSUMPTIONS:

① Concrete Barrier Type 736
② Retaining Wall Type 1 (Assumed Pile Foundation not required)
③ Concrete Barrier Type 60D
④ Concrete Barrier Type 60SA
⑤ Assumed 24" ø CIDH Pile Foundation
⑥ Assumed 10' ø CIDH Pile Foundations
⑦ Assumed 8' ø CIDH Pile Foundations
⑧ Assumed Outrigger Bent Cap

DESIGNED BY Joey Aquino	DATE 5-4-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chlubna	DATE 5-4-09		80/65 IC-"S4" LINE (HOV CONNECTOR)
CHECKED BY Lewis L Shen	DATE 5-4-09		BRIDGE NO. CU 03
APPROVED Joseph Downing	DATE 5-4-09		SCALE: As Shown EA 4E320K

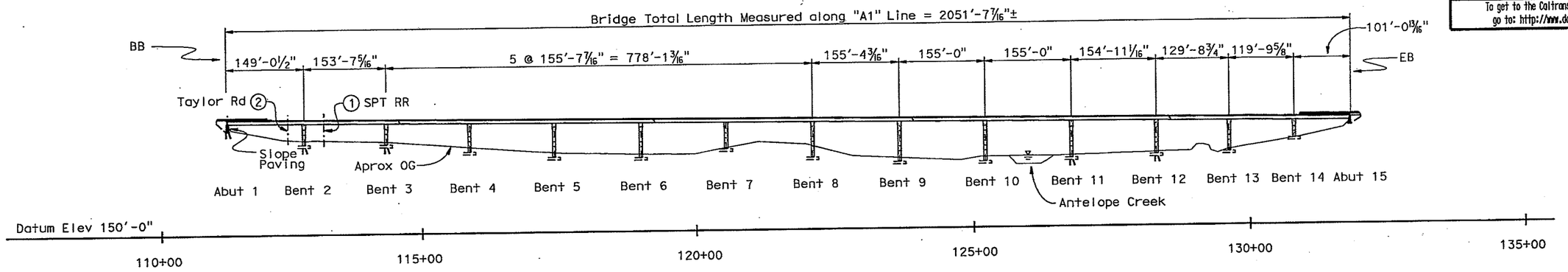
FILE => s4-ops-03.dgn

USERNAME => jchlubna DATE PLOTTED => 06-MAY-2009 TIME PLOTTED => 10:42

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

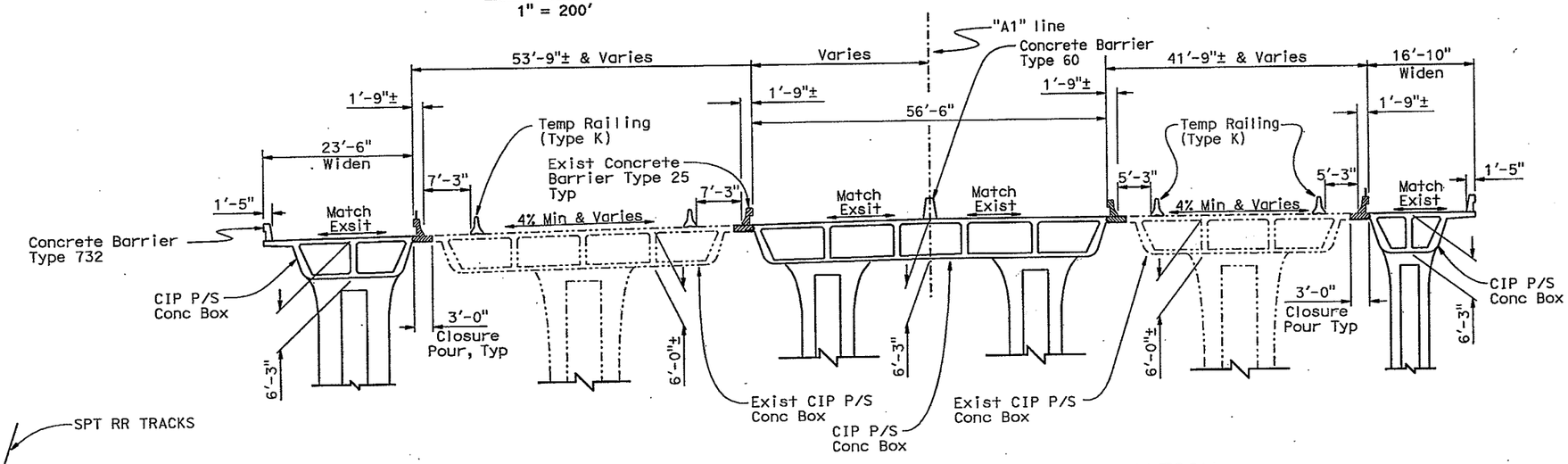
DIST	COUNTY	ROUTE	POST MILE
03	Pla	65	4.8

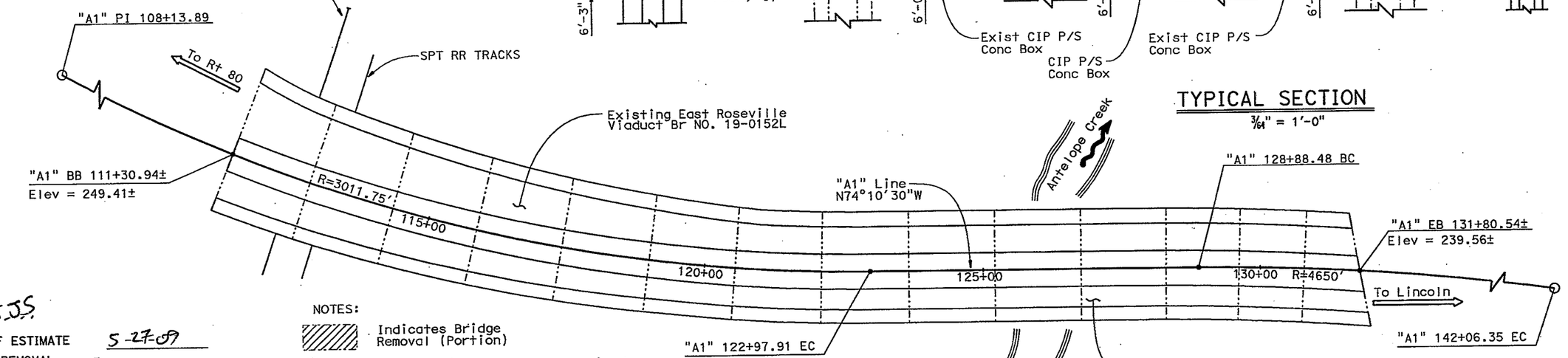
To get to the Caltrans web site, go to: http://www.dot.ca.gov



ELEVATION

1" = 200'





PLAN

1" = 200'

TYPICAL SECTION

3/64" = 1'-0"

CURVE DATA

"A1" LINE

R=3011.75'	R=4650.00'
Δ=28°13'56"	Δ=16°14'18"
T=757.40'	T=663.38'
L=1484.02'	L=1317.87'

SJS

DATE OF ESTIMATE	5-27-09
BRIDGE REMOVAL	=
STRUCTURE DEPTH	=
LENGTH	= 2,052
WIDTH	= 96.83
AREA	= 198,702
COST/ □ INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $207.37
TOTAL COST	= $41,205,000

NOTES:

Indicates Bridge Removal (Portion)

① 21'-6" min vertical clearance required under false work for SPT RR.

② 15'-0" min vertical clearance required under false work

③ Bent & Hinge locations to match existing

④ Bridge architectural features to match existing

DESIGNED BY	Sharon Yen	DATE	5-5-09
DRAWN BY	Joy Reid	DATE	5-5-09
CHECKED BY	Lewis Shen	DATE	5-5-09
APPROVED	Joe Downing	DATE	5-5-09

STRUCTURE DESIGN BRANCH 3

ALTERNATIVE 1&3

PLANNING STUDY

EAST ROSEVILLE VIADUCT (WIDEN)

BRIDGE NO. 19-0152R/L	CU 03
SCALE: As Shown	EA 4E320K

FILE => 19-0152ri-a-gpaps03a.dgn

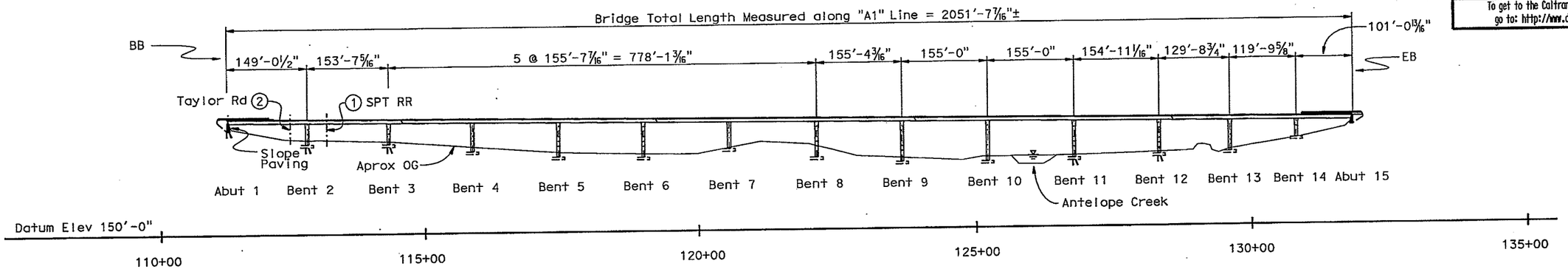
USERNAME => s136693 DATE PLOTTED => 27-MAY-2009 TIME PLOTTED => 14:40

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

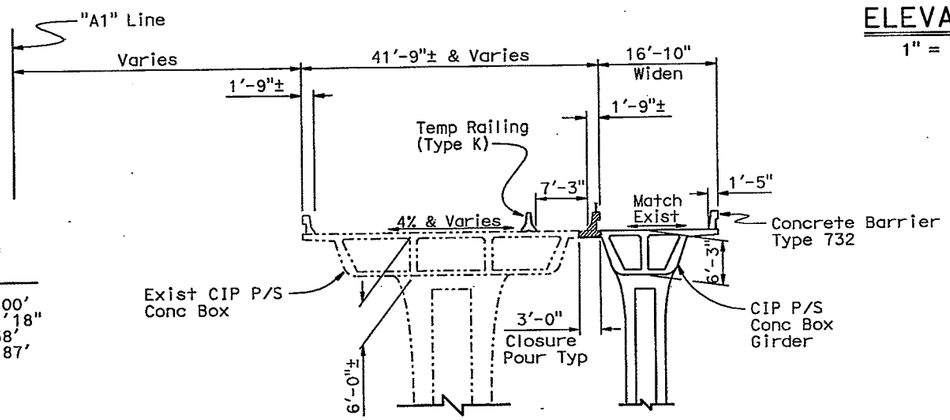
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

DIST	COUNTY	ROUTE	POST MILE
03	Pla	65	4.8

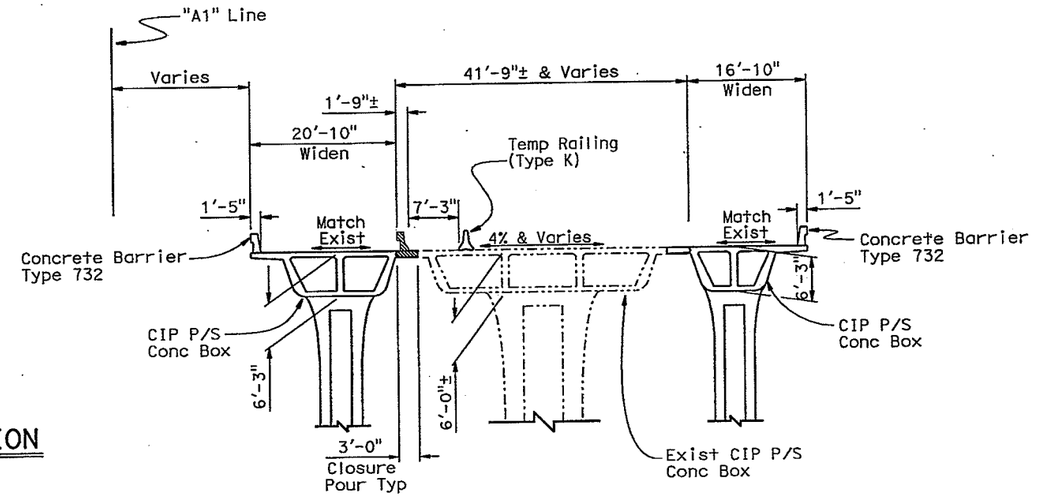
To get to the Caltrans web site, go to: http://www.dot.ca.gov



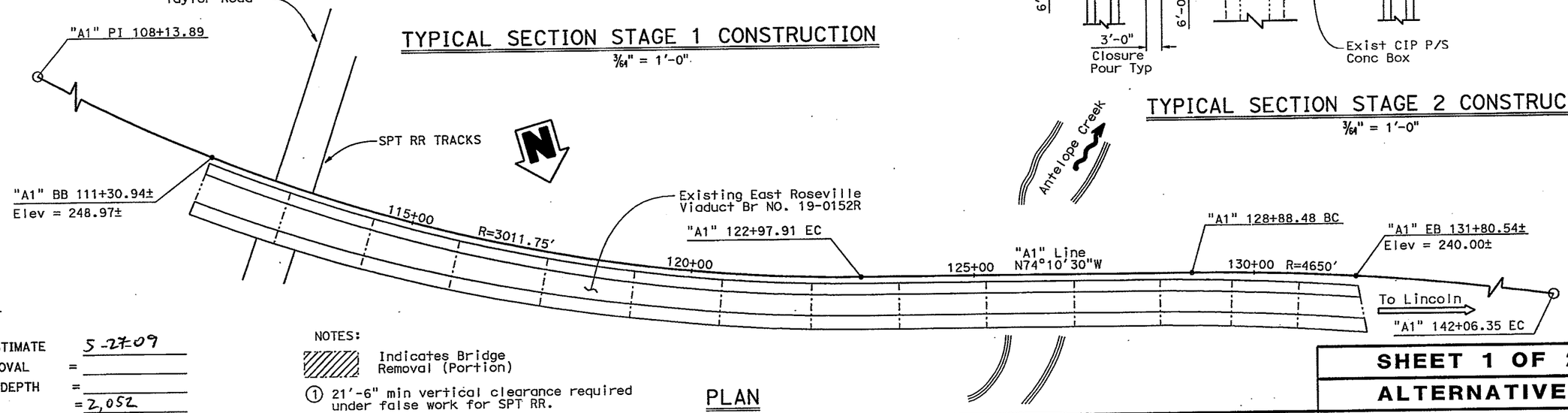
ELEVATION
1" = 200'



TYPICAL SECTION STAGE 1 CONSTRUCTION
3/64" = 1'-0"



TYPICAL SECTION STAGE 2 CONSTRUCTION
3/64" = 1'-0"



PLAN
1" = 200'

CURVE DATA

"A1" LINE

R=3011.75'	R=4650.00'
Δ=28°13'56"	Δ=16°14'18"
T=757.40'	T=663.38'
L=1484.02'	L=1317.87'

S.JS

DATE OF ESTIMATE	5-27-09
BRIDGE REMOVAL	=
STRUCTURE DEPTH	=
LENGTH	= 2,052
WIDTH	= 37.66
AREA	= 77,278
COST/ ☐ INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $216.55
TOTAL COST	= $16,735,000

NOTES:

Indicates Bridge Removal (Portion)

1. 21'-6" min vertical clearance required under false work for SPT RR.
2. 15'-0" min vertical clearance required under false work
3. Bent & Hinge locations to match existing
4. Bridge architectural features to match existing

DESIGNED BY Sharon Yen	DATE 5-5-09	STRUCTURE DESIGN BRANCH 3
DRAWN BY Jay Reid	DATE 5-5-09	
CHECKED BY Lewis Shen	DATE 5-5-09	
APPROVED Joe Downing	DATE 5-5-09	

SHEET 1 OF 2

ALTERNATIVE 2

PLANNING STUDY

EAST ROSEVILLE VIADUCT (RIGHT BRIDGE WIDEN)

BRIDGE NO. 19-0152R	CU 03
SCALE: As Shown	EA 4E320K

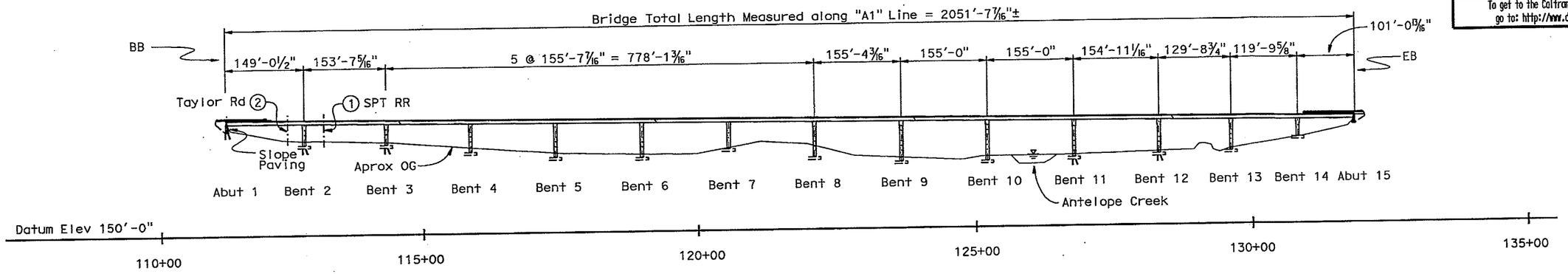
FILE => 19-0152r-a-gpaps02a.dgn

USERNAME => s136693 DATE PLOTTED => 27-MAY-2009 TIME PLOTTED => 14:40

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

DIST	COUNTY	ROUTE	POST MILE
03	Pla	65	4.8

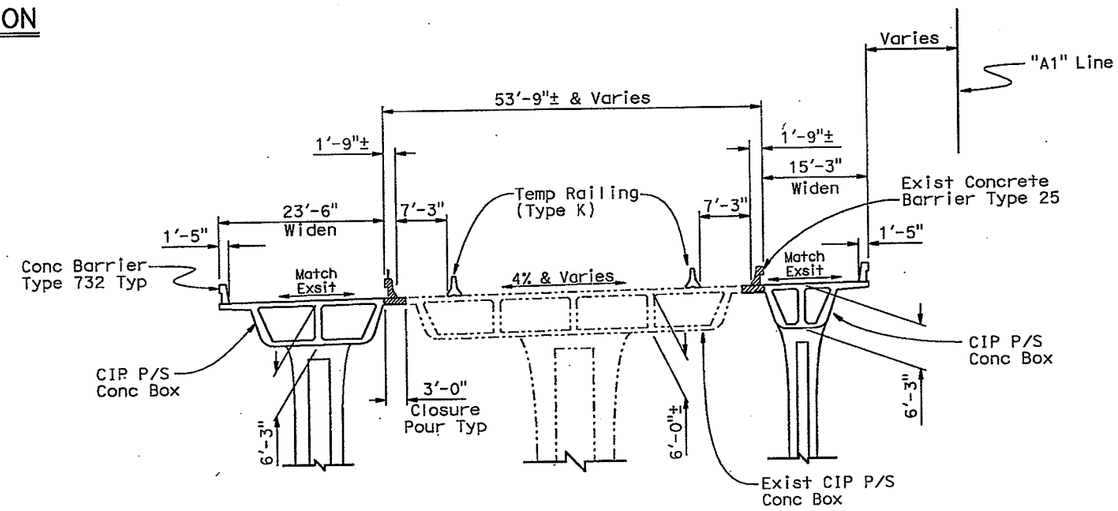
To get to the Caltrans web site, go to: http://www.dot.ca.gov



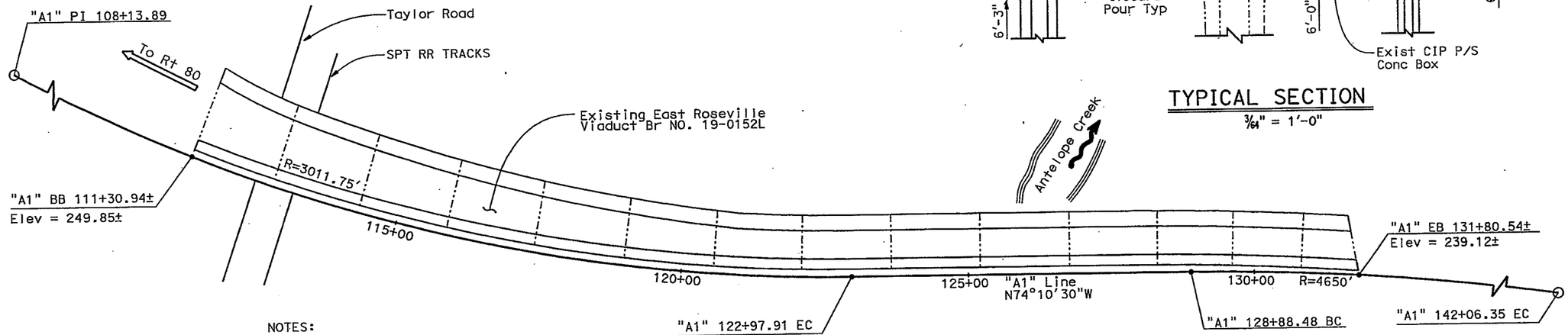
MIRRORED ELEVATION
1" = 200'

CURVE DATA
"A1" LINE

R=3011.75'	R=4650.00'
Δ=28°13'56"	Δ=16°14'18"
T=757.40'	T=663.38'
L=1484.02'	L=1317.87'



TYPICAL SECTION
3/64" = 1'-0"



PLAN
1" = 200'

SJS

DATE OF ESTIMATE	5-27-09
BRIDGE REMOVAL	=
STRUCTURE DEPTH	=
LENGTH	= 2,052
WIDTH	= 38.75
AREA	= 79,515
COST/ ☐ INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $ 216.7#
TOTAL COST	= $17,234,000

NOTES:

Indicates Bridge Removal (Portion)

① 21'-6" min vertical clearance required under false work for SPT RR.

② 15'-0" min vertical clearance required under false work

③ Bent & Hinge locations to match existing

④ Bridge architectural features to match existing

DESIGNED BY Sharon Yen	DATE 5-5-09	STRUCTURE DESIGN BRANCH 3
DRAWN BY Jay Reid	DATE 5-5-09	
CHECKED BY Lewis Shen	DATE 5-5-09	
APPROVED Joe Downing	DATE 5-5-09	

SHEET 2 OF 2

ALTERNATIVE 2

PLANNING STUDY

EAST ROSEVILLE VIADUCT (LEFT BRIDGE WIDEN)

BRIDGE NO. 19-0152L	CU 03
SCALE: As Shown	EA 4E320K

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

USERNAME => s136693 DATE PLOTTED => 27-MAY-2009 TIME PLOTTED => 14:40

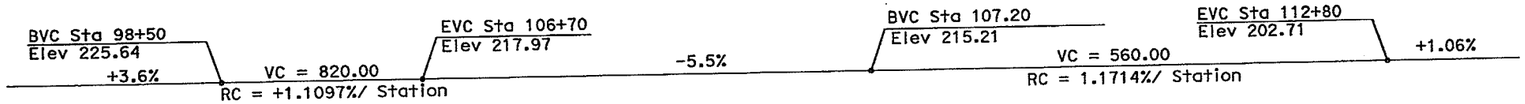
FILE => 19-0152l-a-gpaps02.dgn

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

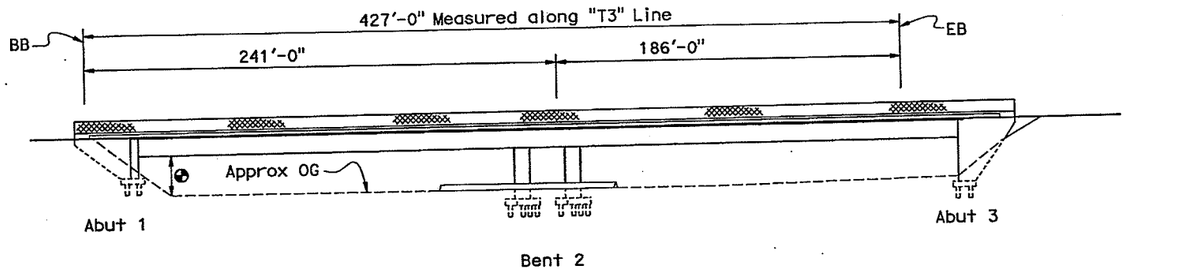
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

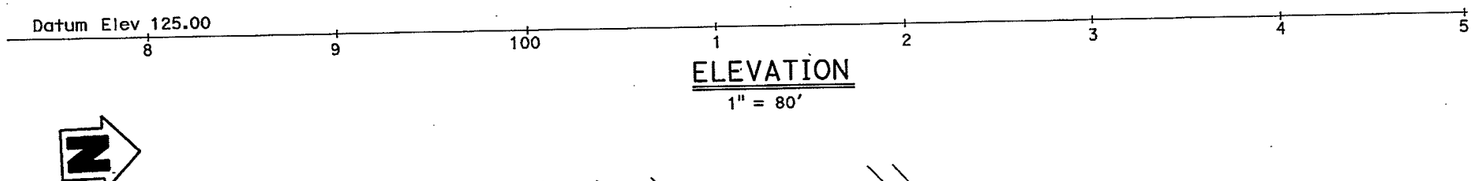
DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

To get to the Caltrans web site, go to: http://www.dot.ca.gov

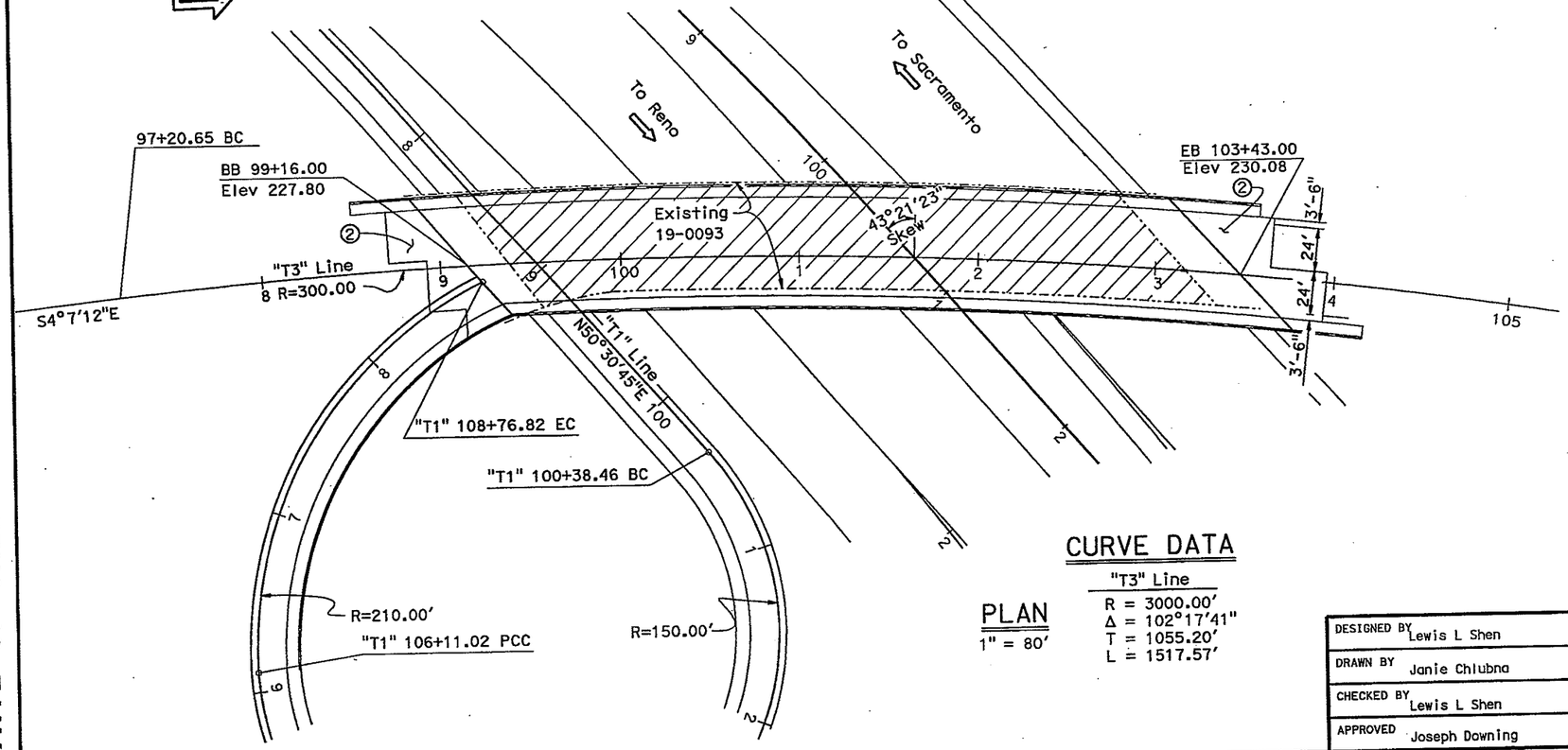


PROFILE GRADE
No Scale





ELEVATION
1" = 80'



PLAN
1" = 80'

CURVE DATA
"T3" Line
R = 3000.00'
Δ = 102°17'41"
T = 1055.20'
L = 1517.57'

NOTES AND ASSUMPTIONS:

- Indicates existing bridge to be removed in Stages
- ① Location and falsework height TBD
- ② Structure Approach Type N(30S)
- ③ Utility relocation information not available
- ④ For "TYPICAL SECTIONS", see "SHEET 2 OF 2"
- Indicates possible Point of Minimum Vertical Clearance

SJS

DATE OF ESTIMATE	5-27-09
BRIDGE REMOVAL	= $450,100
STRUCTURE DEPTH	=
LENGTH	= 427
WIDTH	= 69
AREA	= 29,463
COST/ □ INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $227.46
TOTAL COST	= $6,702,000

SHEET 1 OF 2

DESIGNED BY Lewis L Shen	DATE 5-12-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chlubna	DATE 5-12-09		TAYLOR ROAD OC (REPLACE)
CHECKED BY Lewis L Shen	DATE 5-12-09		BRIDGE NO. 19-0093 / CU 03
APPROVED Joseph Downing	DATE 5-12-09		SCALE: As Shown / EA 4E320K

FILE => taylor-aps-01.dgn

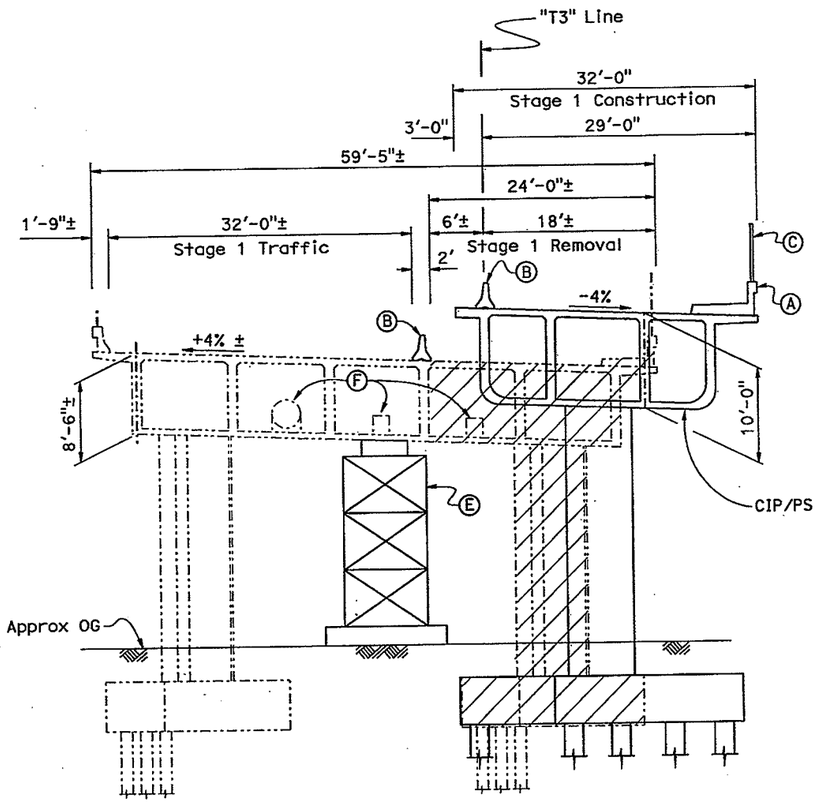
USERNAME => s136693 DATE PLOTTED => 27-MAY-2009 TIME PLOTTED => 14:40

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DIVISION OF STRUCTURES

DIST	COUNTY	ROUTE	POST MILE
03	Pla	80/65	

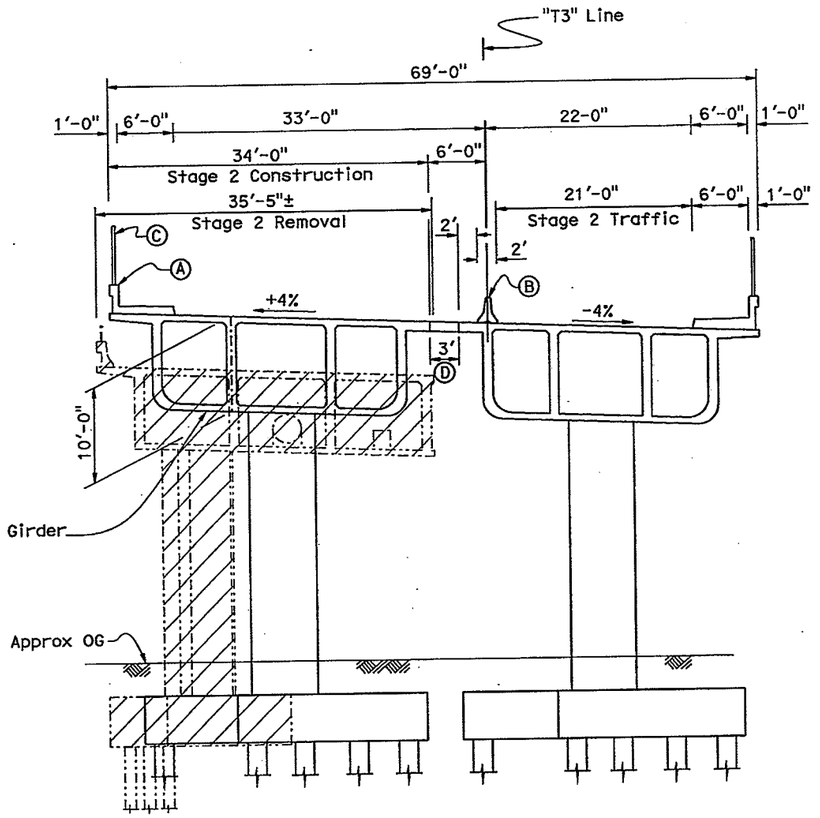
To get to the Caltrans web site, go to: http://www.dot.ca.gov



STAGE 1

ELEVATION

1/8" = 1'-0"



STAGE 2

ELEVATION

1/8" = 1'-0"

LEGEND:

- ------- Indicates Existing Structure
- ——— Indicates New Structure
- ▨ Indicates Bridge Removal
- Ⓐ Concrete Barrier Type 26
- Ⓑ Temporary Railing (Type K)
- Ⓒ Chain Link Railing Type 7
- Ⓓ Closure Pour
- Ⓔ Temporary Shoring @ Existing Bent 2
- Ⓕ Exist Utility to be Relocated

SHEET 2 OF 2

DESIGNED BY Lewis L Shen	DATE 5-12-09	STRUCTURE DESIGN BRANCH 3	PLANNING STUDY
DRAWN BY Janie Chlubna	DATE 5-12-09		TAYLOR ROAD OC (REPLACE)
CHECKED BY Lewis L Shen	DATE 5-12-09		BRIDGE NO. 19-0093 / CU 03
APPROVED Joseph Downing	DATE 5-12-09		SCALE: As Shown / EA 4E320K

FILE => taylor-aps-02.dgn

USERNAME => a136693 DATE PLOTTED => 28-MAY-2009 TIME PLOTTED => 13:50

STRUCTURES DESIGN ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 10/25/05)

ATTACHMENT 6

ALTERNATIVE 1

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 1

PROJECT DESCRIPTION:

In and near Roseville from Sacramento County Line to 0.2 miles north of Orchard Creek Bridge. Construct freeway interchange modifications.

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	$ 130,000,000
TOTAL STRUCTURE ITEMS	$ 90,000,000
SUBTOTAL CONSTRUCTION COSTS	$ 220,000,000
TOTAL RIGHT OF WAY ITEMS	$ 10,000,000
TOTAL PROJECT CAPITAL OUTLAY COSTS	$ 230,000,000

Reviewed by District
Program Manager

Signature _____ Date _____

Approved by
Project Manager

Signature _____ Date _____

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 1

I. ROADWAY ITEMS

	Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Section 1: Earthwork					
Roadway Excavation	95,600	CY	$ 15	$ 1,434,000	
Imported Borrow	68,000	CY	$ 15	$ 1,020,000	
Clearing & Grubbing	1	LS	$ 200,000	$ 200,000	
				Subtotal Earthwork	$ 2,654,000
Section 2: Pavement Structural Section					
RHMA (Type O)	16,100	Ton	$ 95	$ 1,529,500	
HMA (Type A)	80,600	Ton	$ 80	$ 6,448,000	
Aggregate Base	74,600	CY	$ 40	$ 2,984,000	
Shoulder Backing	1	LS	$ 350,000	$ 350,000	
				Subtotal Pavement Structural Sections	$ 11,311,500
Section 3: Drainage					
Remove Existing Drainage Facilities	1	LS	$ 150,000	$ 150,000	
Project Drainage	1	LS	$ 1,750,000	$ 1,750,000	
Ditch Excavation	1	LS	$ 100,000	$ 100,000	
				Subtotal Drainage	$ 2,000,000

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 1

	Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Section 4: Specialty Items					
Barriers and Guardrails	1	LS	$ 559,000	$ 559,000	
Retaining Walls	1	LS	$ 2,970,000	$ 2,970,000	
Highway Planting	1	LS	$ 5,000,000	$ 5,000,000	
Erosion Control	1	LS	$ 335,000	$ 335,000	
Water Pollution Control	1	LS	$ 100,000	$ 100,000	
Prepare SWPPP	1	LS	$ 30,000	$ 30,000	
Treatment BMPs	1	LS	$ 2,500,000	$ 2,500,000	
Construction Site BMPs	1	LS	$ 4,314,000	$ 4,314,000	
Hazardous Waste Mitigation	1	LS	$ 10,000	$ 10,000	
Environmental Mitigation	1	LS	$ 25,000	$ 25,000	
Taylor Rd. IC Closure Mitigation	1	LS	$ 20,000,000	$ 20,000,000	
Resident Engineer Office Space	1	LS	$ 250,000	$ 250,000	
			Subtotal Specialty Items		$ 36,093,000
Section 5: Traffic Items					
Construction Area Signs	1	LS	$ 45,000	$ 45,000	
Temporary Striping	1	LS	$ 500,000	$ 500,000	
Temporary Signing	1	LS	$ 600,000	$ 600,000	
Temporary Lighting	1	LS	$ 160,000	$ 160,000	
Changeable Message Signs (PCMS)	780	Days	$ 1,600	$ 1,248,000	
Fixed Changeable Message Signs	2	EA	$ 100,000	$ 200,000	
COZEEP	780	Days	$ 4,000	$ 3,120,000	
Freeway Service Patrol (FSP)	1	LS	$ 100,000	$ 100,000	
Public Information Office (PIO)	1	LS	$ 100,000	$ 100,000	
Traffic Control System and Maintain Traffic	780	Days	$ 3,000	$ 2,340,000	
Temporary Crash Cushions	500	EA	$ 300	$ 150,000	
K Rail	48460	LF	$ 15	$ 726,900	
Lighting and Electrical	1	LS	$ 4,500,000	$ 4,500,000	
Traffic Handling	1	LS	$ 3,000,000	$ 3,000,000	
Signing and Striping	1	LS	$ 6,600,000	$ 6,600,000	
			Subtotal Traffic Items		$ 23,389,900
			SUBTOTAL SECTIONS 1 THROUGH 5		$ 75,448,400

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 1

Section 6: Minor

					Section Cost
$ 75,448,400 (Subtotal Sections 1-5)	X	0.15	=	$ 11,317,260	
				Total Minor Items	$ 11,317,260

Section 7: Roadway Mobilization

$ 86,765,660 (Subtotal Sections 1-6)	X	0.10	=	$ 8,676,566	
				Total Roadway Mobilization	$ 8,676,566

Section 8: Roadway Additions

Supplemental Work					
$ 86,765,660 (Subtotal Sections 1-6)	X	0.10	X	$ 8,676,566	
Contingencies					
$ 86,765,660 (Subtotal Sections 1-6)	X	0.250	X	$ 21,691,415	
				Total Roadway Additions	$ 30,367,981

TOTAL ROADWAY ITEMS **$ 125,811,000**
(Subtotal Sections 1-8)

Estimate Prepared By: Tou Vang (Print Name) Date: 5/28/2009 Phone: (530) 634-7627

Estimate Checked By: _____ (Print Name) Date: _____ Phone: _____

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 1

II. Structures Items (Advance Planning Study pending)

					Section Cost
East Roseville Viaduct 19-0152L/R (Widening)	1	LS	$ 41,205,000	$ 41,205,000	
I-80/65 HOV Direct Connector (S4)	1	LS	$ 14,574,000	$ 14,574,000	
SB 65 to EB80 Mixed Flow Connector (S3)	1	LS	$ 21,876,000	$ 21,876,000	
Taylor Road OC 19-0093	1	LS	$ 6,702,000	$ 6,702,000	

(incl. 10% mobilization and 25% contingency)

Subtotal Structures Items $ 84,357,000

III. Railroad Related Costs

		Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Flagging (Day)	TBD per working days	250	Day	$ 1,000	$ 250,000	
Flagging (Night)	East Roseville Viaduct	250	Night	$ 2,000	$ 500,000	

Subtotal Railroad Costs $ 750,000

TOTAL STRUCTURES AND RAILROAD ITEMS **$ 85,107,000**

Estimate Prepared By: Joe Downing (Print Name)
Date: 5/28/2009
Phone: (916) 227-8430

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 1

IV. Right of Way Escalated Value

	Item Cost
Acquisition (including excess lands, damages to remainder(s) and goodwill)	$ 6,144,311
Utility Relocation (State share)	$ 3,681,960
Relocation Assistance	$ 12,013
Clearance/Demolition	$ -
Title and Escrow Fees	$ 3,604

TOTAL RIGHT OF WAY ITEMS **$ 9,841,888**

Anticipated Date of Right of Way Certification _____
(Date to which values are escalated)

Construction Contract Work:

Brief Description of Work:

Right of Way Branch Cost Estimate for Work* $ -

* This dollar amount is to be included in the Roadway and/or Structures items of work, as appropriate. Do not include in Right of Way items.

Estimate Prepared By: Kelly Kilpatrick (Print Name) Date: Phone:

ALTERNATIVE 2

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 2

PROJECT DESCRIPTION:

In and near Roseville from Sacramento County Line to 0.2 miles north of Orchard Creek Bridge. Construct freeway interchange modifications.

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	$ 130,000,000
TOTAL STRUCTURE ITEMS	$ 90,000,000
SUBTOTAL CONSTRUCTION COSTS	$ 220,000,000
TOTAL RIGHT OF WAY ITEMS	$ 14,000,000
TOTAL PROJECT CAPITAL OUTLAY COSTS	$ 240,000,000

Reviewed by District
Program Manager

Signature _____ Date _____

Approved by
Project Manager

Signature _____ Date _____

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 2

I. ROADWAY ITEMS

	Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Section 1: Earthwork					
Roadway Excavation	90,900	CY	$ 15	$ 1,363,500	
Imported Borrow	66,200	CY	$ 15	$ 993,000	
Clearing & Grubbing	1	LS	$ 200,000	$ 200,000	
				Subtotal Earthwork	$ 2,556,500
Section 2: Pavement Structural Section					
RHMA (Type O)	13,100	Ton	$ 95	$ 1,244,500	
HMA (Type A)	60,000	Ton	$ 80	$ 4,800,000	
Aggregate Base	53,400	CY	$ 40	$ 2,136,000	
Shoulder Backing	1	LS	$ 350,000	$ 350,000	
				Subtotal Pavement Structural Sections	$ 8,530,500
Section 3: Drainage					
Remove Existing Drainage Facilities	1	LS	$ 150,000	$ 150,000	
Project Drainage	1	LS	$ 1,750,000	$ 1,750,000	
Ditch Excavation	1	LS	$ 100,000	$ 100,000	
				Subtotal Drainage	$ 2,000,000

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 2

	Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Section 4: Specialty Items					
Barriers and Guardrails	1	LS	$ 329,000	$ 329,000	
Retaining Walls	1	LS	$ 4,620,000	$ 4,620,000	
Highway Planting	1	LS	$ 5,000,000	$ 5,000,000	
Erosion Control	1	LS	$ 335,000	$ 335,000	
Water Pollution Control	1	LS	$ 100,000	$ 100,000	
Prepare SWPPP	1	LS	$ 30,000	$ 30,000	
Treatment BMPs	1	LS	$ 2,500,000	$ 2,500,000	
Construction Site BMPs	1	LS	$ 4,314,000	$ 4,314,000	
Hazardous Waste Mitigation	1	LS	$ 10,000	$ 10,000	
Environmental Mitigation	1	LS	$ 25,000	$ 25,000	
Taylor Rd. IC Closure Mitigation	1	LS	$ 20,000,000	$ 20,000,000	
Resident Engineer Office Space	1	LS	$ 250,000	$ 250,000	
			Subtotal Specialty Items		$ 37,513,000
Section 5: Traffic Items					
Construction Area Signs	1	LS	$ 45,000	$ 45,000	
Temporary Striping	1	LS	$ 500,000	$ 500,000	
Temporary Signing	1	LS	$ 600,000	$ 600,000	
Temporary Lighting	1	LS	$ 160,000	$ 160,000	
Changeable Message Signs (PCMS)	780	Days	$ 1,600	$ 1,248,000	
Fixed Changeable Message Signs	2	EA	$ 100,000	$ 200,000	
COZEEP	780	Days	$ 4,000	$ 3,120,000	
Freeway Service Patrol (FSP)	1	LS	$ 100,000	$ 100,000	
Public Information Office (PIO)	1	LS	$ 100,000	$ 100,000	
Traffic Control System and Maintain Traffic	780	Days	$ 3,000	$ 2,340,000	
Temporary Crash Cushions	500	EA	$ 300	$ 150,000	
K Rail	43020	LF	$ 15	$ 645,300	
Lighting and Electrical	1	LS	$ 4,600,000	$ 4,600,000	
Traffic Handling	1	LS	$ 3,000,000	$ 3,000,000	
Signing and Striping	1	LS	$ 5,500,000	$ 5,500,000	
			Subtotal Traffic Items		$ 22,308,300
			SUBTOTAL SECTIONS 1 THROUGH 5		$ 72,908,300

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 2

Section 6: Minor

					Section Cost
$ 72,908,300 (Subtotal Sections 1-5)	X	0.15	=	$ 10,936,245	
				Total Minor Items	$ 10,936,245

Section 7: Roadway Mobilization

$ 83,844,545 (Subtotal Sections 1-6)	X	0.10	=	$ 8,384,455	
				Total Roadway Mobilization	$ 8,384,455

Section 8: Roadway Additions

Supplemental Work					
$ 83,844,545 (Subtotal Sections 1-6)	X	0.10	X	$ 8,384,455	
Contingencies					
$ 83,844,545 (Subtotal Sections 1-6)	X	0.250	X	$ 20,961,136	
				Total Roadway Additions	$ 29,345,591

TOTAL ROADWAY ITEMS **$ 121,575,000**
(Subtotal Sections 1-8)

Estimate Prepared By: Tou Vang (Print Name) Date: 5/28/2009 Phone: (530) 634-7627

Estimate Checked By: _____ (Print Name) Date: _____ Phone: _____

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 2

II. Structures Items (Advance Planning Study pending)

					Section Cost
East Roseville Viaduct 19-0152L/R (Widening)	1	LS	$ 33,969,000	$	33,969,000
EB 80 to NB 65 Mixed Flow Connector (S1)	1	LS	$ 22,801,000	$	22,801,000
SB 65 to EB 80 Mixed Flow Connector (S3)	1	LS	$ 21,876,000	$	21,876,000
Taylor Road OC 19-0093	1	LS	$ 6,702,000	$	6,702,000

(incl. 10% mobilization and 25% contingency)

Subtotal Structures Items	$ 85,348,000

III. Railroad Related Costs

		Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Flagging (Day)	TBD per working days	250	Day	$ 1,000	$ 250,000	
Flagging (Night)	East Roseville Viaduct	250	Night	$ 2,000	$ 500,000	

Subtotal Railroad Costs	$ 750,000

TOTAL STRUCTURES AND RAILROAD ITEMS	**$ 86,098,000**

Estimate Prepared By: Joe Downing (Print Name)
Date: 5/28/2009
Phone: (916) 227-8430

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 2

IV. Right of Way Escalated Value

	Item Cost
Acquisition (including excess lands, damages to remainder(s) and goodwill)	$ 7,471,138
Utility Relocation (State share)	$ 6,078,537
Relocation Assistance	$ 12,013
Clearance/Demolition	$ -
Title and Escrow Fees	$ 4,805

TOTAL RIGHT OF WAY ITEMS $ 13,566,493

Anticipated Date of Right of Way Certification _____
(Date to which values are escalated)

Construction Contract Work:

Brief Description of Work:

Right of Way Branch Cost Estimate for Work* $ -

* This dollar amount is to be included in the Roadway and/or Structures items of work, as appropriate. Do not include in Right of Way items.

Estimate Prepared By: Kelly Kilpatrick (Print Name) Date: Phone:

ALTERNATIVE 3

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 3

PROJECT DESCRIPTION:

In and near Roseville from Sacramento County Line to 0.2 miles north of Orchard Creek Bridge. Construct freeway interchange modifications.

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	$ 150,000,000
TOTAL STRUCTURE ITEMS	$ 110,000,000
SUBTOTAL CONSTRUCTION COSTS	$ 260,000,000
TOTAL RIGHT OF WAY ITEMS	$ 15,000,000
TOTAL PROJECT CAPITAL OUTLAY COSTS	$ 280,000,000

Reviewed by District
Program Manager

Signature _____ Date _____

Approved by
Project Manager

Signature _____ Date _____

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 3

I. ROADWAY ITEMS

	Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Section 1: Earthwork					
Roadway Excavation	120,700	CY	$ 15	$ 1,810,500	
Imported Borrow	53,800	CY	$ 15	$ 807,000	
Clearing & Grubbing	1	LS	$ 300,000	$ 300,000	
				Subtotal Earthwork	$ 2,917,500
Section 2: Pavement Structural Section					
RHMA (Type O)	19,500	Ton	$ 95	$ 1,852,500	
HMA (Type A)	93,700	Ton	$ 80	$ 7,496,000	
Aggregate Base	84,700	CY	$ 40	$ 3,388,000	
Shoulder Backing	1	LS	$ 350,000	$ 350,000	
				Subtotal Pavement Structural Sections	$ 13,086,500
Section 3: Drainage					
Remove Existing Drainage Facilities	1	LS	$ 150,000	$ 150,000	
Project Drainage	1	LS	$ 1,750,000	$ 1,750,000	
Ditch Excavation	1	LS	$ 100,000	$ 100,000	
				Subtotal Drainage	$ 2,000,000

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 3

	Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Section 4: Specialty Items					
Barriers and Guardrails	1	LS	$ 676,000	$ 676,000	
Retaining Walls	1	LS	$ 6,680,000	$ 6,680,000	
Highway Planting	1	LS	$ 5,000,000	$ 5,000,000	
Erosion Control	1	LS	$ 335,000	$ 335,000	
Water Pollution Control	1	LS	$ 100,000	$ 100,000	
Prepare SWPPP	1	LS	$ 30,000	$ 30,000	
Treatment BMPs	1	LS	$ 2,500,000	$ 2,500,000	
Construction Site BMPs	1	LS	$ 5,099,000	$ 5,099,000	
Hazardous Waste Mitigation	1	LS	$ 10,000	$ 10,000	
Environmental Mitigation	1	LS	$ 25,000	$ 25,000	
Taylor Rd. IC Closer Mitigation	1	LS	$ 20,000,000	$ 20,000,000	
Resident Engineer Office Space	1	LS	$ 250,000	$ 250,000	
				Subtotal Specialty Items	$ 40,705,000
Section 5: Traffic Items					
Construction Area Signs	1	LS	$ 45,000	$ 45,000	
Temporary Striping	1	LS	$ 500,000	$ 500,000	
Temporary Signing	1	LS	$ 600,000	$ 600,000	
Temporary Lighting	1	LS	$ 200,000	$ 200,000	
Changeable Message Signs (PCMS)	780	Days	$ 1,600	$ 1,248,000	
Fixed Changeable Message Signs	2	EA	$ 100,000	$ 200,000	
COZEEP	780	Days	$ 4,000	$ 3,120,000	
Freeway Service Patrol (FSP)	1	LS	$ 100,000	$ 100,000	
Public Information Office (PIO)	1	LS	$ 100,000	$ 100,000	
Traffic Control System and Maintain Traffic	780	Days	$ 3,000	$ 2,340,000	
Temporary Crash Cushions	500	EA	$ 300	$ 150,000	
K Rail	56800	LF	$ 15	$ 852,000	
Lighting and Electrical	1	LS	$ 5,500,000	$ 5,500,000	
Traffic Handling	1	LS	$ 3,500,000	$ 3,500,000	
Signing and Striping	1	LS	$ 7,600,000	$ 7,600,000	
				Subtotal Traffic Items	$ 26,055,000
				SUBTOTAL SECTIONS 1 THROUGH 5	$ 84,764,000

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 3

Section 6: Minor

					Section Cost
$ 84,764,000 (Subtotal Sections 1-5)	X	0.15	=	$ 12,714,600	
				Total Minor Items	$ 12,714,600

Section 7: Roadway Mobilization

$ 97,478,600 (Subtotal Sections 1-6)	X	0.10	=	$ 9,747,860	
				Total Roadway Mobilization	$ 9,747,860

Section 8: Roadway Additions

Supplemental Work					
$ 97,478,600 (Subtotal Sections 1-6)	X	0.10	X	$ 9,747,860	
Contingencies					
$ 97,478,600 (Subtotal Sections 1-6)	X	0.250	X	$ 24,369,650	
				Total Roadway Additions	$ 34,117,510

TOTAL ROADWAY ITEMS **$ 141,344,000**
(Subtotal Sections 1-8)

Estimate Prepared By: Tou Vang (Print Name) Date: 6/11/2009 Phone: (530) 634-7627

Estimate Checked By: _____ (Print Name) Date: _____ Phone: _____

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 3

II. Structures Items (Advance Planning Study pending)

					Section Cost
East Rostvelle Viaduct 19-0152L/R (Widening)	1	LS	$ 41,205,000	$ 41,205,000	
I-80/65 HOV Direct Connector (S4)	1	LS	$ 14,574,000	$ 14,574,000	
EB 80 to NB 65 Mixed Flow Connector (S1)	1	LS	$ 22,801,000	$ 22,801,000	
SB 65 to EB 80 Mixed Flow Connector (S3)	1	LS	$ 21,876,000	$ 21,876,000	
Taylor Road OC 19-0093 (Replacement)	1	LS	$ 6,702,000	$ 6,702,000	

(incl. 10% mobilization and 25% contingency)

Subtotal Structures Items	$ 107,158,000

III. Railroad Related Costs

		Quantity	*Unit*	*Unit Price*	*Item Cost*	*Section Cost*
Flagging (Day)	TBD per working days	250	Day	$ 1,000	$ 250,000	
Flagging (Night)	East Roseville Viaduct	250	Night	$ 2,000	$ 500,000	

Subtotal Railroad Costs	$ 750,000

TOTAL STRUCTURES AND RAILROAD ITEMS	**$ 107,908,000**

Estimate Prepared By: Joe Downing (Print Name)
Date: 5/28/2009
Phone: (916) 227-8430

PROJECT STUDY REPORT COST ESTIMATE SUMMARY

03-Pla-80/65
PM: I-80 (2.4/5.7) SR 65 (R4.8/R6.9)
EA: 03-4e320k
Alternative 3

IV. Right of Way Escalated Value

	Item Cost
Acquisition (including excess lands, damages to remainder(s) and goodwill)	$ 7,471,138
Utility Relocation (State share)	$ 6,691,196
Relocation Assistance	$ 12,013
Clearance/Demolition	$ -
Title and Escrow Fees	$ 4,805

TOTAL RIGHT OF WAY ITEMS $ 14,179,152

Anticipated Date of Right of Way Certification _____
(Date to which values are escalated)

Construction Contract Work:

Brief Description of Work:

Right of Way Branch Cost Estimate for Work* $ -

* This dollar amount is to be included in the Roadway and/or Structures items of work, as appropriate. Do not include in Right of Way items.

Estimate Prepared By: Kelly Kilpatrick (Print Name) Date: Phone:

ATTACHMENT 7

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

TO: Chad Baker **FROM:** Ken Murray/Barbara Procissi **Unit/Senior TE Name:** Advance Planning/Chad Baker **Project Manager:** Samuel Jordan	**CO:** PLA **DISTRICT:** 03 **DATE:** 5-5-09 **EA:** 4E320K	**RTE:** **80** 65	**KP:**	**PM:** 2.4/5.7 R4.8/R6.9
PROJECT SEPARATION: X Landscape as part of roadway work EA X Landscape under separate EA (Follow-up)	**PROJECT:** **I80/SR65 Interchange Modification** **TYPE:** **STIP/Local** **PROJECT MILESTONE:** **PID**			

PROJECT DESCRIPTION: Construct HOV Direct Connector, replace current eastbound 1-80 to northbound SR65 loop connector ramp with a new flyover connector ramp, widen the westbound 1-80 to northbound SR 65 connector ramp to 2 lanes, construct auxiliary lane on the southbound SR 65 connector ramp to westbound 1-80 and re-align and widen to 2 lanes the southbound SR 65 to eastbound 1-80 connector ramp.

AREA (A) FOR HIGHWAY PLANTING: 49 Acres – Follow-up Highway Planting Project
AREA (A) FOR EROSION CONTROL: 60 Acres – As part of Highway Construction Project
PLANT COUNT FOR MITIGATION PLANTING: Unknown

LANDSCAPE FREEWAY STATUS: X Yes ☐ No
HIGHWAY PLANTING IS: X Warranted ☐ Not Warranted
SCENIC HIGHWAY STATUS: ☐ Officially Designated ☐ Eligible X Not Designated
REVEGETATION REQUIRED? ☐ Permit Required ☐ Offset of Visual Impact ☐ Other (Forest Service, BLM, etc.)

BIOLOGIST CONTACT: Erik Schwab
DATE OF CONTACT: May 5, 2009
REVEG. SPECIALIST CONTACT:

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

WATER AND POWER AVAILABILITY:

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

DESIGN FOR MAINTENANCE SAFETY: Yes

CONTEXT SENSITIVITY:
X It is determined that the project will involve consideration of highway aesthetics and will require further evaluations pertaining to specific roadside enhancements.

☐ No foreseen issues with highway aesthetics ☐ Other _____

COOPERATIVE MAINTENANCE AGREEMENTS:

Project may Involve additional tasks indicated

X Visual Simulation	X Erosion Control	☐ SWPPP/NPDES
X Highway Planting	X Field Visit	X Context Sensitive Solutions/Aesthetics
☐ Contour Grading	X Cost Estimate	X Landscape Evaluation

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

COST INFORMATION – WITH HIGHWAY CONSTRUCTION:	
Erosion Control; Semi permanent until follow-up planting project, all staging areas. Estimate 60A @ $5k/A	**$ 180,000**
Visual Oak Mitigation – LS placeholder until more is known	**$ 40,000**
Irrigation crossovers and impacts to existing irrigation	**$ 115,000**
	TOTAL $ 335,000
ITEMS TO BE INCLUDED WITH STRUCTURES/DISTRICT ESTIMATE:	
Soundwall aesthetics (blend with EA 36783)	
Column aesthetics	
Retaining wall aesthetics (blend with EA 36782 & 36783)	
Gore Paving (cobble?)	
COST INFORMATION – FOLLOW-UP PLANTING PROJECT:	
EB Atlantic Street on-loop realignment – 4 A	
EB Taylor Rd off-loop realignment – 3 A	
EB 80 to NB 65 remove ramps – 12 A	
SB 65 to EB 80 remove ramps – 15A	
SB 65 to WB 80 realign ramp – 15 A.....49A @ $75,000.....	**$ 3,675,000**
Plant Establishment – 3 yrs	**$ 900,000**
Design Contingency (9%)	**$ 425,000**
	TOTAL $5,000,000

OTHER RELATED INFORMATION:
X Landscape Architecture Resource Estimate:
Attached

ROADSIDE VEGETATION MANAGEMENT TREATMENT NEEDS:
X Extended Gore Areas
☐ Guardrails and Signs
☐ Medians
X Road Edge
X Side Slopes/Embankment Slopes
(See: http://www.dot.ca.gov/hq/LandArch/roadside/index.htm for potential treatment measures)

PREPARED BY: Barbara Procissi DATE: 5/5/09 CONCURRED BY: [signature] (Project Manager) DATE: 5/5/09

APPROVED BY: Kenneth A. Mungy DATE: MAY 5, 2009
(Landscape Architecture or Engineering Services Branch Chief)

ATTACHMENT 8

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: CHAD BAKER
Advance Planning Unit

Date: May 1, 2009

File: 03-4E320K
03-Pla 80/65 Interchange
I-80 PM 2.4/5.7
SR-65 PM R4.8/R6.9

From: GAGANDEEP BAINS
Project Coordinator
District 3- Office of Transportation Management Planning

Subject: Transportation Management Plan (TMP) Data Sheet

Background

- This project is located in Placer County at the SR-65/I-80 interchange. The purpose of this project is to reduce congestion, improve traffic operations and enhance safety. This project consists of various modifications to I-80, SR-65 and the interchange at their junction.
  The proposed improvements consist of:
  - Construction of a 2-lane bi-directional High Occupancy Vehicle (HOV) direct connector on eastbound (EB) I-80 to northbound (NB) SR-65 and southbound (SB) SR-65 to westbound (WB) I-80
  - Replacement of EB I-80 to NB SR-65 loop connector with a 3-lane flyover ramp
  - Ramp widening and additional lane at the SB SR-65 on-ramp from Galleria Boulevard
  - Connector widening with associated auxiliary lane at the WB I-80 to NB SR-65 connector
  - Reconstruction and widening of the SB SR-65 to EB I-80 connector flyover
  - Widening of I-80 and SR-65 and associated ramp realignments at Eureka Road, Taylor Road and Galleria Boulevard
  - Widening the East Roseville Viaduct
  - Replacement of the Taylor Road Overcrossing to accommodate widening I-80
  - Construct HOV lanes on SR-65 from the I-80/SR-65 interchange past the Galleria Boulevard interchange
  - Ramp meter installation at the SB SR-65 on-ramp from Galleria Boulevard

- For Traffic volumes refer to **Table-1.**

Table-1: Traffic Volumes (2007 Traffic Volumes on California State Highways)			
Location Description	**Type of Roadway**	**Peak-Hour (both directions combined)**	**AADT**
03-PLA-65-PM R4.86	Multilane	8,200 vph	108,000 vpd
03-PLA-80-PM 4.16	Multilane	13,100 vph	157,000 vpd

- For Ramp volumes refer to **Table-2.**

Table-2: Ramp Volumes			
Location Description	**Type of Roadway**	**AADT**	**Year**
03-PLA-65-PM R5.700	Off-Ramp to Harding Blvd from NB 65	14,600 vph	2006
03-PLA-65-PM R5.704	On-Ramp from Harding Blvd to SB 65	7,210 vph	2003
03-PLA-80-PM 3.241	On-Ramp from Taylor Rd to EB 80	10,800 vph	2006
03-PLA-80-PM 3.601	Off-Ramp to EB Taylor Rd from EB 80	4,450 vph	2006
03-PLA-80-PM 3.611	On-Ramp from WB Taylor Rd to WB 80	5,100 vph	2006
03-PLA-80-PM 3.950	On-ramp from SB 65 to EB 80	27,500 vph	2004
03-PLA-80-PM 4.220	Off-ramp to NB 65 from EB 80	27,600 vph	2004
03-PLA-80-PM 4.320	Off-ramp to NB 65 from WB 80	13,000 vph	2004
03-PLA-80-PM 4.500	On-ramp from SB 65 to EB 80	96,00 vph	2004

- For Truck volumes refer to **Table-3.**

Table-3: Truck Volumes (2007 Truck Volumes on California State Highways) (Percentage of total AADT)		
Location Description	**Location**	**% Trucks**
03-PLA-65-PM R4.863	After Jct. Route 80	15.1
03-PLA-80-PM 4.16	Before Jct. Route 65	6.2

Recommendations

- TMP recommends that the selected alternative include the replacement of the EB I-80 to NB SR-65 loop connector with the 3-lane flyover connector. The configuration of the loop connector is problematic when maintenance and/or construction activities are performed on the connector. Due to the loop configuration, the entire connector has to be closed during maintenance and construction activities. This forces all traffic to a detour route as well as restricts the available time to perform these operations. By adding a 3-lane flyover, the connector can be left open during maintenance and construction activities, which will reduce future maintenance/ construction costs as well as removing the need for a detour.

- TMP recommends that the mixed flow connector from WB I-80 to NB SR-65 be constructed prior to the construction of HOV connector from WB I-80 to NB SR-65.
- TMP recommends the use of A+B bidding and the Incentive/Disincentive provisions to expedite this project.
- This project will require staged construction.
- Delay damage clauses will be used with this project.
- On SR 65 and I-80 in Placer County, work will be limited to nighttime hours and no lane closures will be allowed during daytime and peak commute hours on weekdays.
- Closing ramps for longer than 10 hours will require the District Lane Closure Review Committee (DLCRC) approval.
- Closing the connector for longer than 6 hours will require the approval of DLCRC.
- During ramp and connector closures, traffic will be detoured in accordance with detour traffic handling plans prepared by the Project Engineer in Coordination with Traffic Operations.
- An early coordination with the City of Roseville and Placer County will need to be established to discuss any closures or traffic handling options on the city streets or county roads.
- The Project Engineer will need to coordinate with the City of Roseville for concurrence of the detour, as part of the permits process prior to PS&E.
- Detour route should be checked to ensure that it meets all Highway Design Manual requirements, including truck turning radii and vertical/horizontal clearances.
- Ramps adjacent to the closed freeway lanes may be closed.
- Ramps will be constructed as part of this project and extended ramp closures will be anticipated.
- Construction vehicles with 3+ axles will be restricted from merging onto the mainline from the shoulders from 6 AM to 9 AM and 3 PM to 7PM.
- To construct additional lanes, it is anticipated shoulder closures at various ramps will be needed.
- Only one ramp may be closed at a time within the same interchange.
- No consecutive ramps shall be closed.
- A detour should be in place whenever a ramp is closed.
- Include sufficient funds for necessary improvements on detours.
- Lane closures will be performed in accordance with Standard Plan Sheet T10, "Traffic Control System for Lane Closure on Freeways and Expressways".
- The maximum length of any lane closure shall be limited to 1 mile.
- Due to high traffic volumes within the project limit, lane closure during weekday daytime hours and peak commute hours will require the approval of DLCRC.
- Due to high traffic volumes, any work from above the deck will be limited to nighttime hours.
- Portable changeable message signs (PCMS) will be required in direction of traffic during construction for each lane, shoulder and connector closure, and at cross streets, if necessary.
- PCMS must be placed 7 days prior to any lane or ramp closures.

- When K-rail is used as a separation barrier between the work zone and the traveled way, there is no closure time restriction.
- In area where the work zone is less than 6 feet away from the traveled way and the work is expected to continue for an extended period of time, K-rail should be considered.
- K-rail along with gawk screen should be utilized during construction.
- K-rail shall be secured in place prior to allowing traffic on the bridge when bridge rail is being replaced.
- No lane closures, shoulder closures, or other traffic restrictions will be allowed on Special Days, designated legal holidays and the day preceding designated legal holidays; and when construction operations are not actively in progress.
- Access to driveways and cross streets must be maintained during construction, in accordance with traffic control standard plans or traffic handling plans.
- Pedestrian access on the city streets must be maintained during construction, with at least one sidewalk open on one side of the roadway at all times. Additional signs will be required to direct pedestrians when sidewalks are closed for contract work.
- Bicycle traffic must be maintained on the city streets below the viaduct during construction. Additional signs and striping will be required to direct bicycle traffic when bikeways are closed for contract work.
- Work at this location will require the assistance of COZEEP with a full time presence.
- The assistance of Freeway Service Patrol (FSP) is recommended during construction. Coordination with Placer County will be needed during PA&ED to ensure the arrangements for additional FSP during construction.
- A separate service contract is recommended to handle the public outreach effort.
- Coordination with the Placer County and City of Roseville is required to handle traffic through the work area.
- Coordination with the operation of the existing Union Pacific Railroad within the project limits will be required, if construction activities impact its facilities.
- Coordination with projects within, or nearby the project limits will be required to avoid conflicts. Care should be taken in the timing of the schedules of each project to ensure that they are not constructed at the same time, or at a minimum to ensure that all projects are coordinated during construction to minimize any interference among the various projects.
- If a detour is not usable by truck traffic, the office of Truck Permits shall be notified.
- If there is a change in the scope or schedule of the project, the TMP unit must be advised, as this may affect the TMP recommendations.
- Lane closure charts will have to be developed prior to P&E.

Cost

- For estimating purposes, use $4,600 per working day that requires traffic control for the Traffic Management Plan (TMP) items. These items include:
    - Traffic Control System and Maintain Traffic: $3,000/ traffic control day
    - Portable Changeable Message Signs: $1,600/ traffic control day

- The cost for Public Information Office (PIO) is estimated at $100,000 (lump sum) for this project. The PIO funds are paid for public outreach in the form of fliers, mailers, brochures and other uses as determined by the Public Information Officer.
- COZEEP is estimated at $4,000 per working night whenever CHP involvement is needed during construction. COZEEP estimate should include 2 officers per vehicle when performing night work.
- The cost for FSP is estimated at $100,000 (lump sum).
- If there is a change in the scope of the project or the order of work (schedule), please advise the TMP unit, as this may affect the TMP estimate.

P & E Requirement

To complete a TMP for this project, please provide the following to the Office of Traffic Management Planning at least three months prior to P&E: project description, title sheet, typical cross sections, layout sheets, construction cost estimates, number of working days, project schedule, and a contact person.

Needed Resources

TMP office will need the following resources to complete our work:

Activity 160	140 hours
Activity 230	150 hours
Activity 230.20	500 hours (last six months of P&E)
Activity 255	80 hours
Activity 265	30 hours
Activity 270	80 hours
Activity 285	20 hours

Attachments

- TMP Checklist

D-3 TRANSPORTATION MANAGEMENT PLAN CHECKLIST

District / EA: 03-4E320K
Date Prepared: May 1, 2009
Prepared By: Gagandeep Bains

Co.Rte.-PM PLA-80 PM 2.4/5.7;PLA-65 PM R4.8/R6.9
Location: In Placer County at the SR 65/I-80 Interchange

Description: Pla I-80/SR 65 Interchange

	REQUIRED	RECOMMENDED	NOT APPLICABLE	BEES Item No.	COMMENTS	UNIT COST	REQUIRED IN SPEC.
1.0 Public Information Strategies							
1.1 Brochures and Mailers		X					
1.2 Media Releases (& minority media sources)		X			Required for daytime lane closures		
1.3 Paid Advertising		X					
1.4 Public Information Center		X					
1.5 Public Meetings/Speakers Bureau		X		066063			
1.6 Project Telephone Hotline		X					
1.7 Internet, E-Mail		X			Website needed		
1.8 Local cable TV and News		X					
1.9 Notification to Impacted groups (i.e. bicycle users, pedestrians with disabilities, others)		X					
1.10 Project Web Page		X			Website needed		
1.11 Caltrans Public Information Office		X		066063			
1.12 Consultant Public Information Office		X					
1.13 Other items			X				
2.0 Traveler Information Strategies							
2.1 Changeable Message Signs (permanent)	X						X
2.2 Changeable Message Signs (portable)	X			128650			X
2.3 Special Construction Signs		X		120690			
2.4 Traveler Information Systems (CHIN/Internet)		X		861985			
2.5 Highway Advisory Radio "HAR" (fixed or mobile)		X		860520	If available		
2.6 Radar Speed Sign		X		066064			
2.7 Traffic Management Team			X				
2.8 Revised Transit Schedules/ Maps			X				
2.9 Bicycle community information			X				
2.10 Other item			X				
3.0 Incident Management							
3.1 COZEEP	X			066062			
3.2 Freeway Service Patrol (tow truck service patrol)	X			066065	Coordination with Placer County needed		X
3.3 Traffic Surveillance Stations (loops or CCTV)		X		066876			
3.4 Transportation Management Center		X					
3.5 Traffic Control Inspector (Caltrans)			X				
3.6 Traffic Management Team			X				
3.7 On-site Traffic Advisor (contractor)		X					
3.8 Other Items			X				
4.0 Construction Strategies							
4.1 Delay damage clause	X						X
4.2 Night work	X				Per Lane Closure Charts		X
4.3 Weekend Work		X					
4.4 Extended Weekend Closures		X			Ramps		
4.5 Planned Lane Closures		X			If approved by DLCRC		
4.6 Planned Ramp/Connector Closures	X				If approved by DLCRC		X
4.7 Total Facility Closure			X				
4.8 Project Phasing		X					
4.9 Truck Traffic Restrictions			X				
4.10 Reduced Lane Widths		X					

	REQUIRED	RECOMMENDED	NOT APPLICABLE	BEES Item No.	COMMENTS	UNIT COST	REQUIRED IN SPEC.
4.0 Construction Strategies (Continued)							
4.11 Temporary K-Rail	X			129000			X
4.12 Temporary Traffic Screens	X			129150			X
4.13 Reduced Speed Zones		X					
4.14 Traffic Control Improvements			X				
4.15 Contingency Plans	X						X
4.15.1 Material Plant on standby			X				
4.15.2 Extra Critical Equipment on site		X					
4.15.3 Material Testing Plan			X				
4.15.4 Alternate Material on site (In case of failure or major delays)			X				
4.15.5 Emergency Detour Plan	X						
4.15.6 Emergency Notification Plan	X						
4.15.7 Weather Conditions Plan			X				
4.15.8 Delay Timing and Documentation Plan		X					
4.15.9 Late Closure Reopening Notification		X					
4.16 Signal timing modification			X				
4.17 Coordination with adjacent construction	X						X
4.18 Double Fine Zone (signs)		X					
4.19 Right of Way Delay			X	066022			
4.20 Other Items			X				
5.0 Demand Management							
5.1 HOV Lanes/Ramps			X				
5.2 Ramp metering		X					
5.3 Park-and-Ride Lots			X				
5.4 Parking Management/Pricing			X				
5.5 Rideshare Incentives			X				
5.6 Rideshare Marketing		X		066069			
5.7 Transit, Train, or Light-Rail Incentives			X	066066			
5.8 Transit Service Modification			X				
5.9 Variable Work Hours			X				
5.10 Telecommute			X				
5.11 Other Items			X				
6.0 Alternate Route Strategies							
6.1 Ramp Closures	X						
6.2 Street Improvements	X						
6.3 Reversible Lanes			X				
6.4 Temporary Lanes or Shoulders Use		X					
6.5 Freeway to freeway connector closures		X					
6.6 Encroachment Permit from City/County		X					
7.0 Other Strategies							
7.1 Application of new technology			X				
7.2 Other Items			X				

Comments:

ATTACHMENT 9

State of California

Memorandum

Business, Transportation and Housing Agency

Date: March 24, 2009

File: 03-PLA-80-PM 2.4/5.7
03-PLA-65 PM R4.8/R6.9
EA 4E320K
PEAR

To: **KEN LASTUFKA**
Environmental Coordinator

From: **MA. ALICIA BEYER**
North Region Hazardous Waste Office

Subject: Hazardous Waste Revised Evaluation for a Preliminary Environmental Analysis Report

This traffic improvement project has four alternatives. However, this hazardous waste evaluation is for Alternative 3, which is Alternatives 1 and 2 combined.

The project proposes 80/65 IC alterations to include HOV Direct Connector, EB 80 to NB 65 ramp re-alignment, SB 65 to EB 80 ramp re-alignment, and auxilary lanes for for both slip connectors, SB 65 to WB 80 & WB 80 to NB 65. Revision was done because preliminary geometrics have been revised.

Temporary Construction Easements (TCE) and new Right of Way (R/W) will be acquired. The project has state, local and federal funding.

Proposed Scope of Work:

- Vegetation removal.
- Ground disturbance, road cut/fill.
- Road widening (I-80 & SR 65).
- Grinding.
- Reconstruct drainage, pave and re-grade side ditches, and extend and construct culverts as necessary.
- Reconstruct, remove and place new metal beam guard railing (MBGR).
- Bridge work, construct fly-over connector ramp.
- Demolish Route 65/I-80 JCT separation Bridge No.19-0151 R/L (PM R4.863).
- Demolish and replace Taylor Rd OC Bridge No.19-0093 (PM 3.661).
- Widen/modify East Roseville Viaduct Bridge No.19-0152 R/L (PM R5.45).
- Ramp demolition and replacement:
  SB 65 to WB I-80; SB 65 to EB I-80; EB I-80 to NB 65
- Modified EB Eureka ramps - lane additions and slight alignment changes.
- Construct additional lane SB 65 to EB I-80 ramp.
- Construct various TOS elements within the project area.
- Landscaping.
- Construct retaining walls fro new ramp abutment as needed.
- Overhead traffic signs relocation.
- Construction staging area(s).

Conclusions:

I. **Records review.** The hazardous waste investigation was limited to a review of aerial photographs, a field review, and the use of GeoTracker record search data from the Regional Water Quality Control Board. Based on this review and without the benefit of soil and ground water sampling, or a full field investigation, no hazardous waste as petroleum hydrocarbons is expected to be encountered within the proposed project work scope.

II. **Yellow and white traffic stripe.** Due to potentially hazardous levels of lead and chromium in yellow and white color traffic paint and/or thermoplastic stripes, if removal is included in the project scope, it shall be removed and disposed in accordance with the Non-Standard Special Provision 15-300 N-SSP.

III. **Aerial Deposited Lead (ADL)**
Lead-contaminated soil may exist due to the historical use of leaded gasoline, leaded airline fuels, waste incineration, etc. The areas of primary concern in relation to highway facilities are soils along routes that have had high vehicle emissions due to large traffic volumes, congestion, or stop and go situations during the time period when leaded gasoline was in use. For practical purposes, most Aerially Deposited Lead (ADL), due to vehicle emissions, would have been deposited prior to 1986. If the project area was constructed or reconstructed with clean material after 1986, it is likely that the levels of ADL contaminated soil are low. The only way to approximate the level of ADL contaminated soil is by sampling and testing the project area by performing a Preliminary Site Investigation (PSI). Depending on the test results, soil on the project may have to be managed as a hazardous waste in compliance with State and Federal laws.

a.) **Along I-80 from Post Mile (PM) 2.88 to PM 5.60.** Based on Geocon, Consultants, ADL site investigation report dated July 2008, conducted under contract 03A1368, Task Order No. 42 for project EA 367831, concluding:

"Lead has been detected within the top 3 ft of material in unpaved areas within the highway right of way. Levels of lead found within the project limits range from less than 5 to 360 mg/kg total lead with an average concentration of 14 mg/kg total lead, as analyzed by EPA Test Method 6010 or EPA Test Method 7000 series. Levels of lead found within the project limits have an average soluble concentration of 1.5 mg/l as analyzed by the California Waste Extraction Test and based upon a 95% Upper Confidence Limit Predicted WET Lead."

Soils excavated from the surface to any depth up to 3 ft can be reused or disposed as non-hazardous soil with respect to lead content.

b.) **Along SR 65 PM R4.8 to R7.0.** Based on the past agricultural use of land and on that the original SR 65 was realigned during 1985/1986 from approximately the City of Lincoln to the current I-80 intersection. The original SR 65 was abandoned and since then, roadway improvements, and new intersections and over crossings have been constructed along the current SR 65. Levels of ADL if any, are expected to be very low.

Soils excavated from the surface to any depth up to 3 ft can be reused on site with respect to lead content. However, no excess oil shall leave the project area without being tested for testing for ADL

c.) **Conclusion and recommendations for ADL along I-80 and SR 65.**
The Contractor shall prepare a project specific "Lead Compliance Plan" and a lead awareness training to prevent or minimize worker exposure to lead while handling material potentially containing aerially deposited lead. Attention is directed to Title 8, California Code of Regulations, Section 1532.1, "Lead," for specific Cal-OSHA requirements when working with lead. Handling material containing aerially deposited lead shall be in conformance with rules and regulations including, but not limited to the following agencies:

- California Division of Occupational Safety and Health Administration (Cal-OSHA)
- California Regional Water Quality Control Board,

The Lead Compliance Plan shall contain the elements listed in Title 8, California 1987of Regulations, Section 1532.1(e)(2)(B). Before submission to the Engineer, the Lead Compliance Plan shall be approved by an Industrial Hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene. The Plan shall be submitted to the Engineer at least 15 days prior to beginning work in areas containing aerially deposited lead.

Lead Compliance Plan cost is expected to be about $3,500.

Caltrans handling procedures for soil must include Dust Control, Spillage Prevention, and Air Quality Monitoring during construction.

IV. Naturally Occurring Asbestos (NOA)

Based on the "The State of California, Air Resources Board (ARB) Map" showing the principal Asbestos Deposits, this project site is not located in an area of naturally occurring asbestos (NOA).

V. Asbestos Containing Materials (ACM's)

Demolish Route 65/I-80 JCT separation Bridge No. 19-0151 R/L - Built in 1985.
Demolish/Replace Taylor Road OC Bridge No. 19-0093 – Built in 1989.
Widen/Modify East Roseville Viaduct Bridge No. 19-0152 R/L – Built in 1987.
Demolish Ramps (SB 65 to WB I-80; SB 65 to EB I-80; EB I-80 to NB 65)

The As-builts showed the use of neoprene strip and expanded polystyrene in the constructions expansion joints and pads for the above structures. Based on the As-built plans there are no asbestos containing materials (ACM's) and or Lead base paint on the structures. However, utilities running trough the utilities openings in the structure may contain ACMs. N-SSP's may apply.

VI. NESHAP Notification

As required by the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 61, Subpart M, and California Health and Safety Code section 39658(b)(1), the Contractor shall prepare bridge/structure demolition, or widening notification form and attachments to be submitted to the California Air Resource Board, Compliance Division, (2020 'L' Street, Sacramento, CA 95814,) and to County of Placer APCD (3091 County Center Dr., Suite 240, Auburn, CA 95603, Ph(530)745-2330, http://www.placer.ca.gov/Departments/Air.aspx) as required by NESHAP, 40CFR Part 61, and California Air Resources Control Board rules.

VII. Asphalt Grindings.

No AC grindings may be placed in shoulder backing at locations where erosion or maintenance operations could result in their deposit into waterways. Surplus excavated soil if any, shall not be disposed of outside the project limits. Caltrans handling procedures for soil must include Dust Control, Spillage Prevention, and Air Quality Monitoring during construction.

VIII. Metal Beam Guardrail (MBGR) wood post.

If MBRG is removed, than the contractor shall prepare and submit safety and health work practices for handling treated wood waste approved by an industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene. Treated Wood Waste Non-Standard Special Provision (N-SSP) is required.

Manage treated wood waste under title 22 CA Code of Regulations, Division 4.5, Chapter 34. Wood removed from metal beam guard railing is treated with creosote, pentachlorophenol, copper azole, copper boron azole, chromated copper arsenate, amrnoniacal copper zinc arsenate, copper naphthenate, alkaline copper quaternary, or acid copper chromate. Treated wood waste must be disposed in an approved treated wood waste facility.

If there are new modifications to the project limits or work scope, a supplemental ISA will be required cover those changes. Do not hesitate to call at me at (530) 741-4580 if you have any questions or comments.

cc: Sam Vandell – Project Engineer
Chad Baker - Advance Planning

ATTACHMENT 10

1. Preliminary Environmental Analysis Report

1. Project Information

District: 03 **County:** Pla **Route:** 65/80 **Post Mile:** (I-80) 2.4 – 5.7; (SR-65) R4.8 – R6.9 **EA:** 4E320

Project Title: I-80/SR 65 Interchange Improvements Project

Project Manager: Sam Jordan **Phone #:** (916) 274-0655

Project Engineer: Chad Baker **Phone #:** (530) 740-5749

Environmental (Manager) Office Chief: John Webb **Phone #:** (916) 274-0588

Environmental Planner Generalist: Ken Lastufka **Phone #:** (916) 274-0586

2. Project Description

Purpose and Need:

The purpose of this project is to reduce congestion, improve traffic operations and enhance safety.

The State Route (SR) 65/I-80 interchange is currently experiencing operational problems caused by high peak period traffic volumes and the less efficient geometry of the loop connector. Additional delay is caused by downstream bottlenecks on both corridors. These bottlenecks are generated by high demands from southbound SR 65 to westbound I-80 (AM and PM), and eastbound I-80 to northbound SR 65 (PM). Vehicle hours of delay, average speeds, travel times, and other traffic performance measures will continue to degenerate as growth increases in the surrounding areas.

Description of work:

The project proposes to provide improvements to the I-80/SR 65 interchange in Placer County east of Roseville. The project also modifies the Eureka Road ramps (lane additions and slight alignment changes). These improvements may include auxiliary lanes and/or new connector ramps.

Alternatives:

There are four alternatives including the "No Build" alternative. Alternatives 1 and 2 partially overlap in their scopes of work while Alternative 3 is the "ultimate build" project encompassing all the work of Alternatives 1 and 2. Please refer to Attachment 3 of the Project Study Report for project features and layouts.

Alternative 1: HOV Direct Connector, Connector Widening and Auxiliary Lanes

The proposed improvements consist of:

- Construction of 2-lane bi-directional High Occupancy Vehicle (HOV) direct connector on eastbound I-80 to northbound SR 65 and southbound SR 65 to westbound I-80
- Construct HOV lanes on SR 65 from the I-80/SR 65 interchange past the Galleria Blvd interchange
- Ramp widening and additional lane at the southbound SR 65 on-ramp from Galleria Boulevard
- Auxiliary lane at the northbound SR 65 on-ramp from Galleria Boulevard

- Ramp widening with associated auxiliary lane at the westbound I-80 to northbound SR 65 connector
- Realign and widen the southbound SR 65 to eastbound I-80 flyover connector
- Ramp realignments at Taylor Road and Galleria Boulevard from the HOV lane addition to I-80 and SR 65
- Widen East Roseville Viaduct
- Replacement of the Taylor Road Overcrossing to accommodate widening I-80 for the HOV direct connector
- Ramp meter installation

Total Capital Cost (Roadway, Structures and Right of Way) is $230,000,000.

Alternative 2: Mixed Flow Flyover, Connector Widening and Auxiliary Lanes

The proposed improvements consist of:

- Replacement of the eastbound I-80 to northbound SR 65 loop connector with a 3-lane flyover connector
- Ramp widening and additional lane at the southbound SR 65 on-ramp from Galleria Boulevard
- Auxiliary lane at the northbound SR 65 on-ramp from Galleria Boulevard
- Ramp widening with associated auxiliary lane at the westbound I-80 to northbound SR 65 connector
- Ralign and widen the southbound SR 65 to eastbound I-80 flyover connector
- Ramp realignments at Eureka Road, Taylor Road and Galleria Boulevard from the HOV lane addition to I-80 and SR 65
- Widen the East Roseville Viaduct
- Replacement of the Taylor Road Overcrossing to accommodate widening I-80 for the HOV direct connector
- Ramp meter installation

Total Capital Cost (Roadway, Structures and Right of Way) is $240,000,000.

Alternative 3: Ultimate Build Project

The proposed improvements consist of:

- Construction of 2-lane bi-directional High Occupancy Vehicle (HOV) direct connector on eastbound I-80 to northbound SR 65 and southbound SR 65 to westbound I-80
- Construct HOV lanes on SR 65 from the I-80/SR 65 interchange past the Galleria Blvd interchange
- Replacement of the eastbound I-80 to northbound SR 65 loop connector with a 3-lane flyover connector
- Ramp widening and additional lane at the southbound SR 65 on-ramp from Galleria Boulevard
- Auxiliary lane at the northbound SR 65 on-ramp from Galleria Boulevard
- Ramp widening with associated auxiliary lane at the westbound I-80 to northbound SR 65 connector
- Realign and widen the southbound SR 65 to eastbound I-80 flyover connector
- Ramp realignments at Eureka Road, Taylor Road and Galleria Boulevard from the HOV lane addition to I-80 and SR 65
- Widening the East Roseville Viaduct
- Replacement of the Taylor Road Overcrossing to accommodate widening I-80 for the HOV direct connector
- Ramp meter installation

Total Capital Cost (Roadway, Structures and Right of Way) is $280,000,000.

Alternative 4: No Build

This alternative is not considered to be a reasonable because it does not meet the purpose and need of the project.

The new HOV lanes will likely operate during peak traffic periods; off-peak, these lanes will be mixed flow.

New right of way is required. There are five partial acquisitions and one complete acquisition necessary to construct Alternative 1. Two additional partial acquisitions are required for Alternatives 2 and 3.

3. Anticipated Environmental Approval

CEQA		NEPA	
☐	Categorical/Statutory Exemption	☐	Categorical Exclusion
☒	Negative Declaration / focused ND	☒	Finding of No Significant Impact
☐	Environmental Impact Report	☐	Environmental Impact Statement

4. Special Environmental Considerations

This PEAR analyzes the scope of work required to construct Alternative 3, which combines the features of Alternative 1 and Alternative 2. As such, this PEAR covers the worst-case scenario regarding potential impacts and estimated resources.

Potential special environmental processes that may be necessary include:

- Section 4(f), for work near the Antelope Creek Trail.
- Work within Antelope Creek, which will require a wetland delineation and a jurisdictional determination from the USACE. There is also a possibility of work within Secret Ravine Creek, if the Taylor Road ramps are removed and improvements are made to the Eureka Road/Atlantic Street ramps.
- A work window for work in Antelope Creek and Secret Ravine Creek may be required if affected fish species are discovered. The work window would occur during the dry season.
- Work window for removal of potential nesting trees and bushes, September 1st to January 31st.

5. Anticipated Environmental Commitments

This PEAR analyzes the scope of work required to construct Alternative 3, which combines the features of Alternative 1 and Alternative 2. As such, this PEAR covers the worst-case scenario regarding potential impacts and estimated resources.

Depending upon the results of the environmental studies, anticipated environmental commitments may include (see Attachment D for estimated costs):

- Work window for removal of potential nesting trees and bushes, September 1st to January 31st.
- A work window for Antelope Creek and possible Secret Ravine Creek during the dry season.
- Mitigation related to encroachment of floodplains, costs unknown at this time.
- Mitigation related to work within Antelope Creek and Secret Ravine Creek, costs unknown at this time (pending determination by USACE).
- Vegetation replacement as a result of construction of new connectors, auxiliary lanes and ramp lanes, and elimination of existing ramps, costs unknown at this time.

- If aerial deposited lead is discovered at hazardous levels, a lead compliance plan would be required at a cost of approximately $3,500.
- Noise abatement (soundwalls) may be required, pending the results of noise monitoring. Cost is unknown at this time.

6. Permits and Approvals

Since there will be work within Antelope Creek, and possibly Secret Ravine Creek, the following permits are required:

- Section 401 Water Quality Certification (Regional Water Quality Control Board); approximately 6 months to acquire.
- Section 404 Nationwide Permit (US Army Corps of Engineers); up to one year to acquire.
- 1602 Streambed Alteration Agreement (California Department of Fish and Game); approximately 6 months to acquire.
- Statewide National Pollutant Discharge Elimination System (NPDES) Permit issued by the State Water Resources Control Board, (Board Order 99-06-DWQ). Caltrans already has this permit.

Please refer to Attachment D for estimated permit cost information.

7. Level of Effort

Factors that may affect cost, schedule, level of effort, and resources needed to complete the environmental document include:

- Community impacts:
  - Relocation of residents and/or businesses
  - Impacts of extended temporary ramp closures to businesses and residents

- Cultural resources:
  - Discovery of cultural resources could extend the schedule three to five years.

- Biological resources:
  - Discovery of federally-listed plant species would trigger FESA Section 7 consultation, and possible external factors beyond the Department's control, such as resources agency staffing shortages, may lengthen consultation timeframes.
  - Plant and animal surveys need to be conducted during the spring, summer and early fall months. If possible, these surveys should be started in spring 2009. The project schedule may be affected if these surveys are pushed to spring 2010.

- Hazardous waste:
  - Discovery of hazardous waste within the environmental study limits of the project.

8. PEAR Technical Summaries

4(f) Impacts:
The project may create 4(f) issues if it results in any temporary or permanent impacts to the City of Roseville's Antelope Creek Trail that extends under Highway 65 west of I-80 and adjacent to Antelope Creek.

Community Impacts:
A full Community Impacts Analysis (CIA) will be required for this project. The CIA will address potential construction related impacts such as economic impacts and impacts to public services, as well as

issues related to land use and growth. Due to the limited acquisition of land for this project, any other community impacts are expected to be minor.

Population and Housing
A Relocation Impact Study prepared by Right of Way staff may be required, as well as an analysis in the Community Impact Assessment (CIA) to determine whether or not low-income or minority households would be displaced. An initial review of census tract data for the potential project area reveals no immediate concern that low-income or racial minority populations would be disproportionately affected. The demographic figures reveal that within the project area, populations are identified by the 2000 census as predominately White alone, not Hispanic or Latino, and median household incomes, which are higher than the U.S. median income, are consistent with the county as a whole.

Economic:
At this time it does not appear that there will be any negative impacts to the local economy from the project. If, upon further analysis of the proposed project, there will be any impacts to local businesses, particularly access restrictions and temporary ramp closures, then this will need to be studied in depth.

Utilities, Emergency Services, and Community Facilities:
All relevant local emergency service providers should be notified once the project scope and construction schedule are more clearly defined due to potential delays during construction.

Traffic and Transportation/Bicycle and Pedestrian Facilities:
This project is expected to improve the level of service (LOS) within the project area. Should temporary ramp closures be required for interchange improvements, a Transportation Management Plan (TMP) will be required to ensure that any temporary ramp closures have minimal impacts on the flow of traffic along these portions of the freeway and in adjacent neighborhoods. If temporary ramp closures occur, the CIA will need to determine if there will be a significant impact on access in the study area.

Relocating the existing 230 kV electrical tower onto the Sun Splash parking lot may remove a number of available parking spaces.

Land Use:
This project is included in the Placer County Transportation Planning Agency's 2027 Regional Transportation Plan (RTP) and is therefore consistent with local transportation planning efforts. Zoning in the project is area almost entirely urban (including residential), with just one small area of rural residential zoning, which appears to be north of the project limits. Planning for the area includes the Sunset Industrial Area (SIA), which consists of 8,883 acres adjacent to and east of SR 65. Placer Ranch, located within the SIA, is expected to include a branch campus of California State University, Sacramento.

Temporary Impacts
Temporary adverse effects to traffic circulation and access are expected during construction. Lane closures will be necessary and expedited night work is anticipated. Temporary impacts to circulation and access are likely to be most aggravated at the busier interchanges. Some effects of construction noise to commercial and residential areas closest to the project is expected.

This project will also require avoiding potential conflicts in scheduling with other transportation projects in the area, including the Lincoln Bypass, Placer Parkway, and operational improvements to I-80 in Placer County. These, and other projects currently in the planning stages could effect traffic handling and exacerbate other construction related impacts. The impacts of other ongoing projects will require the consideration of staging and scheduling issues to minimize adverse construction related effects.

Visual/Aesthetics:
A Visual Impact Assessment (VIA) is required.

The VIA is based on several factors; existing visual qualities, viewer exposure and the level of concern the viewer has to change in the project area. Travelers include commuters, truck drivers, and others who drive to recreation areas, shopping centers and residential communities. These individuals view the project corridor as it is seen from the highway. Neighbors include observers from adjacent land uses such as shopping centers, office buildings, fast food restaurants, apartments or residential areas. Their views vary greatly by location, elevation relative to the highway and density of existing vegetation. Pedestrian views of the projected change will be primarily from recreational users of the Antelope Creek Trail that extends under SR 65, west of I80. These users would be joggers, walkers and on bicycles. They could be solitary or in small groups enjoying the out-of doors.

Potential permanent visual impacts include:

- New retaining walls at approximate eight locations, varying in length from about 120 feet to 800 feet. Their heights are not known at this time. The retaining walls will have an aesthetic treatment to compensate for the additional height and visual impact.
- New flyovers at three locations. The juncture of these new flyovers is within the existing interchange, thus greatly reducing their visual impacts to the adjoining urban and residential neighbors.
- Loop ramp realignments at two locations (Atlantic Street and Taylor Road interchanges).

All disturbed areas will be replanted with irrigated landscaping and/or erosion control as is appropriate to their specific location. Removed landscaping will be replaced. Existing trees will be preserved and protected to the maximum extent possible. Replacement landscaping will follow existing design concept of trees, mulch and maximum mowable areas. All slopes will be vegetated to protect against erosion and to help meet Storm Water Quality issues. The design of the flyovers and retaining walls are to incorporate existing, or soon to be constructed, corridor aesthetics.

Temporary visual impacts would occur during construction and involve heavy equipment, traffic management equipment and construction delays.

The affected routes are not designated Scenic Highways within the project limits.

Visual simulations may be required. Cost of visual simulations can be significant; however, because a decision as to the number of simulations has not been made, cost is unknown at this time.

Cultural Resources:
Archaeological Sensitivity:
Much of the State right of way and adjacent area has been previously surveyed for cultural resources by Caltrans cultural resources staff, with negative results. Additionally, previous cultural resources studies have been conducted within a half-mile radius of the project primarily for numerous commercial and residential developments in the project vicinity. Within this radius, but outside the present project Area of Potential Effect (APE), numerous investigations with prehistoric and historical archaeological resources have been identified. The area of the I-80/SR 65 interchange is extremely disturbed, with commercial, residential development and recent highway construction, which may preclude the presence of surface and/or buried archaeological resources.

Built-Environment Sensitivity:
It is unlikely a Historic Resource Evaluation Report (HRER) will be necessary. The project area is comprised mostly of modern development and the one known historic resource (the First Transcontinental Railroad-UPRR) that passes through the project APE has been well documented and would be considered eligible for listing in the National Register of Historic Places (NRHP). However, a

Finding of Effects (FOE) document, researched and completed by a PQS Architectural Historian, may be required to comply with both State and Federal laws. An adverse effect to an eligible resource (If determined) would require entering into a Memorandum of Agreement (MOA) between the State Historic Preservation Officer and FHWA. It would also require evaluation under Section 4(f) of the National Transportation Act in the Environmental document. The potential need for an MOA and 4(f) evaluation may add 12 to 18 months to the overall project schedule.

Pre-Field Research:
For compliance with Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA), Caltrans cultural resources staff would be required to:

- Conduct a record and literature search at the California Historical Information System;
- Coordinate with interested parties (i.e., local historical society, Native American Heritage Commission, local Native American representatives) and the State Office of Historic Preservation (OHP);
- Delineate an Area of Potential Effects (APE);
- Conduct an archaeological survey of all areas not previously examined within the last 5 years and preparation of an Archaeological Survey Report (ASR);
- Prepare a Finding of Effect (FOE);
- Preparation of a Historic Property Survey Report, a summary document; and
- Coordination with OHP.

Cultural resources could not be identified during field surveys. The number of months required to satisfy Section 106 compliance is contingent on the results of pedestrian surveys and background research of the area within the project APE:

If no cultural resources are identified within this project's APE, it is expected that Section 106 compliance could be completed within six months. This is assuming that the project scope is set prior to the beginning of environmental studies. It must be emphasized, however, that a six-month time frame for compliance with Section 106 would only be possible if no archaeological or built environment resources were identified within the APE. Findings of archaeological or built environmental resources could extend the schedule for completing Section 106 studies from three to five years to allow for the evaluation of significance of any identified resources as well as possible mitigation of impact to those significant resources.

If cultural resources are identified within the project APE, they will require documentation and evaluation for significance under Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). If any archaeological sites are found within the project's APE an Archaeological Study Report (ASR) must be written, which can take up to 12 months. The potential for buried archaeological resources will need to be evaluated for this project and, if needed, work will need to be conducted to assess the likelihood of such resources within the project area. If it is determined that the site(s) will be impacted by the project, a Phase II evaluation excavation will be required and the results described in a Phase II Report. The Phase II study and follow-up documentation will require <u>at a minimum</u> an additional 18 months and may require as much as 3 years. If the archaeological sites are determined to be eligible for listing on the National Register of Historic Places, as a result of the Phase II evaluative excavation, a Phase III data recovery will be required before construction.

If the project plans change, the results for the PEAR evaluation may be invalidated, and potential impacts to cultural resources may need to be re-examined.

Hydrology and Floodplain:
A floodplain evaluation report will be prepared to analyze the effects of the alterations to the bridge footings on the 100-year floodplain. The project will encroach on several floodplains, including Secret Ravine and Antelope Creek. The floodplain study will include an assessment of the impacts and mitigation measures to reduce the significance of these impacts.

Water Quality and Storm Water Runoff:
Caltrans has a Statewide National Pollutant Discharge Elimination System (NPDES) Permit (permit) issued by the State Water Resources Control Board, (Board Order 99-06-DWQ). This permit regulates the storm water and non-storm water discharges associated with construction activity, discharges associated with normal maintenance and operations of Caltrans facilities (also known as a Municipal Storm Water Permit), and it also serves as a State of California Waste Discharge Requirement.

The permit requires Caltrans to comply with the requirements of the statewide Construction General Permit (Board Order Number 99-08-DWQ). During construction, compliance with the permit requires the appropriate selection and deployment of both structural and non-structural Best Management Practices (BMPs) that achieve the performance standards of Best Available Technology economically achievable/Best Conventional Pollutant Control Technology (BAT/BCT) to reduce or eliminate storm water pollution.

(PLA-65, PM 4.8-12.9)
The principal receiving water bodies appears to be Antelope Creek, Pleasant Grove Creek, and Orchard Creek. The Water Quality Planning Tool list no Total Maximum Daily Load (TMDL) or constituents from the 2006 303(d) list for the affected waterbodies; thus, there is no pollutant/stressor of concern or cause of impairment to its beneficial use.

(PLA-80, PM 3.4-4.7)
The principal receiving water bodies appears to be Dry Creek and Secret Ravine Creek. The Water Quality Planning Tool list no TMDLs or constituents from the 2006 303(d) list for the affected waterbodies; thus, there is no pollutant/stressor of concern or cause of impairment to its beneficial use. CVRWQCB has a high interest in projects within the I-80 corridor and Secret Ravine. The project contains both aspects and will require coordination with NPDES, Design, and CVRWQCB during the different stages of the project. Should the SWDR exempt Treatment BMPs, a Technical Report may be required by the RWQCB 60 days prior to PS&E.

At this time, a Storm Water Data Report (SWDR) has not been prepared for this project. Thus, the Disturbed Soil Area (DSA) for the entire project is unknown. Also unknown are the specific Design Pollution Prevention, Treatment, and Construction Site BMPs selected by the Project Engineer (per Project Planning and Design Guide and SWDR). It is expected the Project Engineer will make the determination when completing the Evaluation Documentation Form.

The Central Valley RWQCB has concerns in the area regarding hydromodification from the previous project, Placer I-80 HOV Phase 3; therefore, expect coordination with the Board throughout the phases of design and construction. Expect the RWQCB to request how design will be addressing storm water point source control for pre and post velocities and quantities. Construction Site BMPs shall be selected to protect water bodies within or near the project limits from potential water pollution runoff from construction activities. To address the temporary water quality impacts, the contractor will implement Temporary Construction Site BMPs identified in the SWPPP or included as Line Item BMPs. It is expected that the project will have over 1.0 acres of DSA and will require a SWPPP.

<u>Recommendation to Minimize and Avoid Impacts to Water Quality:</u>
Adherence to the following is recommended to prevent receiving water pollution as a result of construction activities and/or operation from the repainting of the steel bridge element project:

1. The project shall adhere to the conditions of the Caltrans Statewide NPDES Permit CAS No. 000003 (Order No. 99-06-DWQ) issued by the State Water Resources Control Board. Adherence to the compliance requirements of the NPDES General Permit CAS No. 000002 (Order No. 99-08-DWQ) for General Construction Activities is required if the DSA is greater than 1.0 acre.
2. The Disturbed Soil Area will exceed 1.0 acre and a Caltrans approved SWPPP will be required, which specifies the level of temporary pollution control measures for the project. Standard Special Provision (SSP) 07-345 shall be included in the PS&E to address construction's temporary water pollution control measures. These measures must address soil stabilization, sediment control, tracking control and wind erosion control practices. In addition, the project plans must include non-storm water controls, waste management and material pollution controls, as a minimum. Line Item, Temporary Construction Site BMPs, may be required and incorporated into the PS&E.
   - If a SWPPP is specified, then a Notification of Construction (NOC) shall be submitted to the CVRWQCB at least 30 days prior to the start of construction.
   - Upon completion of the project, submittal of a Notice of Construction Completion (NOCC) to the CVRWQCB is required to indicate that project construction is completed and the SWPPP is no longer in effect.

3. Consideration should be given to include SSP 07-346 (Construction Site Management) during PS&E to control potential sources of water pollution before it encounters any storm water system or watercourse. It requires the Contractor to control material pollution, manage waste and non-storm water at the construction site. The Contractor prepared WPCP/SWPPP incorporates appropriate Construction Site BMPs to implement effective handling, storage, use and disposal practices during construction activities.
4. The Caltrans' Storm Water Management Plan (SWMP), the Project Planning and Design Guide (PPDG) Section 4, and the Evaluation Documentation Form (EDF) provide detailed guidance in determining if a specific project requires the consideration of permanent Treatment BMPs. Line Item BMPs may be required and incorporated into the PS&E.
5. Caltrans will participate in early project design consultation with CVRWQCB.

Hazardous Waste/Materials:
The hazardous waste investigation was limited to a review of aerial photographs, a field review and the use of Geo Tracker record search data from the Regional Water Quality Control Board. Based on this review and without the benefit of soil and ground water sampling or a full investigation, hazardous waste as petroleum hydrocarbons are not expected within the proposed project work scope.

Yellow and white traffic stripe
Due to potentially hazardous levels of lead and chromium in yellow and white color traffic paint and/or thermoplastic stripes, if removal is included in the project scope, it shall be removed and disposed in accordance with the Non-Standard Special Provision 15-300 N-SSP.

Aerial Deposited Lead (ADL)
Lead-contaminated soil may exist due because of the historical use of leaded gasoline, leaded airline fuels, waste incineration, etc. The areas of primary concern in relation to highway facilities are soils along routes that have had high vehicle emissions due to large traffic volumes, congestion, or stop and go situations during the time period when leaded gasoline was in use. For practical purposes, most aerially deposited lead (ADL) would have been deposited prior to 1986. If the project area was constructed or reconstructed with clean material after 1986, it is likely that the levels of ADL contaminated soil are low. The only way to approximate the level of ADL contaminated soil is by sampling and testing the project area by performing a Preliminary Site Investigation (PSI). Depending on the test results, soil on the project may have to be managed as a hazardous waste in compliance with State and Federal laws.

a.) *Along I-80 from Post Mile (PM) 2.88 to PM 5.60.*

According to Geocon Consultants July 2008 ADL site investigation report:

> "Lead has been detected within the top 3 ft. of material in unpaved areas within the highway right of way. Levels of lead found within the project limits range from less than 5 to 360 mg/kg total lead with an average concentration of 14 mg/kg total lead, as analyzed by EPA Test Method 6010 or EPA Test Method 7000 series. Levels of lead found within the project limits have an average soluble concentration of 1.5 mg/l as analyzed by the California Waste Extraction Test and based upon a 95% Upper Confidence Limit Predicted WET Lead."

Soils excavated from the surface to any depth up to 3 ft. can be reused or disposed as non-hazardous soil with respect to lead content.

b.) *Along SR 65 PM R4.8 to R7.0.*

The original SR 65 was abandoned after SR 65 was realigned in 1986. Since then, roadway improvements and new intersections and over crossings have been constructed along the current SR 65. Levels of ADL if any, are expected to be very low.

The Contractor shall prepare a project specific "Lead Compliance Plan" and a lead awareness training to prevent or minimize worker exposure to lead while handling material potentially containing aerially deposited lead. Attention is directed to Title 8, California Code of Regulations, Section 1532.1, "Lead," for specific Cal-OSHA requirements when working with lead. Handling material containing aerially deposited lead shall be in conformance with rules and regulations including, but not limited to the following agencies:

- California Division of Occupational Safety and Health Administration (Cal-OSHA)
- California Regional Water Quality Control Board,

The Lead Compliance Plan shall contain the elements listed in Title 8, California 1987of Regulations, Section 1532.1(e)(2)(B). Before submission to the Engineer, the Lead Compliance Plan shall be approved by an Industrial Hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene. The Plan shall be submitted to the Engineer at least 15 days prior to beginning work in areas containing aerially deposited lead.

The Lead Compliance Plan cost is expected to be about $3,500.

Caltrans handling procedures for soil must include Dust Control, Spillage Prevention, and Air Quality Monitoring during construction.

Naturally Occurring Asbestos (NOA)

Based on the "The State of California, Air Resources Board (ARB) Map" showing the principal Asbestos Deposits, this project site is not located in an area of naturally occurring asbestos (NOA).

Asbestos Containing Materials (ACM's)

The project includes the following structure demolitions and modifications:

- Demolish Route 65/I-80 JCT separation Bridge No. 19-0151 R/L - Built in 1985.
- Demolish/Replace Taylor Road OC Bridge No. 19-0093 – Built in 1989.
- Widen/Modify East Roseville Viaduct Bridge No. 19-0152 R/L – Built in 1987.
- Demolish Ramps (SB 65 to WB I-80; SB 65 to EB I-80; EB I-80 to NB 65)

The as-built plans show the use of neoprene strip and expanded polystyrene in the constructions expansion joints and pads for the affected structures. Based on these plans, there are no asbestos containing materials (ACM's) and or Lead base paint on the structure. However, utilities running trough the utilities openings in the structure may contain ACM's. Non-standards special provisions may apply.

NESHAP Notification
As required by the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 61, Subpart M, and California Health and Safety Code section 39658(b)(1), the Contractor shall prepare bridge/structure demolition, or widening notification form and attachments to be submitted to the California Air Resource Board, Compliance Division, and to County of Placer APCD as required by NESHAP, 40CFR Part 61, and California Air Resources Control Board rules.

Asphalt Grindings
No asphalt grindings can be placed in shoulder backing at locations where erosion or maintenance operations could result in their deposit into waterways. Surplus excavated soil shall not be disposed of outside the project limits. Caltrans handling procedures for soil must include Dust Control, Spillage Prevention, and Air Quality Monitoring during construction.

Metal Beam Guardrail (MBGR) wood post
If MBRG is removed, than the contractor shall prepare and submit safety and health work practices for handling treated wood waste approved by an industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene. Treated Wood Waste Non-Standard Special Provision (N-SSP) is required.

Manage treated wood waste under title 22 CA Code of Regulations, Division 4.5, Chapter 34. Wood removed from metal beam guard railing is treated with creosote, pentachlorophenol, copper azole, copper boron azole, chromated copper arsenate, amrnoniacal copper zinc arsenate, copper naphthenate, alkaline copper quaternary, or acid copper chromate. Treated wood waste must be disposed in an approved treated wood waste facility.

Air Quality:
This project is consistent with the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP) and Metropolitan Transportation Improvement Program (MTIP). As such a satisfactory affirmative regional conformity determination has been made.

Local (Project Level CO) Impacts
Full scope project level analysis is required for the project, including carbon monoxide (CO), particulate matter (PM_{10}), mobile source air toxics (MSAT), and construction emissions.

Construction Impacts
Caltrans Standard Specifications which includes Section 7-1.01F, "Air Pollution Control" and Section 10, "Dust Control" that require the contractor to comply with all pertinent rules, regulations, ordinances, and statues of the local air district in order to minimize any potential temporary construction-related emission impacts.

Noise:
The project is anticipated to meet the definition of a Type I project, requiring the need for a technical noise studies report. The need for noise abatement (such as soundwalls) will not be determined until after the noise monitoring is complete.

Climate Change:
Information from the Standard Environmental Reference regarding climate change will be incorporated. Climate change analysis involving modeling may be required.

Biological Environment:
Formal surveys will be completed for the Natural Environment Study (NES), as well as pre-construction surveys by a qualified biologist to determine absence/presence of listed and non-listed plant and animal species. These formal surveys will begin in early spring and end October 1st (within the same year). A Biological Assessment (BA) is not anticipated.

Surveys will be conducted for nesting/roosting bats and birds in bridge weep holes and expansion joints. Surveys for nesting birds will be conducted between February 15th and August 31st.

If tree and/or shrub removal is required, removal will be completed between September 1st and January 31st, during the non-nesting season for migratory and nesting birds.

Because of the potential work within Antelope Creek, and possibly Secret ravine Creek, a complete wetland delineation and jurisdictional determination from the USACE is required, and permits are needed before project construction begins. Formal consultation with the USFWS and NMFS may be required.

Cumulative Impacts:
A cumulative impact assessment will be conducted and included in the environmental document.

9. Summary Statement for PSR or PSR-PDS

Type of environmental approval:

- Negative Declaration (ND)/Finding of No Significant Impact (FONSI)

Key environmental issues:

- Potential 4(f) issues
- Right of way acquisition
- Ramp closures
- Visual impacts of new structures
- Floodplain impacts
- Aerial deposited lead
- Noise (soundwalls)
- Biological resources (nesting birds, bats, wetlands, work within creeks)

10. Disclaimer

The Preliminary Environmental Analysis Report (PEAR) provides information to support programming of the proposed project. It is not an environmental determination or document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in the Project Study Report (PSR). The estimates and conclusions in the PEAR are approximate and are based on cursory analysis of probable effects. A reevaluation of the PEAR will be needed for changes in project scope or alternatives, or in environmental laws, regulations, or guidelines.

11. List of Preparers

Resource	Specialist	Date
Cultural Resources	Rich Olson and Joan Fine	Feb. 2009
Biologist	Erik Schwab	Feb. 2009
Community Impacts	Alicia Boomer	Dec. 2008
Noise and Vibration	Ben Tam	Feb. 2009
Air Quality	Sharon Tang	Feb. 2009
Water Quality	Kevin Evarts	Dec. 2008

Hydrology and Floodplain	Gurdeep Bhattal	Feb. 2009
Hazardous Waste/Materials	Alicia Beyer	Feb. 2009
Visual/Aesthetics	Barbara Procissi	Feb. 2009
Climate Change	Sharon Tang	Feb. 2009
PEAR Preparer (name and title)	Ken Lastufka, Env. Planner	March 2009

12. Reviewed and Approval

I confirm that environmental cost, scope, and schedule have been satisfactorily completed and that the PEAR meets all Caltrans requirements. Also, if the project is scoped as an EA or EIS, I verify that the HQ DEA Coordinator has concurred in the Class of Action.

Environmental Office Chief — Date: 6/8/09

Project Manager — Date: 6/11/09

ATTACHMENTS

Attachment A:	PEAR Environmental Studies Checklist
Attachment B:	Estimated Resources by WBS Code
Attachment C:	Schedule
Attachment D:	PEAR Environmental Commitments Cost Estimate (Standard PSR)

Attachment A: PEAR Environmental Studies Checklist

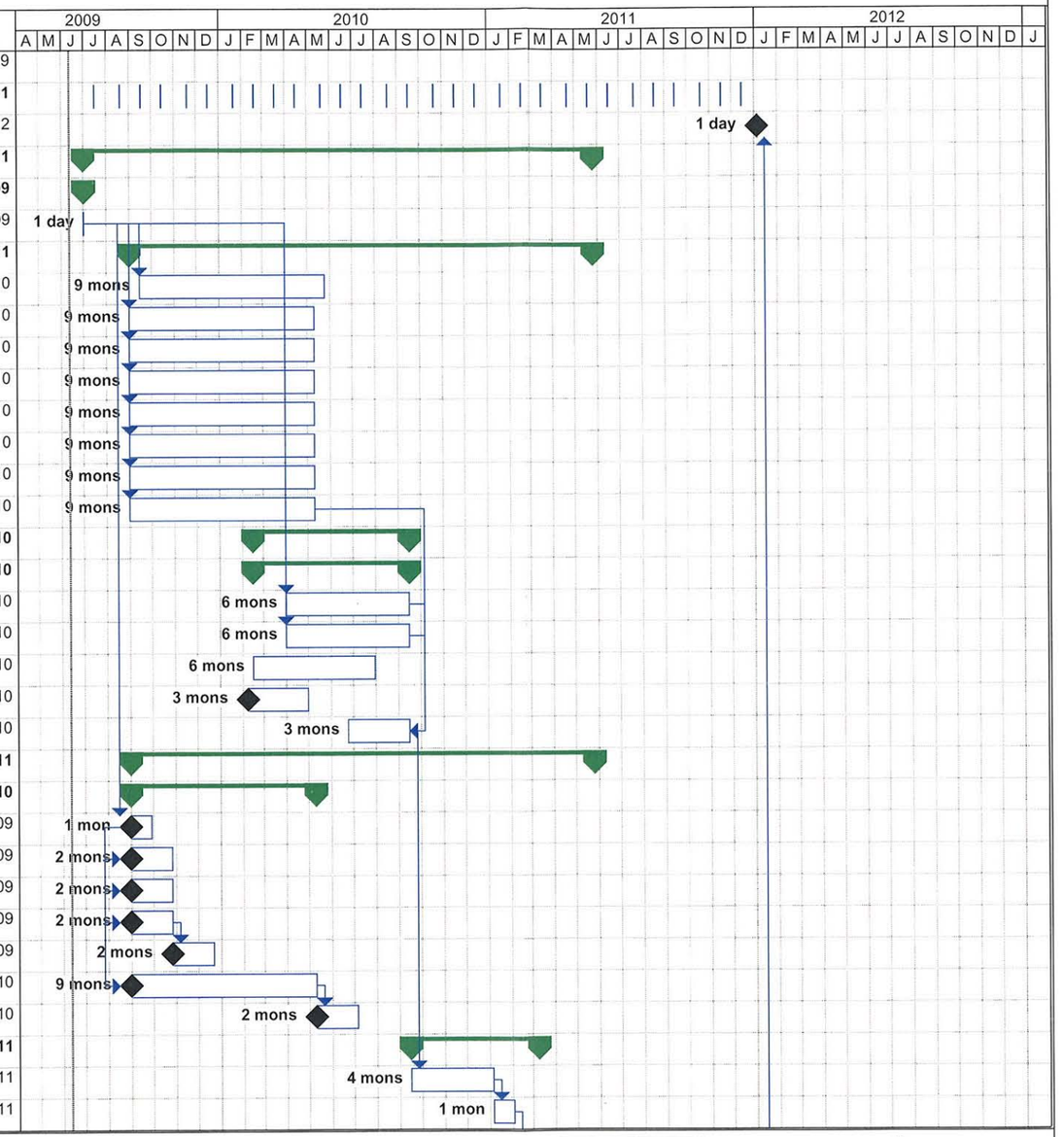
Rev. 11/08

Environmental Studies for PA&ED Checklist					
	Not anticipated	Memo to file	Report required	Risk* L M H	Comments
Land Use	☐	☐	☒	L	
Growth	☐	☐	☒	L	
Farmlands/Timberlands	☒	☐	☐	L	
Community Impacts	☐	☐	☒	L	
Community Character and Cohesion	☐	☐	☒	L	
Relocations	☐	☐	☒	L	
Environmental Justice	☐	☐	☒	L	
Utilities/Emergency Services	☐	☐	☒	L	
Visual/Aesthetics	☐	☐	☒	L	
Cultural Resources:	☐	☐	☐	L	
Archaeological Survey Report	☐	☐	☒	L	
Historic Resources Evaluation Report	☒	☐	☐	L	
Historic Property Survey Report	☐	☒	☐	L	
Historic Resource Compliance Report	☒	☐	☐	L	
Section 106 / PRC 5024 & 5024.5	☐	☒	☐	L	
Native American Coordination	☐	☒	☐	L	
Finding of Effect	☐	☒	☐	L	
Data Recovery Plan	☒	☐	☐	L	
Memorandum of Agreement	☒	☐	☐	L	
Other:	☐	☐	☐	L	
Hydrology and Floodplain	☐	☐	☒	L	
Water Quality and Stormwater Runoff	☐	☐	☒	L	
Geology, Soils, Seismic and Topography	☒	☐	☐	L	
Paleontology	☒	☐	☐	L	
PER	☐	☐	☐	L	
PMP	☐	☐	☐	L	
Hazardous Waste/Materials:	☐	☐	☐	L	
ISA (Additional)	☐	☐	☒	L	
PSI	☒	☐	☐	L	
Other:	☐	☐	☐	L	
Air Quality	☐	☐	☒	M	
Noise and Vibration	☐	☐	☒	L	
Energy and Climate Change	☐	☐	☒	L	
Biological Environment	☐	☐	☐	L	
Natural Environment Study	☐	☐	☒	L	
Section 7:	☐	☐	☐	L	
Formal	☐	☐	☒	L	
Informal	☐	☐	☐	L	
No effect	☐	☐	☐	L	
Section 10	☒	☐	☐	L	
USFWS Consultation	☐	☐	☒	L	
NMFS Consultation	☐	☐	☒	L	
Species of Concern (CNPS, USFS, BLM, S, F)	☒	☐	☐	L	

Environmental Studies for PA&ED Checklist					
	Not anticipated	Memo to file	Report required	Risk* L M H	Comments
Wetlands & Other Waters/Delineation	☐	☐	☒	L	
404(b)(1) Alternatives Analysis	☒	☐	☐	L	
Invasive Species	☒	☐	☐	L	
Wild & Scenic River Consistency	☒	☐	☐	L	
Coastal Management Plan	☒	☐	☐	L	
HMMP	☒	☐	☐	L	
DFG Consistency Determination	☒	☐	☐	L	
2081	☒	☐	☐	L	
Other:	☐	☐	☐	L	
Cumulative Impacts	☐	☐	☒	L	
Context Sensitive Solutions	☒	☐	☐	L	
Section 4(f) Evaluation	☐	☐	☒	L	
Permits:					
401 Certification Coordination	☐	☐	☒	L	
404 Permit Coordination, IP, NWP, or LOP	☐	☐	☒	L	
1602 Agreement Coordination	☐	☐	☒	L	
Local Coastal Development Permit Coordination	☒	☐	☐	L	
State Coastal Development Permit Coordination	☒	☐	☐	L	
NPDES Coordination	☐	☐	☒	L	
US Coast Guard (Section 10)	☒	☐	☐	L	
TRPA	☒	☐	☐	L	
BCDC	☒	☐	☐	L	

ATTACHMENT C
I-80/SR 65 Interchange Improvements Project (EA 4E320K)
Environmental Schedule for PEAR

ID	WBS	Task Name	Start Date	Finish Date
1	**100**	**Perform Project Management**	Wed 7/15/09	Wed 7/15/09
2	100.10.06	Attend PDT Meetings (once a month)	**Thu 7/16/09**	**Thu 12/15/11**
33	100.10.10	PA & ED	Thu 1/5/12	Thu 1/5/12
34	**165**	**Perform Environmental Studies & Prepare DED**	**Wed 7/1/09**	**Wed 5/25/11**
35	**165.05**	**Perform Environmental Scoping and Select Alts for Study**	**Wed 7/1/09**	**Wed 7/1/09**
36	165.05.01	Distribute Environmental Study Request and Mapping (Begin Environmental)	Wed 7/1/09	Wed 7/1/09
37	**165.10**	**Perform General Environmental Studies**	**Tue 9/1/09**	**Wed 5/25/11**
38	165.10.05	Perform Surveys and Mapping for Environmental Studies	Tue 9/15/09	Mon 5/24/10
39	165.10.15	Community Impact Assessment (CIA)	Tue 9/1/09	Mon 5/10/10
40	165.10.20	Visual Assessment/Scenic Resources	Tue 9/1/09	Mon 5/10/10
41	165.10.25	Noise Impact Study	Tue 9/1/09	Mon 5/10/10
42	165.10.30	Air Quality Impact Study	Tue 9/1/09	Mon 5/10/10
43	165.10.35	Water Quality Study	Tue 9/1/09	Mon 5/10/10
44	165.10.50	ISA for Hazardous Waste	Tue 9/1/09	Mon 5/10/10
45	165.10.60	Hydraulic/Floodplain Study Report	Tue 9/1/09	Mon 5/10/10
46	**165.15**	**Biological Studies**	**Mon 2/15/10**	**Wed 9/15/10**
47	**165.15.02**	**Conduct Biological Surveys**	**Mon 2/15/10**	**Wed 9/15/10**
48	165.15.02a	Conduct Plant Surveys	Thu 4/1/10	Wed 9/15/10
49	165.15.02b	Conduct Animal Surveys	Thu 4/1/10	Wed 9/15/10
50	165.15.02c	Conduct Bat Surveys	Mon 2/15/10	Fri 7/30/10
51	165.15.10	Wetland Study	Mon 2/8/10	Fri 4/30/10
52	165.15.20	Prepare NESR	Thu 6/24/10	Wed 9/15/10
53	**165.20**	**Perform Cultural Resource Studies**	**Tue 9/1/09**	**Wed 5/25/11**
54	**165.20.05**	**Perform Phase I Archaeological Studies**	**Tue 9/1/09**	**Mon 5/10/10**
55	165.20.05.05	Prepare area of potential effect (APE)/ Study Area Map	Tue 9/1/09	Mon 9/28/09
56	165.20.05.10	Conduct Native American Consultation	Tue 9/1/09	Mon 10/26/09
57	165.20.05.15	Perform records and literature search	Tue 9/1/09	Mon 10/26/09
58	165.20.05.20	Conduct Field Survey	Tue 9/1/09	Mon 10/26/09
59	165.20.05.25	Prepare Archaeological Survey Report (ASR)	Tue 10/27/09	Mon 12/21/09
60	165.20.20	Perform Historical and Architectural Resource Studies	Tue 9/1/09	Mon 5/10/10
61	165.20.25	Cultural Resource Compliance Consultation Documents	Tue 5/11/10	Mon 7/5/10
62	**165.25**	**Prepare Draft Environmental Document (DED)**	**Thu 9/16/10**	**Wed 3/9/11**
63	165.25.05	Prepare Draft Environmental Document	Thu 9/16/10	Wed 1/5/11
64	165.25.21	Conduct Environmental Quality Control	Thu 1/6/11	Wed 2/2/11



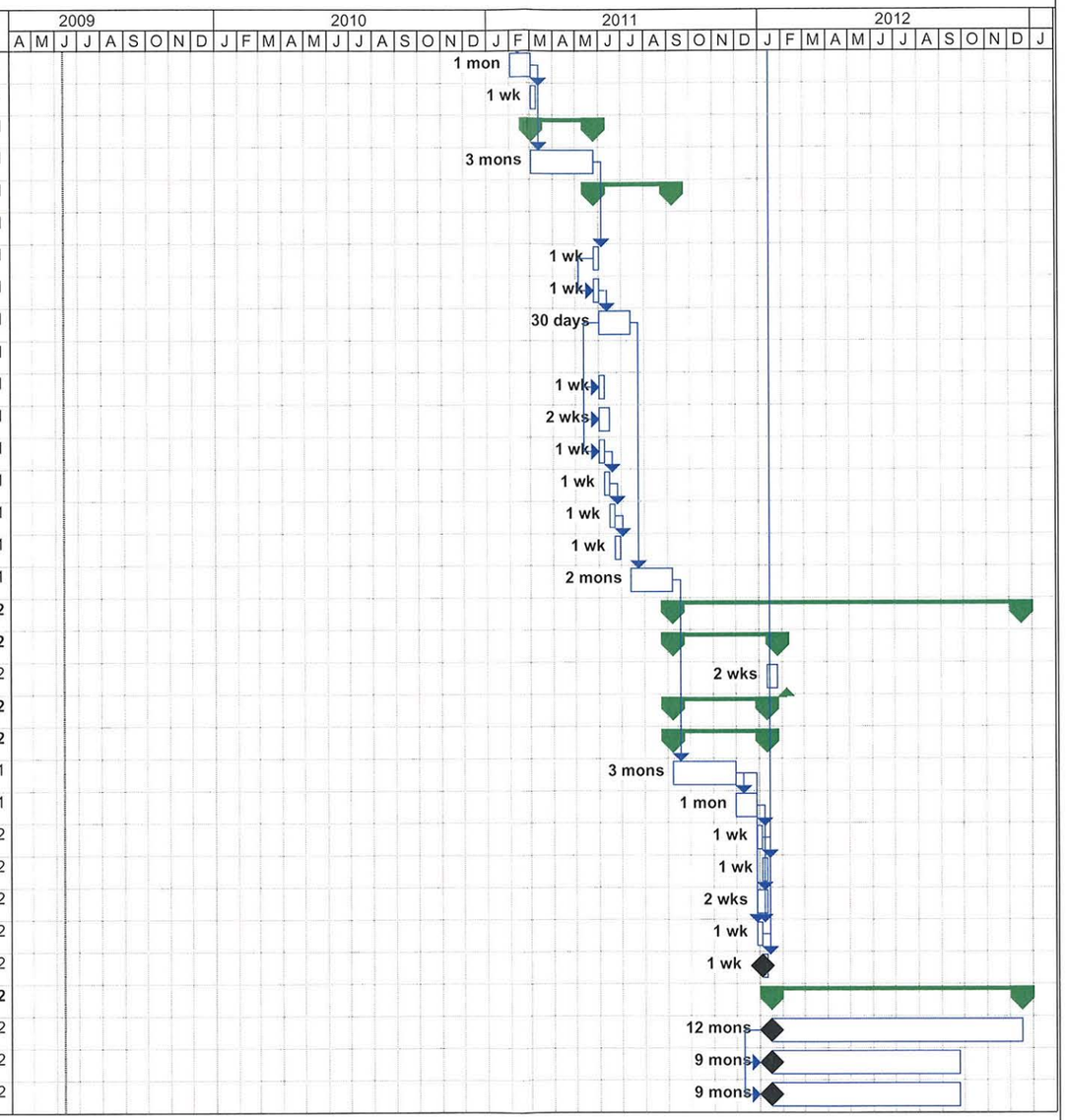
Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary | Deadline

Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks | External Milestone

Revised 6-11-09

ATTACHMENT C
I-80/SR 65 Interchange Improvements Project (EA 4E320K)
Environmental Schedule for PEAR

ID	WBS	Task Name	Start Date	Finish Date
65	165.25.22	Conduct Legal Review	Thu 2/3/11	Wed 3/2/11
66	165.25.25	Obtain approval to circulate	Thu 3/3/11	Wed 3/9/11
67	**165.30**	**NEPA Delegation**	**Thu 3/3/11**	**Wed 5/25/11**
68	165.30.01	NEPA review (if necessay)	Thu 3/3/11	Wed 5/25/11
69	**175**	**Circulate DED & Select Preferred Alternative**	**Thu 5/26/11**	**Wed 9/7/11**
70	**175.05**	**Circulate DED**	**Thu 5/26/11**	**Wed 7/13/11**
71	175.05.05	Prepare Distribution/Invitation Lists	Thu 5/26/11	Wed 6/1/11
72	175.05.10	Publish Notice of Public Hearing & Availability of DED	Thu 5/26/11	Wed 6/1/11
73	175.05.15	Publish & Circulate DED	Thu 6/2/11	Wed 7/13/11
74	**175.10**	**Prepare for and Hold Public Hearing**	**Thu 6/2/11**	**Wed 6/29/11**
75	175.10.10	Arrange for Public Hearing Logistics	Thu 6/2/11	Wed 6/8/11
76	175.10.15	Prepare Displays for Public Hearing	Thu 6/2/11	Wed 6/15/11
77	175.10.20	Prepare & Publish Notices of Public Hearing	Thu 6/2/11	Wed 6/8/11
78	175.10.25	Review Map Displays & Discuss Public Hearing	Thu 6/9/11	Wed 6/15/11
79	175.10.35	Hold Public Hearings	Thu 6/16/11	Wed 6/22/11
80	175.10.40	Prepare and distribute Record of Public hearing	Thu 6/23/11	Wed 6/29/11
81	175.15	Respond to Public Comments & Correspondence (begin prior to date shown)	Thu 7/14/11	Wed 9/7/11
82	**180**	**Final Environmental Document**	**Thu 9/8/11**	**Mon 12/17/12**
83	**180.05**	**Prepare and Approve Project Report**	**Thu 9/8/11**	**Wed 1/25/12**
84	180.05.10	Review and approve Project Report	Thu 1/12/12	Wed 1/25/12
85	**180.10**	**Prepare and Approve Final Environmental Document**	**Thu 9/8/11**	**Wed 1/11/12**
86	**180.10.05**	**Prepare and approve FED**	**Thu 9/8/11**	**Wed 1/11/12**
87	180.10.05.05	Circulate for Review, Including Legal Review (begin prior to date shown)	Thu 9/8/11	Wed 11/30/11
88	180.10.05.10	Revisions due to comments	Thu 12/1/11	Wed 12/28/11
89	180.10.05.30	Prepare CEQA NOD	Thu 12/29/11	Wed 1/4/12
90	180.10.05.31	Review and Submit NOD	Thu 1/5/12	Wed 1/11/12
91	180.10.05.32	NEPA Approval	Thu 12/29/11	Wed 1/11/12
92	180.10.05.70	Finalize Mitigation Measures	Thu 12/29/11	Wed 1/4/12
93	180.15	Complete Environmental Compliance	Thu 1/5/12	Wed 1/11/12
94	**205.05**	**Obtain Permits**	**Tue 1/17/12**	**Mon 12/17/12**
95	205.10.05	USACE Permit (404)	Tue 1/17/12	Mon 12/17/12
96	205.10.20	CDFG 1600 Agreement	Tue 1/17/12	Mon 9/24/12
97	205.10.50	Regional Water Quality Control Board 401 Permit	Tue 1/17/12	Mon 9/24/12



Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary | Deadline

Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks | External Milestone

Revised 6-11-09

Attachment D: PEAR Environmental Commitments Cost Estimate

Standard PSR Only

(Prepare a separate form for each viable alternative described in the Project Study Report)

PART 1 PROJECT INFORMATION *rev. 11/08*

District-County-Route-Post Mile 03-PLA-65-80	EA: 03-4E320
Project Description: Provide improvements to the I-80/SR 65 interchange in Placer County east of Roseville.	
Form completed by (Name/District Office): Ken Lastufka, Venture Oaks District 3, Sacramento	
Project Manager: Sam Jordan	Phone Number: 916-274-0655
Date: 2-10-09	

PART 2 PERMITS AND AGREEMENTS

	Permits and Agreements **($$)**
☒ Fish and Game 1602 Agreement	$8,000
☐ Coastal Development Permit	
☐ State Lands Agreement	
☒ Section 401 Water Quality Certification	$20000
☒ Section 404 Permit – Nationwide (U.S. Army Corps)	$0
☐ Section 404 Permit – Individual (U.S. Army Corps)	
☐ Section 10 Navigable Waters Permit (U.S. Army Corps)	
☐ Section 9 Permit (U.S. Coast Guard)	
☐ Other:	
Total (enter zeros if no cost)	$28000

PART 3. ENVIRONMENTAL COMMITMENTS FOR PERMANENT IMPACTS

To complete the following information:

- Report costs in $1,000s.
- Include all costs to complete the commitment:
  - Capital outlay and staff support. Refer to Estimated Resources by WBS Code. For example, if you estimated 80 hours for biological monitoring (WBS 235.35 Long Term Mitigation Monitoring), convert those hours to a dollar amount for this entry. For current conversion rates from PY to dollars, see the Project Manager.
  - Cost of right of way or easements.
  - If compensatory mitigation is anticipated (for wetlands, for example), insert a range for purchasing credits in a mitigation bank.
  - Long-term monitoring and reporting
  - Any follow-up maintenance
  - Use current costs; the Project Manager will add an appropriate escalation factor.
  - This is an estimating tool, so a range is not only acceptable, but advisable.

Environmental Commitments Alternative 3		
	Estimated Cost in $1,000's	Notes
Noise abatement or mitigation		See notes
Special landscaping		
Archaeological resources		
Biological resources		See notes
Historical resources		
Scenic resources		See notes
Wetland/riparian resources		See notes
Res./bus. relocations		
Other: Haz waste		See notes
Total (enter zeros if no cost)		

NOTES TO ATTACHMENT D

Environmental Commitments Table

Noise abatement or mitigation:

The need and accurate cost for noise abatement (such as soundwalls) cannot be determined until after the noise monitoring is complete. The current cost of soundwalls is approximately $1.33 million per linear mile (construction contract funding source). One-quarter to one-mile of new soundwalls may be required.

Commitment	Cost	Funding Source
Biological resources:		
• Exclusionary devices under structures:	$500 - $5,000	Construction contract
• Removal of nesting trees and bushes	$1,000 - $20,000	Construction contract
• Permits:	$28,000	Right-of-way
• Compensitory mitigation for wetlands:	$10,000 - $50,000	Right-of-way
• Staff hours (440 hours for studies, 300 hours for permits, 60 hours for monitoring, 60 hours for construction liason):	$98,000 (860 hours x $114/hour)	
Scenic resources:		
• Tree removal/replanting (50-200 trees):	$5,000 - $20,000	State furnished
Other:		
• Lead compliance plan:	$3,500	Construction contract

ATTACHMENT 11

ALTERNATIVE 1

State of California
Department of Transportation

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: Chad Baker
Chief, D03 Advance Planning
Department of Transportation, District 3

Attention Sam Vandell
Project Engineer

Date: May 1, 2009

File: 03-PLA-65/80
E.A. 4E320K
Alternate No. A

RECONSTRUCT
INTERCHANGE AT THE
INTERSTATE 80/STATE
ROUTE 65 CONFLUENCE

From: LINDY K. LEE
North Region Right of Way Manager
Project Coordination

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on March 15, 2009 , and the following assumptions and limiting conditions.

There is little utility information available for a comprehensive estimate. The utility unit will be using the scoping value until there is better data. There is an Outdoor Advertising Sign (billboard), a Roseville Auto mall Sign and on-site advertising signs that will need to be relocated. RAP will be involved with at least one property owner. As there is limited space, we are anticipating a 50% condemnation rate.

Right of Way Lead Time will require a minimum of _20_months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have bee approved and obtained. Additionally a minimum of _15_ months will be required after receiveing the last appraisal map to Right of Way for certification

cc. Sam Jordan

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

Caltrans

Date: May 1, 2009

03-PLA-65/80
E.A. 4E320K
RECONSTRUCT INTERCHANGE AT THE INTERSTATE 80/STATE ROUTE 65 CONFLUENCE

1. **Right of Way Cost Estimate:** **Alternate No. A**

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	$5,114,753	5%	$6,144,311
B. Mitigation acquisition & credits	$0		$0
C. Project Development Permit Fees	$0		$0
Subtotal	$5,114,753		$6,144,311
D. Utility Relocation (State Share) (Owner's share: $3,000,000)	$3,065,000	5%	$3,681,960
E. Relocation Assistance (RAP)	$10,000	5%	$12,013
F. Clearance/Demolition	$0		$0
G. Title & Escrow	$3,000	5%	$3,604
H. Total Estimated Right of Way Cost	$8,192,753	Rounded	$9,842,000
I. Construction Contract Work	$0		

2. **Current Date of Right of Way Certification** February 1, 2013

3. **Parcel Data:**

Type		Dual/Appr
X	0	
A	0	
B	4	
C	2	0
D	0	0
Total	6	

Utilities	
U4 - 1	5
- 2	0
- 3	0
- 4	6
U5 - 7	0
- 8	0
- 9	11

RR Involvements	
None	
C&M Agrmt	1
Svc Contract	1
Easements	1
Rights of Entry	1
Clauses	1

Areas:

R/W:	2.63 Ac.
Excess:	N/A
Mitigation:	N/A

No. Excess Pcls: 0

Misc. R/W Work	
RAP Displ	N/A
Clear/Demo	N/A
Const Permits	N/A
Condemnation	3
USA Involvement	

4. Are there any major items of construction contract work?
   Yes _____ No X

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

   On the small parcel (015-162-001), we need 1200 of 1500 square feet. It is recommended that we purchase the whole. Cattleman's Restaurant (015-162-002), we need to move at least two light standard, relocate the on-site sign and 42 parking spaces, and there may possibly be some landscaping issues. Pan Pacific (015-162-004), there is an ODA and several motor homes that will need to be relocated. RAP will be involved. The residence (015-162-007) is on commercial land and is currently boarded up.

   On the East side of the highway, the land is undeveloped and mostly owned by the City of Roseville. However, this could be identified as either highway commercial or residential (over the fence) as there are adjoining parcels with subdivision maps on them. Per appraisal division, use the same $300,000/acre as highway commercial.

6. Are any properties acquired for this project expected to be rented, leased, or sold?
   Yes _____ No X

7. Is there an effect on assessed valuation? Yes _____ Not Significant _____
   No X

8. Are utility facilities or rights of way affected? Yes X No _____

   AT&T, Comcast Cable, Kinder Morgan, PG&E (gas & electric), Level 3 Communications, Qwest, City of Roseville (water & sewer), and Placer County Water Agency

   3 - PG&E, Kinder Morgan, Level 3 Communications

   The following assumptions and limiting conditions apply: Estimate is based on utilities that have been mapped and does not account for any "invisible" utilities that can only be known through permit searches, as-builts, and verifications. Easements for both private and public utilities are needed. Only known public utility relocations will be addressed in this estimate. This estimate does not take into account possible timing conflicts between alternatives. Each alternative is viewed as a separate project. Kinder Morgan usually runs with the railroad, as well as possible underground facilities for PG&E Gas, Comcast, and Level 3. The assumption of these utilities being in conflict when the structures are built are likely.

9. Are railroad facilities or rights of way affected? Yes X No _____

   Union Pacific Railroad mainline tracks at the SR 65 Roseville bridge and overhead.

   Right of Entry - for contractors access to RR R/W outside state's easement during construction = $25,000 Phase-9 funds. Permanent Easement - new 7,000 s.f. easement will be required for widening of SR 65 structure = $100,000 Phase-9 funds. Service Contract - for railroad plan review/approval as well as flagging/inspection during construction = $100,000 Phase-4 funds. Construction and Maintenance Agreement - to provide cost allocations and future ownership/maintenance of widened structure.

   Project will require working over double mainline tracks. All work will be performed withing the limits of railroad operating right of way.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

10. Were any previously unidentified sites with hazardous waste and/or material found?
Yes _____ None Evident X

11. Are RAP displacements required? Yes _____ No X

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

No. of multi-family _____ No. of farms _____

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

12. Are there material borrow and/or disposal sites required?
Yes _____ No X

13. Are there potential relinquishments and/or abandonments?
Yes _____ No X

14. Are there any existing and/or potential airspace sites?
Yes _____ No X

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

Right of Way Lead Time will require a minimum of 20 months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of 15 months will be required after receiving the last appraisal map to Right of Way for certification.

16. Is it anticipated that Caltrans will perform all Right of Way work?
Yes X No _____

Evaluation Prepared By:
Right of Way: _____ Kelly Kilpatrick Date 6/5/09

Reviewed By:
RW Planning & Management: _____ Rich Covey Date 6/10/09

ALT C - PREFERRED ENTERED

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

RECOMMENDED FOR APPROVAL

_____
JEFFREY PURDIE,
Senior Right of Way Agent
Project Coordination Branch
Marysville

6/9/09
Date

APPROVED:

_____
LINDY K. LEE,
North Region Right of Way Manager
Marysville

6-5-09
Date

ALTERNATIVE 2

State of California
Department of Transportation

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: Chad Baker
Chief, D03 Advance Planning
Department of Transportation, District 3

Attention Sam Vandell
Project Engineer

From: LINDY K. LEE
North Region Right of Way Manager
Project Coordination

Date: May 1, 2009

File: 03-PLA-65/80
E.A. 4E320K
Alternate No. B

RECONSTRUCT
INTERCHANGE ON
ROUTE 80/STATE ROUTE
65 CONFLUENCE

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on March 15, 2009 , and the following assumptions and limiting conditions.

There is little utility information available for a comprehensive estimate. The utility unit will be using the scoping value until there is better data. There is an Outdoor Advertising Sign (billboard), a Roseville Auto mall Sign and on-site advertising signs that will need to be relocated. RAP will be involved with at least one property owner. As there is limited space, we are anticipating a 50% condemnation rate.

Right of Way Lead Time will require a minimum of _24_ months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have bee approved and obtained. Additionally a minimum of _21_ months will be required after receiveing the last appraisal map to Right of Way for certification

Attachments:

cc. Sam Jordan

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

Date: May 1, 2009

03-PLA-65/80
E.A. 4E320K
RECONSTRUCT INTERCHANGE ON ROUTE 80/STATE ROUTE 65 CONFLUENCE

1. **Right of Way Cost Estimate:** **Alternate No. B**

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	$6,212,253	5%	$7,462,729
B. Mitigation acquisition & credits	$0		$0
C. Project Development Permit Fees	$7,000	5%	$8,409
Subtotal	$6,219,253		$7,471,138
D. Utility Relocation (State Share) (Owner's share: $4,000,000)	$5,060,000	5%	$6,078,537
E. Relocation Assistance (RAP)	$10,000	5%	$12,013
F. Clearance/Demolition	$0		$0
G. Title & Escrow	$4,000	5%	$4,805
H. Total Estimated Right of Way Cost	$11,293,253	Rounded	**$13,566,000**
I. Construction Contract Work	$0		

2. **Current Date of Right of Way Certification** February 1, 2013

3. **Parcel Data:**

Type		Dual/Appr	Utilities	
X	0		U4 - 1	5
A	0		- 2	0
B	6		- 3	0
C	2	0	- 4	6
D	0	0	U5 - 7	0
			- 8	0
Total	8		- 9	11

RR Involvements	
None	
C&M Agrmt	1
Svc Contract	1
Easements	1
Rights of Entry	1
Clauses	1

Areas:

R/W:	5.53 Ac.		
Excess:	N/A	No. Excess Pcls:	0
Mitigation:	N/A		

Misc. R/W Work	
RAP Displ	N/A
Clear/Demo	N/A
Const Permits	N/A
Condemnation	4
USA Involvement	

4. Are there any major items of construction contract work?
   Yes _____ No X

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

6. Are any properties acquired for this project expected to be rented, leased, or sold?
   Yes _____ No X

7. Is there an effect on assessed valuation? Yes _____ Not Significant _____
No X

8. Are utility facilities or rights of way affected? Yes X No _____

The following assumptions and limiting conditions apply: Estimate is based on utilities that have been mapped and does not account for any "invisible" utilities that can only be known through permit searches, as-builts, and verifications. Easements for both private and public utilities are needed. Only known public utility relocations will be addressed in this estimate. This estimate does not take into account possible timing conflicts between alternatives. Each alternative is viewed as a separate project. Electric facility relocation involving power lines operating in excess of 50KV may require special permits and environmental review per R/W Manual 13.02.05.01 and a 2 year lead time. Kinder Morgan usually runs with the railroad, as well as possible underground facilities for PG&E Gas, Comcast, and Level 3. The assumption of these utilities being in conflict when the structures are built are likely.

9. Are railroad facilities or rights of way affected? Yes X No _____

Right of Entry - for contractors access to RR R/W outside state's easement during construction = $25,000 Phase-9 funds. Permanent Easement - new 7,000 s.f. easement will be required for widening of SR 65 structure = $100,000 Phase-9 funds. Service Contract - for railroad plan review/approval as well as flagging/inspection during construction = $100,000 Phase-4 funds. Construction and Maintenance Agreement - to provide cost allocations and future ownership/maintenance of widened structure.

10. Were any previously unidentified sites with hazardous waste and/or material found?
Yes _____ None Evident X

11. Are RAP displacements required? Yes _____ No X

No. of single family _____ No. of business/nonprofit _____
No. of multi-family _____ No. of farms _____

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

12. Are there material borrow and/or disposal sites required?
Yes _____ No X

13. Are there potential relinquishments and/or abandonments?
Yes _____ No X

14. Are there any existing and/or potential airspace sites?
Yes _____ No X

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

Right of Way Lead Time will require a minimum of 24 months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of 21 months will be required after receiving the last appraisal map to Right of Way for certification.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

16. Is it anticipated that Caltrans will perform all Right of Way work?
Yes X No ____

Evaluation Prepared By:

Right of Way: Kelly Kilpatrick Date 6/5/09

Reviewed By:

RW Planning & Management: Rich Covey Date 6/10/09

ALT C PREFERRED

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

RECOMMENDED FOR APPROVAL

JEFFREY A. PURDIE,
Senior Right of Way Agent
Project Coordination Branch
Marysville

6/9/09
Date

APPROVED:

for CINDY K. LEE,
North Region Right of Way Manager
Marysville

6-5-09
Date

ALTERNATIVE 3

State of California
Department of Transportation

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: Chad Baker
Chief, D03 Advance Planning
Department of Transportation, District 3

Attention Sam Vandell
Project Engineer

From: LINDY K. LEE,
North Region Right of Way Manager
Project Coordination

Date: May 1, 2009

File: 03-PLA-65/80
E.A. 4E320K
Alternate No. C

RECONSTRUCT
INTERCHANGE ON
ROUTE 80/STATE ROUTE
65 CONFLUENCE

Subjec Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on information received from you c March 15, 2009 , and the following assumptions and limiting conditions.

There is little utility information available for a comprehensive estimate. The utility unit will be using the scoping value until there is better data. There is an Outdoor Advertising Sign (billboard), a Roseville Auto mall Sign and on-site advertising signs that will need to be relocated. RAP will be involved with at least one property owner. As there is limited space, we are anticipating a 50% condemnation rate.

Right of Way Lead Time will require a minimum of _24_months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have bee approved and obtained. Additionally a minimum of _21_ months will be required after receiveing the last appraisal map to Right of Way for certification

Attachments:

cc. Sam Jordan

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

Date: May 1, 2009

03-PLA-65/80
E.A. 4E320K
RECONSTRUCT INTERCHANGE ON ROUTE 80/STATE ROUTE 65 CONFLUENCE

1. **Right of Way Cost Estimate:** **Alternate No. C**

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	$6,212,253	5%	$7,462,729
B. Mitigation acquisition & credits	$0		$0
C. Project Development Permit Fees	$7,000	5%	$8,409
Subtotal	$6,219,253		$7,471,138
D. Utility Relocation (State Share) (Owner's share: $4,500,000)	$5,570,000	5%	$6,691,196
E. Relocation Assistance (RAP)	$10,000	5%	$12,013
F. Clearance/Demolition	$0		$0
G. Title & Escrow	$4,000	5%	$4,805
H. Total Estimated Right of Way Cost	$11,803,253	Rounded	**$14,179,000**
I. Construction Contract Work	$0		

2. **Current Date of Right of Way Certification** February 1, 2013

3. **Parcel Data:**

Type		Dual/Appr
X	0	
A	0	
B	6	
C	2	0
D	0	0
Total	8	

Utilities	
U4 - 1	5
- 2	0
- 3	0
- 4	6
U5 - 7	0
- 8	0
- 9	11

RR Involvements	
None	
C&M Agrmt	1
Svc Contract	1
Easements	1
Rights of Entry	1
Clauses	1

Areas:

R/W:	5.53 Ac.		
Excess:	N/A	No. Excess Pcls:	0
Mitigation:	N/A		

Misc. R/W Work	
RAP Displ	N/A
Clear/Demo	N/A
Const Permits	N/A
Condemnation	4
USA Involvement	

4. Are there any major items of construction contract work?
Yes _____ No X

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

On the small parcel (015-162-001), we need 1200 of 1500 square feet. It is recommended that we purchase the whole. Cattleman's Restaurant (015-162-002), we need to move at least two light standard, relocate the on-site sign and 42 parking spaces, and there may possibly be some landscaping issues. Pan Pacific (015-162-004), there is an ODA and several motor homes that will need to be relocated. RAP will be involved. The residence (015-162-007) is on commercial land and is currently boarded up.

On the East side of the highway, the land is undeveloped and mostly owned by the City of Roseville. However, this could be identified as either highway commercial or residential (over the fence) as there are adjoining parcels with subdivision maps on them. Per appraisal division, use the same $300,000/acre as highway commercial.

6. Are any properties acquired for this project expected to be rented, leased, or sold?
Yes X No _____

7. Is there an effect on assessed valuation? Yes _____ Not Significant _____
No X

8. Are utility facilities or rights of way affected? Yes X No _____

AT&T, Comcast Cable, Kinder Morgan, PG&E (gas & electric), Level 3 Communications, Qwest, City of Roseville (water & sewer), and Placer County Water Agency

3 - PG&E, Kinder Morgan, Level 3 Communications

The following assumptions and limiting conditions apply: Estimate is based on utilities that have been mapped and does not account for any "invisible" utilities that can only be known through permit searches, as-builts, and verifications. Easements for both private and public utilities are needed. Only known public utility relocations will be addressed in this estimate. Electric facility relocation involving power lines operating in excess of 50KV may require special permits and environmental review per R/W Manual 13.02.05.01 and a 2 year lead time. Kinder Morgan usually runs with the railroad, as well as possible underground facilities for PG&E gas, Comcast, and Level 3. The assumption of these utilities being in conflict when the structures are built

9. Are railroad facilities or rights of way affected? Yes X No _____

Union Pacific Railroad mainline tracks at the SR 65 Roseville bridge and overhead.

Right of Entry - for contractors access to RR R/W outside state's easement during construction = $25,000 Phase-9 funds. Permanent Easement - new 7,000 s.f. easement will be required for widening of SR 65 structure = $100,000 Phase-9 funds. Service Contract - for railroad plan review/approval as well as flagging/inspection during construction = $100,000 Phase-4 funds. Construction and Maintenance Agreement - to provide cost allocations and future ownership/maintenance of widened structure.

Project will require working over double mainline tracks. All work will be performed withing the limits of railroad operating right of way.

10. Were any previously unidentified sites with hazardous waste and/or material found?
Yes _____ None Evident X

11. Are RAP displacements required? Yes X No _____

No. of single family 1 No. of business/nonprofit 2
No. of multi-family _____ No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated N/A
it is anticipated that sufficient replacement housing (w 0
Last Resort Housing.

12. Are there material borrow and/or disposal sites required?
Yes _____ No X

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

13. Are there potential relinquishments and/or abandonments?
Yes _____ No X

14. Are there any existing and/or potential airspace sites?
Yes _____ No X

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

Right of Way Lead Time will require a minimum of 24 months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of 21 months will be required after receiving the last appraisal map to Right of Way for certification.

16. Is it anticipated that Caltrans will perform all Right of Way work?
Yes X No _____

Evaluation Prepared By:

Right of Way: Kelly Kilpatrick Date 6/5/09

Reviewed By:

RW Planning & Management: Rich Covey Date 6/10/09

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

RECOMMENDED FOR APPROVAL:

JEFFREY PURDIE,
Senior Right of Way Agent
Project Coordination Branch
Marysville

6/9/09
Date

APPROVED:

LINDY K. LEE,
North Region Right of Way Manager
Marysville

6-5-09
Date

ATTACHMENT 12

NO BUILD

I-80 2007	WB AM Hr Peak Period	EB PM Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	13,541	14,390	3,788	3,896
Rocklin Rd Off-Ramp	1,099	4,381	356	1,080
Rocklin Rd On Ramp	2,902	604	721	184
East of I-80/SR 65 IC	15,344	18,167	4,153	4,792
WB off to NB 65	3,861		1,160	
WB on from SB 65	9,564		2,782	
EB on from SB 65		5,096		1,491
EB off to NB 65		12,826		3,375
West of I-80/SR 65 IC	21,047	25,897	5,775	6,676
Taylor Rd Off Ramp		1,749		388
Taylor Rd On Ramp	2,597		712	
East of Eureka Rd	23,644	27,646	6,487	7,064
Eureka Rd Off Ramp	1,121	4,591	364	1,186
Eureka Rd Off Ramp (Loop)	3,348		1,019	
Eureka Rd On Ramp	3,193	4,672	862	1,111
Eureka Rd On Ramp (Loop)		1,454		363
West Eureka Rd	22,369	26,111	5,967	6,776

I-80 2020	WB AM Hr Peak Period	EB PM Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	17,449	17,713	4,857	4,829
Rocklin Rd Off-Ramp	1,233	5,645	393	1,392
Rocklin Rd On Ramp	3,204	766	796	251
East of I-80/SR 65 IC	19,420	22,592	5,259	5,970
WB off to NB 65	4,539		1,364	
WB on from SB 65	11,864		3,451	
EB on from SB 65		5,858		1,714
EB off to NB 65		14,660		3,858
West of I-80/SR 65 IC	26,745	31,394	7,347	8,113
Taylor Rd Off Ramp		1,930		428
Taylor Rd On Ramp	2,875		786	
East of Eureka Rd	29,621	33,325	8,133	8,541
Eureka Rd Off Ramp	1,574	6,680	530	1,725
Eureka Rd Off Ramp (Loop)	4,203		1,255	
Eureka Rd On Ramp	3,525	5,677	988	1,357
Eureka Rd On Ramp (Loop)		2,017		522
West Eureka Rd	27,368	32,310	7,337	8,386

I-80 2030	WB AM Hr Peak Period	EB PM Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	20,456	20,569	5,678	5,747
Rocklin Rd Off-Ramp	1,337	6,617	422	1,631
Rocklin Rd On Ramp	3,436	890	854	303
East of I-80/SR 65 IC	22,555	26,296	6,111	7,075
WB off to NB 65	5,060		1,520	
WB on from SB 65	13,633		3,966	
EB on from SB 65		6,444		1,885
EB off to NB 65		16,071		4,229
West of I-80/SR 65 IC	31,129	35,923	8,556	9,419
Taylor Rd Off Ramp		2,070		459
Taylor Rd On Ramp	3,089		843	
East of Eureka Rd	34,218	37,993	9,399	9,878
Eureka Rd Off Ramp	1,923	8,087	657	2,140
Eureka Rd Off Ramp (Loop)	4,861		1,437	
Eureka Rd On Ramp	3,781	6,451	1,086	1,547
Eureka Rd On Ramp (Loop)		2,450		645
West Eureka Rd	31,214	37,179	8,391	9,825

I-80 2040	WB AM Hr Peak Period	EB PM Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	23,462	24,825	6,500	6,565
Rocklin Rd Off-Ramp	1,440	7,590	450	1,871
Rocklin Rd On Ramp	3,668	1,014	911	354
East of I-80/SR 65 IC	25,690	31,400	6,962	8,081
WB off to NB 65	5,581		1,677	
WB on from SB 65	15,403		4,480	
EB on from SB 65		7,030		2,057
EB off to NB 65		17,482		4,600
West of I-80/SR 65 IC	35,512	41,852	9,765	10,624
Taylor Rd Off Ramp		2,210		490
Taylor Rd On Ramp	3,303		900	
East of Eureka Rd	38,815	44,062	10,665	11,114
Eureka Rd Off Ramp	2,271	9,394	784	2,555
Eureka Rd Off Ramp (Loop)	5,520		1,619	
Eureka Rd On Ramp	4,036	7,224	1,183	1,737
Eureka Rd On Ramp (Loop)		2,883		768
West Eureka Rd	35,060	43,348	9,445	11,164

SR 65 2007	NB PM Hr Peak Period	SB AM Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	16,934	13,415	4,277	3,888
Stanford Ranch NB Off Ramp	3,453	497	825	125
Stanford Ranch SB Off Ramp	1,581	2,440	375	807
Stanford Ranch On Ramp	3,387	2,713	799	788
North of Stanford Ranch Rd	15,287	13,639	3,876	4,032

SR 65 2020	NB PM Hr Peak Period	SB AM Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	23,172	18,372	5,850	5,089
Stanford Ranch NB Off Ramp	4,555	614	1,051	152
Stanford Ranch SB Off Ramp	2,086	3,012	478	983
Stanford Ranch On Ramp	4,500	4,212	1,027	1,223
North of Stanford Ranch Rd	21,031	17,786	5,348	5,001

SR 65 2030	NB PM Hr Peak Period	SB AM Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	27,970	22,655	7,059	6,298
Stanford Ranch NB Off Ramp	5,403	703	1,224	173
Stanford Ranch SB Off Ramp	2,474	3,453	556	1,118
Stanford Ranch On Ramp	5,356	5,065	1,203	1,558
North of Stanford Ranch Rd	25,449	21,746	6,481	6,031

SR 65 2040	NB PM Hr Peak Period	SB AM Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	32,769	25,837	8,269	7,507
Stanford Ranch NB Off Ramp	6,251	793	1,398	194
Stanford Ranch SB Off Ramp	2,862	3,893	635	1,253
Stanford Ranch On Ramp	6,212	5,818	1,378	1,893
North of Stanford Ranch Rd	29,867	24,706	7,614	7,061

ALTERNATIVE 1

I-80 2020	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	18,178	16,401	5,059	4,432
Rocklin Rd Off-Ramp	1,291	5,561	411	1,371
Rocklin Rd On Ramp	3,205	771	796	253
East of I-80/SR 65 IC	20,092	21,191	5,444	5,550
WB off to NB 65	4,793		1,440	
WB on from SB 65	12,031		3,500	
WB on from SB 65 (HOV)	3,431		998	
EB on from SB 65		6,714		1,964
EB off to NB 65		16,930		4,455
EB off to NB 65 (HOV)		4,781		1,258
West of I-80/SR 65 IC	30,761	36,187	8,502	9,299
Taylor Rd Off Ramp		1,510		335
Taylor Rd On Ramp	2,744		750	
East of Eureka Rd	33,505	37,697	9,252	9,634
Eureka Rd Off Ramp	1,611	6,075	542	1,569
Eureka Rd Off Ramp (Loop)	5,516		1,647	
Eureka Rd On Ramp	3,416	7,699	958	1,841
Eureka Rd On Ramp (Loop)		1,868		484
West Eureka Rd	29,794	34,206	8,021	8,878

I-80 2030	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	21,310	19,367	5,916	5,388
Rocklin Rd Off-Ramp	1,399	6,518	441	1,607
Rocklin Rd On Ramp	3,437	896	854	305
East of I-80/SR 65 IC	23,348	24,989	6,328	6,690
WB off to NB 65	5,344		1,605	
WB on from SB 65	13,825		4,021	
WB on from SB 65 (HOV)	3,943		1,147	
EB on from SB 65		7,386		2,161
EB off to NB 65		18,559		4,884
EB off to NB 65 (HOV)		5,241		1,379
West of I-80/SR 65 IC	35,772	41,403	9,891	10,792
Taylor Rd Off Ramp		1,619		359
Taylor Rd On Ramp	2,949		805	
East of Eureka Rd	38,721	43,022	10,696	11,151
Eureka Rd Off Ramp	1,968	7,355	672	1,946
Eureka Rd Off Ramp (Loop)	6,380		1,886	
Eureka Rd On Ramp	3,663	8,747	1,052	2,098
Eureka Rd On Ramp (Loop)		2,270		598
West Eureka Rd	34,036	39,360	9,190	10,401

I-80 2040	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	24,442	23,798	6,772	6,237
Rocklin Rd Off-Ramp	1,507	7,476	471	1,843
Rocklin Rd On Ramp	3,670	1,022	912	357
East of I-80/SR 65 IC	26,604	30,253	7,213	7,723
WB off to NB 65	5,894		1,771	
WB on from SB 65	15,619		4,543	
WB on from SB 65 (HOV)	4,454		1,296	
EB on from SB 65		8,057		2,357
EB off to NB 65		20,189		5,312
EB off to NB 65 (HOV)		5,701		1,500
West of I-80/SR 65 IC	40,783	48,085	11,281	12,179
Taylor Rd Off Ramp		1,729		383
Taylor Rd On Ramp	3,153		859	
East of Eureka Rd	43,936	49,814	12,140	12,562
Eureka Rd Off Ramp	2,324	8,543	803	2,323
Eureka Rd Off Ramp (Loop)	7,244		2,125	
Eureka Rd On Ramp	3,911	9,796	1,146	2,355
Eureka Rd On Ramp (Loop)		2,671		712
West Eureka Rd	38,279	45,891	10,358	11,819

SR 65 2020	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	29,319	22,089	7,406	6,002
Stanford Ranch NB Off Ramp	4,549	1,438	1,049	357
Stanford Ranch SB Off Ramp	2,083	7,062	477	2,304
Stanford Ranch On Ramp	4,945	6,599	1,143	1,917
North of Stanford Ranch Rd	27,633	23,991	7,023	6,745

SR 65 2030	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	35,305	27,523	8,941	7,550
Stanford Ranch NB Off Ramp	5,396	1,649	1,223	406
Stanford Ranch SB Off Ramp	2,470	8,094	556	2,620
Stanford Ranch On Ramp	5,781	7,935	1,255	2,441
North of Stanford Ranch Rd	33,220	29,331	8,418	8,135

SR 65 2040	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	41,790	31,452	10,476	9,098
Stanford Ranch NB Off Ramp	6,242	1,859	1,396	455
Stanford Ranch SB Off Ramp	2,858	9,127	635	2,937
Stanford Ranch On Ramp	6,517	9,115	1,468	2,966
North of Stanford Ranch Rd	39,207	33,323	9,913	9,524

ALTERNATIVE 2

I-80 2020	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	18,246	16,515	5,078	4,473
Rocklin Rd Off-Ramp	1,287	5,436	410	1,340
Rocklin Rd On Ramp	3,208	777	797	255
East of I-80/SR 65 IC	20,167	21,174	5,465	5,558
WB off to NB 65	4,413		1,326	
WB on from SB 65	12,184		3,544	
EB on from SB 65		6,408		1,875
EB off to NB 65		19,782		5,205
West of I-80/SR 65 IC	27,939	34,548	7,684	8,888
Taylor Rd Off Ramp		1,589		352
Taylor Rd On Ramp	2,912		796	
East of Eureka Rd	30,851	36,137	8,480	9,241
Eureka Rd Off Ramp	1,573	6,203	529	1,602
Eureka Rd Off Ramp (Loop)	4,469		1,334	
Eureka Rd On Ramp	3,461	7,142	970	1,708
Eureka Rd On Ramp (Loop)		1,738		450
West Eureka Rd	28,270	33,460	7,586	8,684

I-80 2030	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	21,389	19,409	5,938	5,405
Rocklin Rd Off-Ramp	1,395	6,372	440	1,571
Rocklin Rd On Ramp	3,440	903	855	307
East of I-80/SR 65 IC	23,435	24,878	6,353	6,668
WB off to NB 65	4,919		1,478	
WB on from SB 65	14,002		4,073	
EB on from SB 65		7,049		2,062
EB off to NB 65		21,686		5,706
West of I-80/SR 65 IC	32,517	39,515	8,947	10,312
Taylor Rd Off Ramp		1,704		378
Taylor Rd On Ramp	3,129		854	
East of Eureka Rd	35,646	41,219	9,801	10,690
Eureka Rd Off Ramp	1,922	7,509	657	1,987
Eureka Rd Off Ramp (Loop)	5,169		1,528	
Eureka Rd On Ramp	3,712	8,114	1,066	1,946
Eureka Rd On Ramp (Loop)		2,112		556
West Eureka Rd	32,268	38,502	8,683	10,175

I-80 2040	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	24,533	23,742	6,797	6,233
Rocklin Rd Off-Ramp	1,502	7,308	470	1,801
Rocklin Rd On Ramp	3,673	1,029	912	359
East of I-80/SR 65 IC	26,703	30,021	7,240	7,675
WB off to NB 65	5,426		1,630	
WB on from SB 65	15,819		4,601	
EB on from SB 65		7,690		2,250
EB off to NB 65		23,589		6,207
West of I-80/SR 65 IC	37,096	45,921	10,211	11,633
Taylor Rd Off Ramp		1,819		403
Taylor Rd On Ramp	3,346		912	
East of Eureka Rd	40,442	47,740	11,123	12,036
Eureka Rd Off Ramp	2,270	8,723	784	2,372
Eureka Rd Off Ramp (Loop)	5,869		1,721	
Eureka Rd On Ramp	3,963	9,087	1,161	2,185
Eureka Rd On Ramp (Loop)		2,485		662
West Eureka Rd	36,266	44,891	9,779	11,561

SR 65 2020	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	27,070	19,153	6,637	5,244
Stanford Ranch NB Off Ramp	4,457	763	1,028	189
Stanford Ranch SB Off Ramp	2,041	3,345	467	1,221
Stanford Ranch On Ramp	4,630	3,363	1,057	882
North of Stanford Ranch Rd	25,202	19,898	6,198	5,773

SR 65 2030	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	32,625	23,770	8,113	6,393
Stanford Ranch NB Off Ramp	5,287	874	1,198	215
Stanford Ranch SB Off Ramp	2,421	3,792	545	1,389
Stanford Ranch On Ramp	5,510	3,943	1,237	1,159
North of Stanford Ranch Rd	30,427	24,493	7,607	6,838

SR 65 2040	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	37,979	26,684	9,588	7,692
Stanford Ranch NB Off Ramp	6,117	986	1,368	241
Stanford Ranch SB Off Ramp	2,801	4,339	622	1,457
Stanford Ranch On Ramp	6,391	4,455	1,418	1,387
North of Stanford Ranch Rd	35,453	27,555	9,017	8,003

ALTERNATIVE 3

I-80 2020	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	18,134	16,101	5,047	4,352
Rocklin Rd Off-Ramp	1,277	5,536	407	1,365
Rocklin Rd On Ramp	3,184	768	791	252
East of I-80/SR 65 IC	20,040	20,870	5,431	5,465
WB off to NB 65	4,786		1,438	
WB on from SB 65	11,926		3,693	
WB on from SB 65 (HOV)	3,399		1,052	
EB on from SB 65		6,818		1,995
EB off to NB 65		17,857		4,699
EB off to NB 65 (HOV)		4,688		1,234
West of I-80/SR 65 IC	30,579	36,597	8,738	9,403
Taylor Rd Off Ramp		1,509		334
Taylor Rd On Ramp	2,725		745	
East of Eureka Rd	33,304	38,106	9,483	9,737
Eureka Rd Off Ramp	1,602	5,917	539	1,528
Eureka Rd Off Ramp (Loop)	5,535		1,653	
Eureka Rd On Ramp	3,492	7,817	979	1,869
Eureka Rd On Ramp (Loop)		1,859		482
West Eureka Rd	29,659	34,347	8,270	8,915

I-80 2030	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	21,258	19,069	5,901	5,310
Rocklin Rd Off-Ramp	1,384	6,490	437	1,600
Rocklin Rd On Ramp	3,415	893	848	303
East of I-80/SR 65 IC	23,288	24,667	6,313	6,606
WB off to NB 65	5,336	0	1,603	
WB on from SB 65	13,740		4,220	
WB on from SB 65 (HOV)	3,915		1,203	
EB on from SB 65		7,500		2,194
EB off to NB 65		19,575		5,151
EB off to NB 65 (HOV)		5,139		1,352
West of I-80/SR 65 IC	35,607	41,882	10,133	10,915
Taylor Rd Off Ramp		1,618		359
Taylor Rd On Ramp	2,928		799	
East of Eureka Rd	38,535	43,500	10,932	11,274
Eureka Rd Off Ramp	1,957	7,163	669	1,895
Eureka Rd Off Ramp (Loop)	6,402		1,892	
Eureka Rd On Ramp	3,745	8,882	1,075	2,130
Eureka Rd On Ramp (Loop)		2,259		595
West Eureka Rd	33,922	39,523	9,446	10,444

I-80 2040	WB AM 4 Hr Peak Period	EB PM 4 Hr Peak Period	WB AM Peak Hour	EB PM Peak Hour
East of Rocklin Rd	24,382	23,508	6,755	6,161
Rocklin Rd Off-Ramp	1,491	7,444	466	1,835
Rocklin Rd On Ramp	3,645	1,017	906	355
East of I-80/SR 65 IC	26,536	29,934	7,195	7,641
WB off to NB 65	5,886		1,768	
WB on from SB 65	15,475		4,826	
WB on from SB 65 (HOV)	4,410		1,375	
EB on from SB 65		8,182		2,394
EB off to NB 65		21,294		5,603
EB off to NB 65 (HOV)		5,591		1,471
West of I-80/SR 65 IC	40,536	48,637	11,627	12,321
Taylor Rd Off Ramp		1,728		383
Taylor Rd On Ramp	3,131		853	
East of Eureka Rd	43,667	50,364	12,480	12,704
Eureka Rd Off Ramp	2,312	8,321	798	2,263
Eureka Rd Off Ramp (Loop)	7,269		2,132	
Eureka Rd On Ramp	3,998	9,947	1,172	2,391
Eureka Rd On Ramp (Loop)		2,658		708
West Eureka Rd	38,084	46,080	10,722	11,868

SR 65 2020	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	30,154	22,408	7,617	6,098
Stanford Ranch NB Off Ramp	4,637	1,393	1,069	346
Stanford Ranch SB Off Ramp	2,123	6,840	486	2,231
Stanford Ranch On Ramp	4,574	6,431	1,058	1,868
North of Stanford Ranch Rd	27,969	24,211	7,120	6,807

SR 65 2030	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	36,313	27,897	9,196	7,657
Stanford Ranch NB Off Ramp	5,500	1,597	1,246	393
Stanford Ranch SB Off Ramp	2,518	7,840	566	2,538
Stanford Ranch On Ramp	5,339	7,734	1,156	2,379
North of Stanford Ranch Rd	33,634	29,601	8,539	8,209

SR 65 2040	NB PM 4 Hr Peak Period	SB AM 4 Hr Peak Period	NB PM Peak Hour	SB AM Peak Hour
North of I-80	42,471	31,872	10,774	9,217
Stanford Ranch NB Off Ramp	6,363	1,801	1,423	441
Stanford Ranch SB Off Ramp	2,913	8,840	647	2,845
Stanford Ranch On Ramp	6,004	8,884	1,354	2,891
North of Stanford Ranch Rd	39,200	33,629	10,059	9,611

ATTACHMENT 13

PROGRAMMING SHEET - 2008/2009

EA: 03-4E320 | Project Manager: Sam Jordan | Date: 06/22/2009
Proj Name: Pla-65 HOV | Co-Rte-PM: PLA-065-R004.8/R006.9 | Type: STIP

PROJECT SCHEDULE

MILESTONE		DATE (STATUS)
Begin Environmental Document	M020	12/01/2009 (T)
Begin Project Report	M040	10/01/2009 (T)
Circulate Environmental Document (DED)	M120	12/01/2010 (T)
Project Approval & Environmental Document (PA&ED)	M200	07/15/2011 (T)
District Submits Bridge Site Data to Structures	M221	07/01/2011 (T)
Right of Way Maps	M224	08/01/2011 (T)
Regular Right of Way	M225	12/01/2011 (T)
District Plans, Specifications & Estimates to DOE	M377	04/01/2013 (T)
Draft Structures Plans, Specifications & Estimates	M378	04/01/2013 (T)
District Plans, Specifications & Estimates (PS&E)	M380	07/15/2013 (T)
Right of Way Certification	M410	10/01/2013 (T)
Ready to List (RTL)	M460	10/01/2013 (T)
Headquarters Advertise (HQ AD)	M480	12/01/2013 (T)
Approve Construction Contract	M500	07/15/2014 (T)
Contract Acceptance (CCA)	M600	07/15/2016 (T)
End Project	M800	07/15/2018 (T)

ESTIMATE	DATE	AMOUNT
ROADWAY	06/01/09	$ 150000
BRIDGE	06/01/09	$ 110000
Subtotal Const		$ 260000
RIGHT OF WAY	06/10/09	$ 16630
MITIGATION		$ 0
Subtotal RW		$ 16630
GRAND TOTAL		$ 276630

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

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

PROJECT COSTS BY SB45 CATEGORY

CAPITAL COST ESTIMATE (Escalation Factor)	Prior Yrs+	08/09+	09/10 (3.5%)	10/11 (3.5%)	11/12 (3.5%)	12/13 (3.5%)	Future++ (3.5%)	Total	
Right of Way	16630							$ 16,630	
Construction							308798	$ 308,798	
					CAPITAL COSTS TOTAL			$ 325,428	
SUPPORT COSTS (Escalation Factor)			(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)		Sup/Cap
PAED			1123	818	10			$ 1,951	0.60%
PS&E				969	1735	1928	346	$ 4,977	1.53%
Right of Way					105	123	170	$ 397	0.12%
Construction								$ 0	0.00%
					SUPPORT COSTS TOTAL			$7,325	2.25%

TOTAL PROJECT COSTS	$ 332,753

PROJECT SUPPORT IN PYS

	Prior Yrs	08/09	09/10	10/11	11/12	12/13	Future	Total	PY %
Environmental	0.00	0.00	3.03	2.35	0.13	0.10	0.01	5.62	13.06%
Design	0.00	0.00	3.41	4.95	6.90	6.10	0.28	21.64	50.28%
Engineering Services	0.00	0.00	0.17	0.33	0.35	1.02	0.20	2.07	4.81%
Surveys	0.00	0.00	0.05	1.91	0.41	0.55	0.37	3.29	7.64%
Right of Way	0.00	0.00	0.20	0.14	0.22	0.33	0.59	1.48	3.44%
Traffic	0.00	0.00	0.11	0.59	0.41	0.45	0.06	1.62	3.76%
Construction	0.00	0.00	0.01	0.12	0.04	0.09	0.07	0.33	0.77%
Project Management	0.00	0.00	0.42	0.50	0.12	0.15	0.12	1.31	3.04%
District Units*	0.00	0.00	0.05	0.06	0.02	0.03	0.01	0.17	0.39%
Subtotal Dist/Region Resources	0.00	0.00	7.45	10.95	8.60	8.82	1.71	37.53	*87.20%*
59-DES Project Development	0.00	0.00	0.00	0.00	1.63	2.36	0.00	3.99	9.27%
59-DES Structures Foundation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-Office Engineer	0.00	0.00	0.00	0.00	0.00	0.00	1.52	1.52	3.53%
59-DES Project Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-DES Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-DES Other Units**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
Subtotal DES Resources	0.00	0.00	0.00	0.00	1.63	2.36	1.52	5.51	*12.80%*
TOTAL PYs	**0.00**	**0.00**	**7.45**	**10.95**	**10.23**	**11.18**	**3.23**	**43.04**	

*Admin, Plng, Maintenance
**DES Admin, DES Plng, DES Maintenance
HRS/PYS = 1758

Comments:
Per Project Charter - No Const. support at this time. Const. Support will be determined at a later date. Support costs are based on the signed Project Charter for PA & ED, P.S.& E.and R/W components. The hours submitted by functions are not included. High risk we may exceed the dollar amount.