Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	10	4.1/6.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

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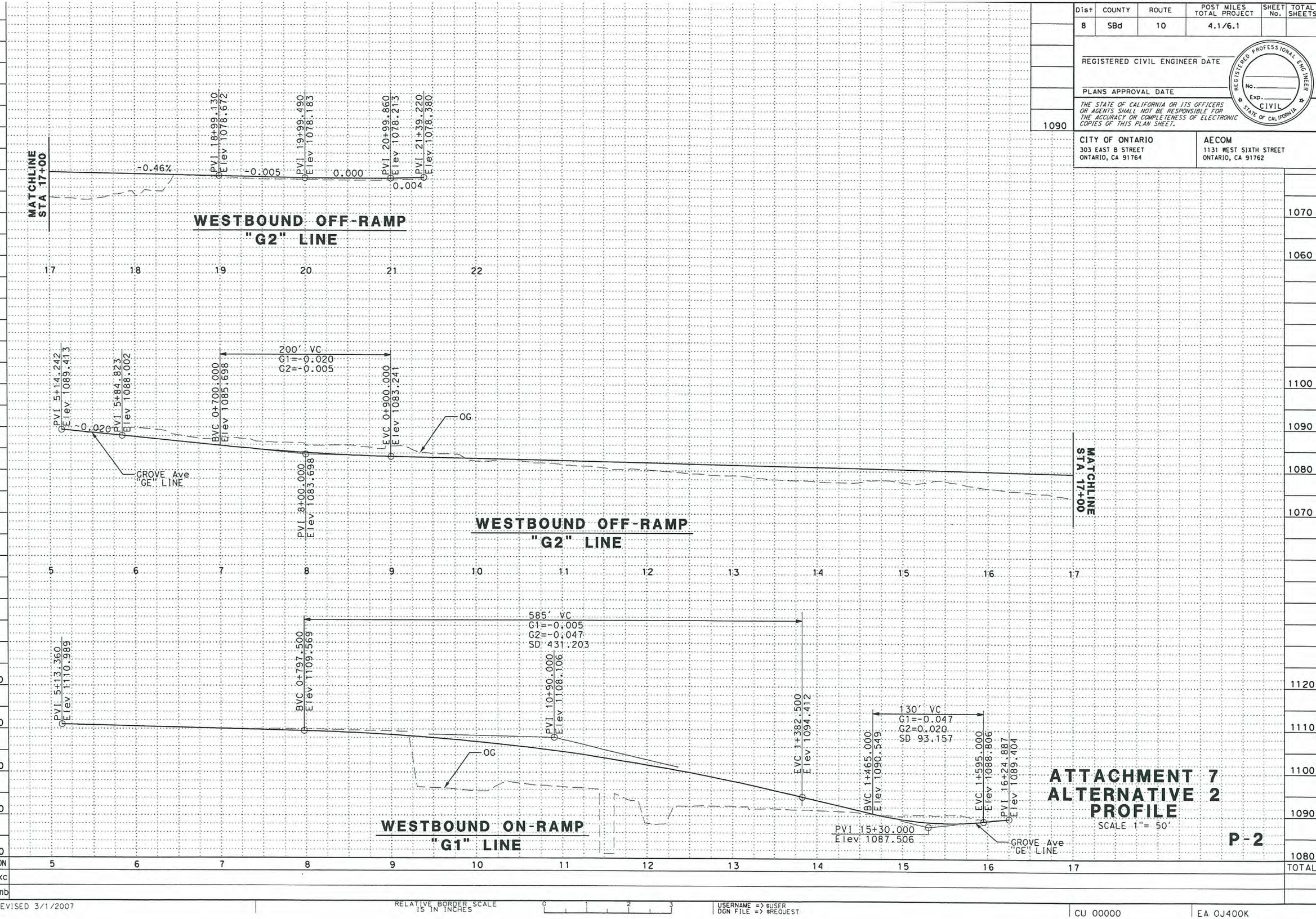
CITY OF ONTARIO
303 EAST B STREET
ONTARIO, CA 91764

AECOM
1131 WEST SIXTH STREET
ONTARIO, CA 91762



ATTACHMENT 7
ALTERNATIVE 2
PROFILE

SCALE 1"= 50'

P-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: NASSIM ELIAS
CALCULATED-DESIGNED BY
CHECKED BY

REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => $DATE | TIME PLOTTED => $TIME

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => $USER
DGN FILE => $REQUEST

CU 00000

EA 0J400K

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	10	4.1/6.1		

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PLANS APPROVAL DATE

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EASTBOUND ON-RAMP
"G6" LINE

100' VC
G1=-0.020
G2=0.026
SD 102.099

PVI 9+24.673
Elev 1077.783
BVC 0+950.000
Elev 1077.276
EVC 1+050.000
Elev 1077.567
PVI 10+00.000
Elev 1076.276
BVC 1+097.500
Elev 1078.793
PVI 13+70.000
Elev 1085.827
545' VC
G1=0.026
G2=-0.013
SD 431.548
EVC 1+642.500
Elev 1082.261
PVI 16+99.930
Elev 1081.510
PVI 18+00.000
Elev 1080.000
PVI 18+99.980
Elev 1078.888
PVI 20+00.000
Elev 1078.368
PVI 20+36.200
Elev 1078.310
-0.015
-0.011
-0.005
-0.002
GROVE Ave
"GE" LINE

EASTBOUND OFF-RAMP
"G4" LINE

400' VC
G1=-0.054
G2=-0.009
SD 340.433

200' VC
G1=-0.009
G2=0.020
SD 309.014

OG
EVC 1+778.874
Elev 1076.249
BVC 1+800.000
Elev 1076.064
EVC 2+000.000
Elev 1077.190
PVI 20+29.651
Elev 1077.783
-5.407
PVI 15+78.874
Elev 1077.998
PVI 19+00.000
Elev 1075.190
GROVE Ave
"GE" LINE

PVI 4+12.540
Elev 1111.250
-0.004
PVI 6+83.370
Elev 1110.110
PVI 10+50.000
Elev 1106.562
BVC 0+825.000
Elev 1108.739
OG
BVC 1+378.874
Elev 1088.799
450' VC
G1=+0.010
G2=+0.054
SD 367.318
EVC 1+275.000
Elev 1094.410
MATCHLINE
STA 15+00

EASTBOUND OFF-RAMP
"G4" LINE

ATTACHMENT 7
ALTERNATIVE 2
PROFILE

SCALE 1"= 50'

P-3

STATION 4 5 6 7 8 9 10 11 12 13 14 15 TOTAL

CY Exc

Emb

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

DESIGN OVERSIGHT: NASSIM ELIAS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION | DATE PLOTTED => $DATE

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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CU 00000

EA 0J400K

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	10	4.1/6.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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ONTARIO, CA 91762

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

DESIGN OVERSIGHT: NASSIM ELIAS

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

MATCHLINE STA 18+00

PVI 18+68.240 Elev 1078.931
PVI 18+99.130 Elev 1078.672
PVI 19+99.490 Elev 1078.178
PVI 20+99.860 Elev 1078.216
PVI 21+39.220 Elev 1078.376
-0.008 | -0.005 | 0.000 | 0.004

WESTBOUND OFF-RAMP "G2" LINE

PVI 4+54.507 Elev 1089.404
BVC 0+530.000 Elev 1087.894
200' VC G1=-0.020 G2=0.011 SD 276.575
EVC 0+730.000 Elev 1086.975
GROVE Ave "GE" LINE
PVI 6+30.000 Elev 1085.894
PVI 11+18.857 Elev 1091.178
OG
BVC 0+901.357 Elev 1088.827
EVC 1+336.357 Elev 1086.828
435' VC G1=0.011 G2=-0.020 SD 433.206
BVC 1+532.012 Elev 1082.915
200' VC G1=-0.020 G2=-0.008
EVC 1+732.012 Elev 1080.075
PVI 16+32.012 Elev 1080.915

MATCHLINE STA 18+00

WESTBOUND OFF-RAMP "G2" LINE

PVI 5+13.365 Elev 1110.994
PVI 11+60.747 Elev 1108.858
150' VC G1=-0.060 G2=0.020 SD 90.485
BVC 0+880.747 Elev 1109.782
OG
BVC 1+445.000 Elev 1091.801
EVC 1+595.000 Elev 1088.801
PVI 16+25.160 Elev 1089.404
560' VC G1=-0.003 G2=-0.060 SD 362.302
EVC 1+440.747 Elev 1092.056
PVI 15+20.000 Elev 1087.301
GROVE Ave "GE" LINE

WESTBOUND ON-RAMP "G1" LINE

ATTACHMENT 7
ALTERNATIVE 3
PROFILE

SCALE 1"= 50'

P-4

STATION | TOTAL
CY Exc
CY Emb

LAST REVISION | DATE PLOTTED => $DATE | TIME PLOTTED => $TIME

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES (0 1 2 3) | USERNAME => $USER | DGN FILE => $REQUEST | CU 00000 | EA 0J400K

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	10	4.1/6.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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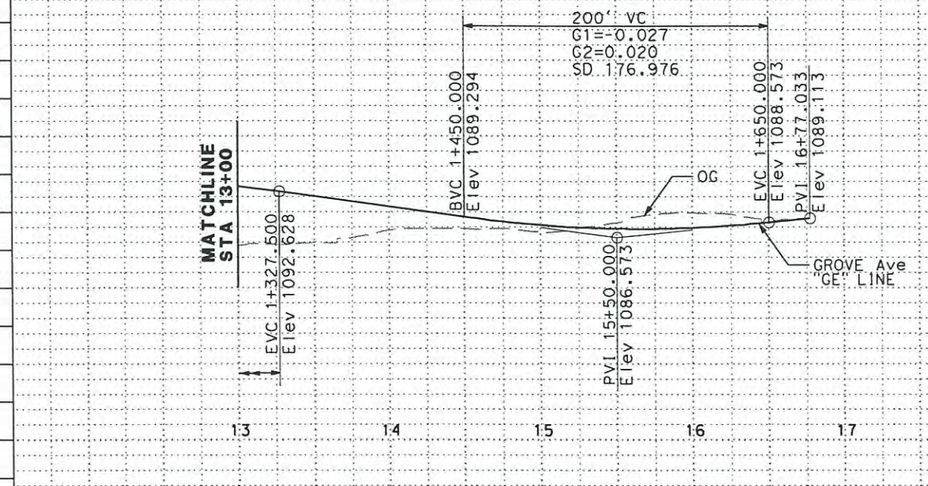
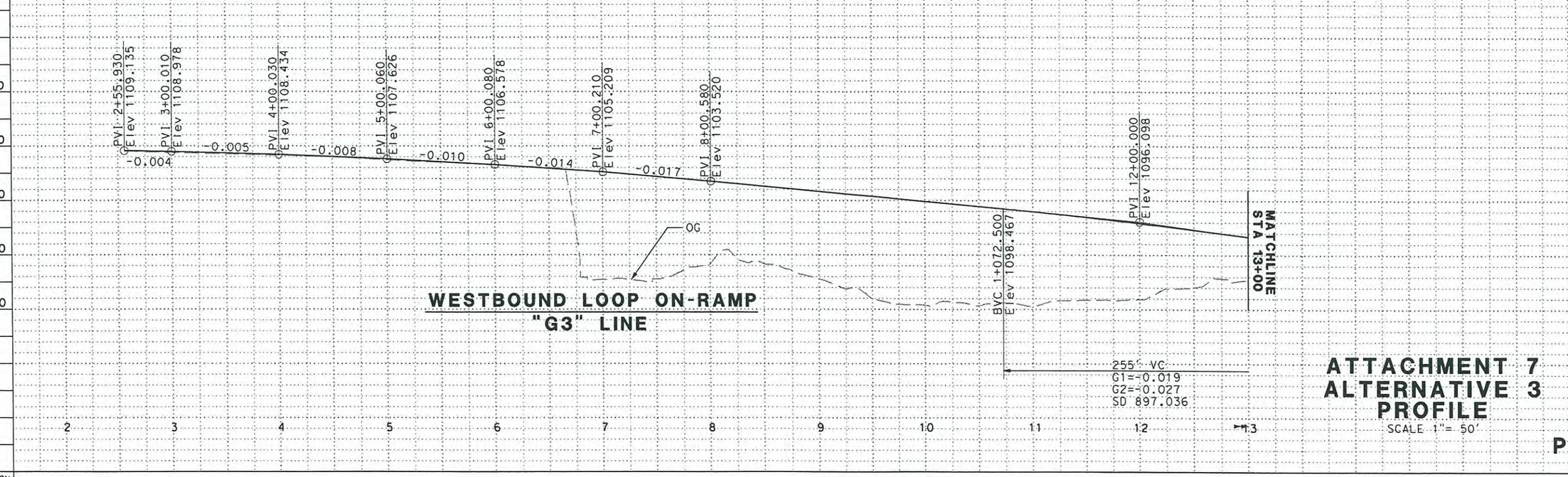
Caltrans



WESTBOUND LOOP ON-RAMP
"G3" LINE



WESTBOUND LOOP ON-RAMP
"G3" LINE

ATTACHMENT 7
ALTERNATIVE 3
PROFILE

SCALE 1"= 50'

P-5

STATION		TOTAL
CY	Exc	
	Emb	

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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DGN FILE => $REQUEST

CU 00000

EA 0J400K

LAST REVISION | DATE PLOTTED => $DATE
00-00-00 | TIME PLOTTED => $TIME

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	10	4.1/6.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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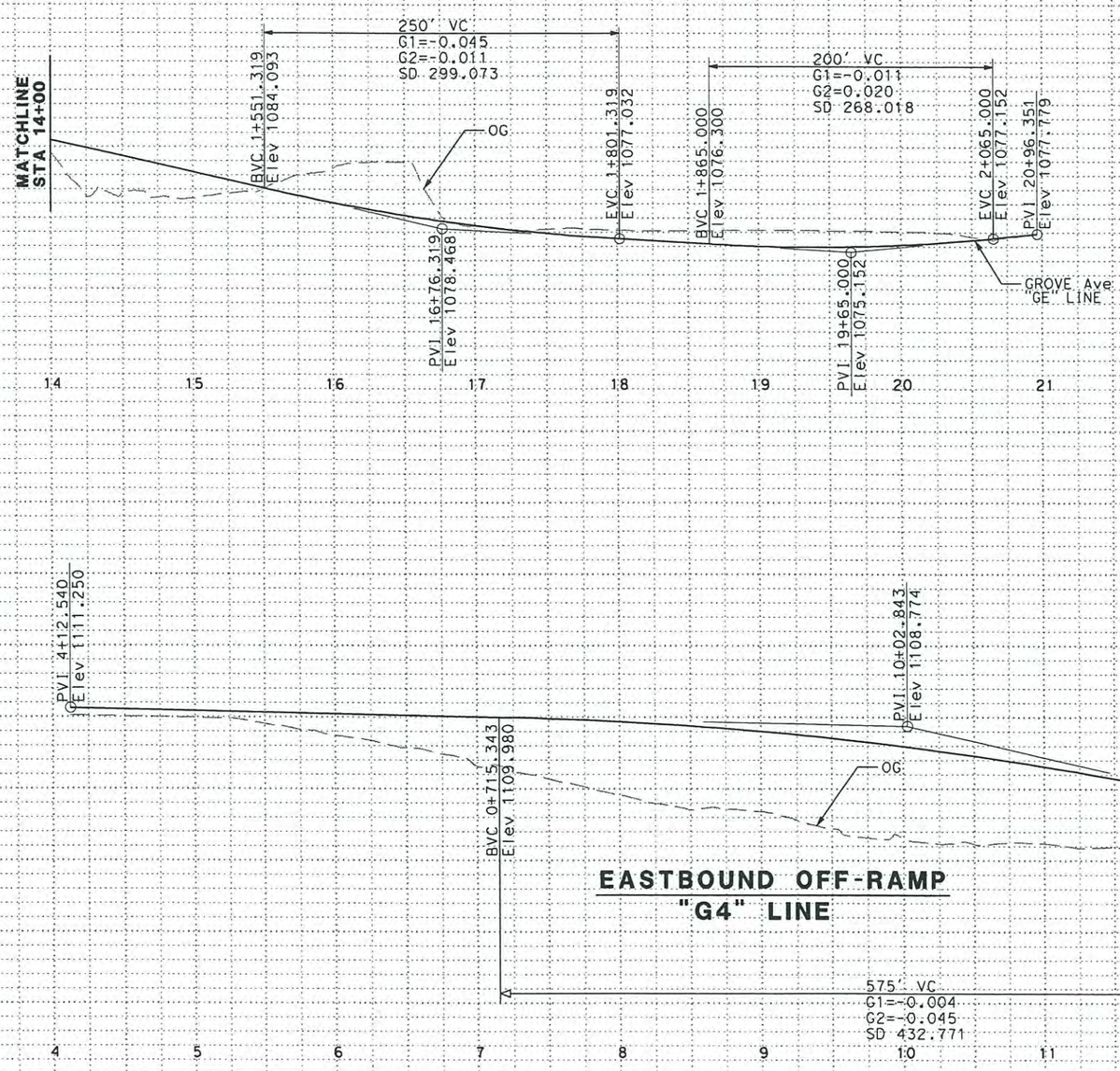
ONTARIO, CA 91762



ATTACHMENT 7
ALTERNATIVE 3
PROFILE

SCALE 1"= 50'

P-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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CHECKED BY

REVISED BY | DATE REVISED

STATION

CY Exc

Emb

TOTAL

LAST REVISION | DATE PLOTTED => $DATE | TIME PLOTTED => $TIME

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => $USER
DGN FILE => $REQUEST

CU 00000 | EA 0J400K

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	10	4.1/6.1		

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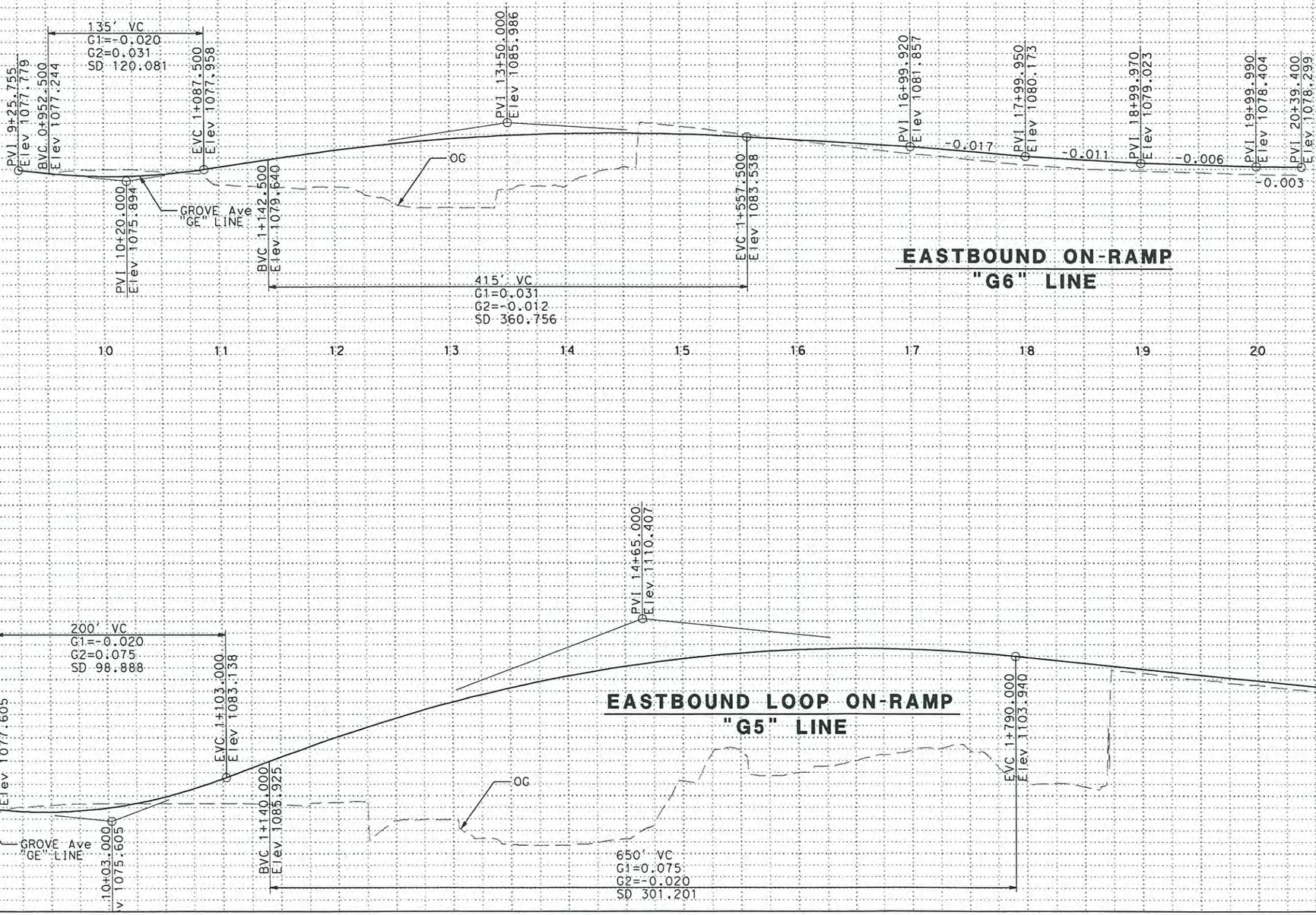


ATTACHMENT 7
ALTERNATIVE 3
PROFILE

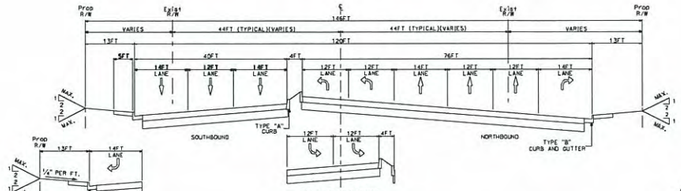
SCALE 1"= 50'

P-7

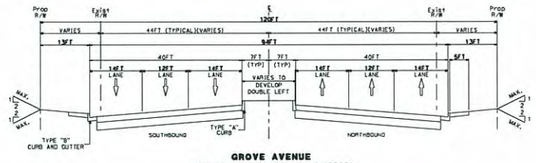
STATION	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	TOTAL
CY Exc																
CY Emb																

LAST REVISION | DATE PLOTTED => $DATE

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN INCHES (0 1 2 3) | USERNAME => $USER | DGN FILE => $REQUEST | CU 00000 | EA 0J400K



GROVE AVENUE
City Standard - Double Left
TYPICAL SECTION NO. 1



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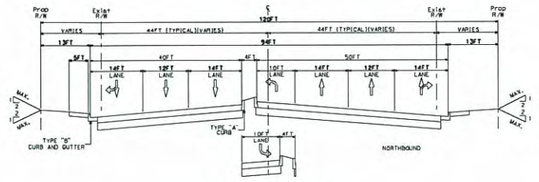
City of Ontario Standard (1002)
Divided Arterial Street
TYPICAL SECTION NO. 2



GROVE AVENUE
City Standard - Single Left
TYPICAL SECTION NO. 3

CITY STANDARD

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)

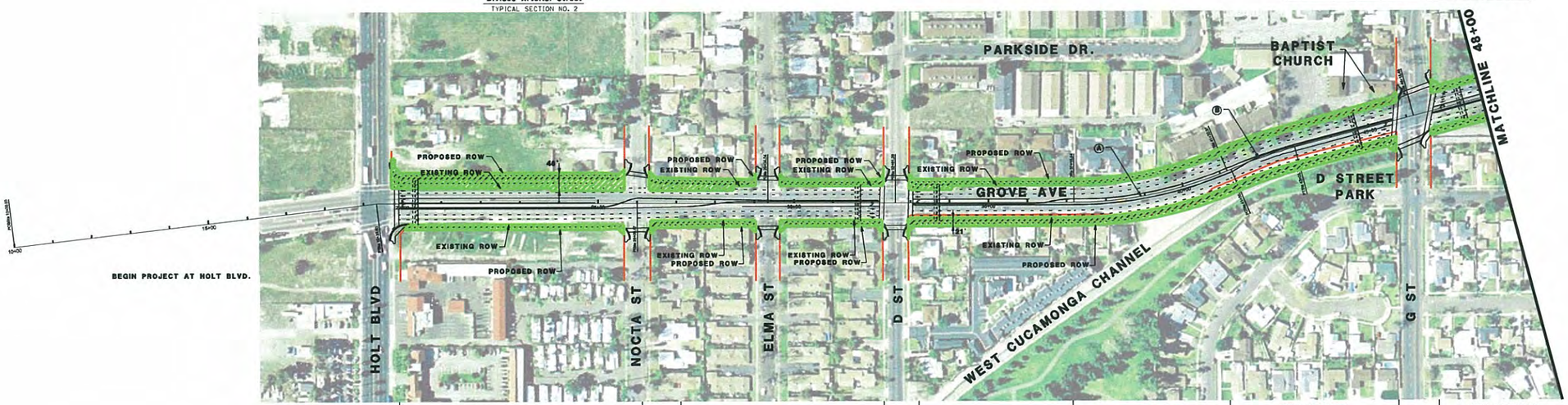
LEGEND

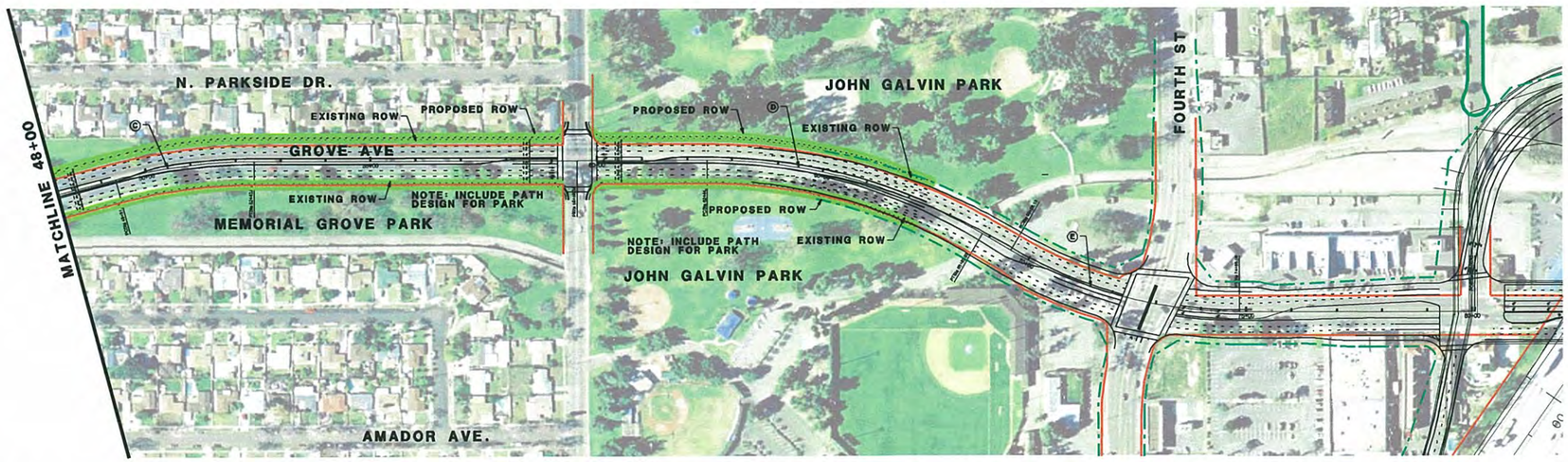
ROW IMPACT

NOTE: SIDE STREET IMPROVEMENTS ARE NOT SHOWN.

SEPTEMBER 15, 2010

CURVE DATA				
NO.	R	Δ	T	L
A	1000.00'	23°00'00"	203.45'	401.43'
B	1200.00'	8°15'00"	86.54'	172.79'
C	1200.00'	14°45'15"	155.36'	309.01'
D	1200.00'	30°28'57"	326.96'	638.42'
E	1000.00'	30°19'07"	270.93'	529.16'





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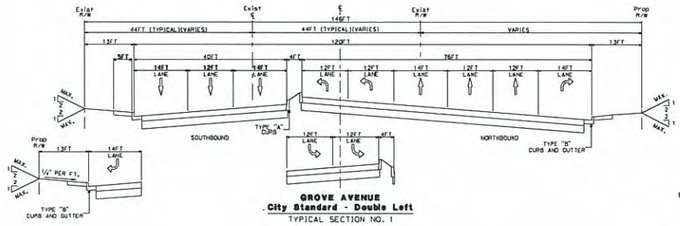

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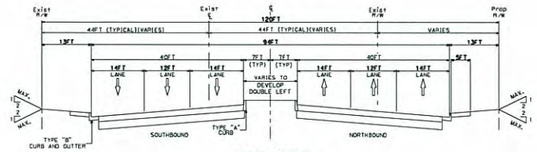
City Standard - Double Left
TYPICAL SECTION NO. 1



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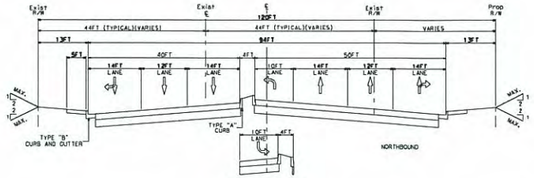
City of Ontario Standard (1002)
Divided Arterial Street
TYPICAL SECTION NO. 2



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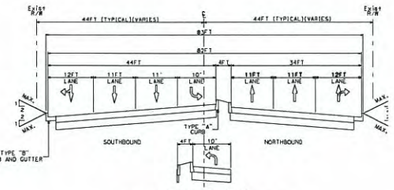
City Standard - Single Left
TYPICAL SECTION NO. 3



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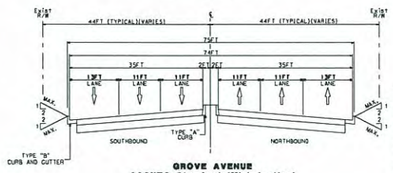
AASHTO Standard - Single Left
TYPICAL SECTION NO. 4



GROVE AVENUE
AASHTO Standard (Minimization)
TYPICAL SECTION NO. 5

CITY/AASHTO EAST

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)

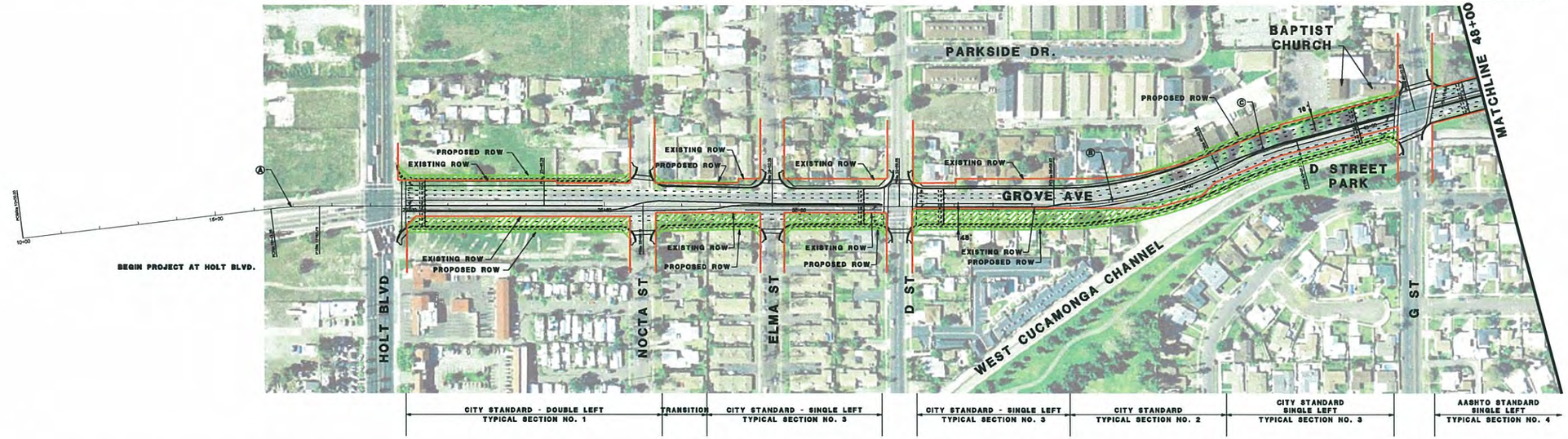
LEGEND

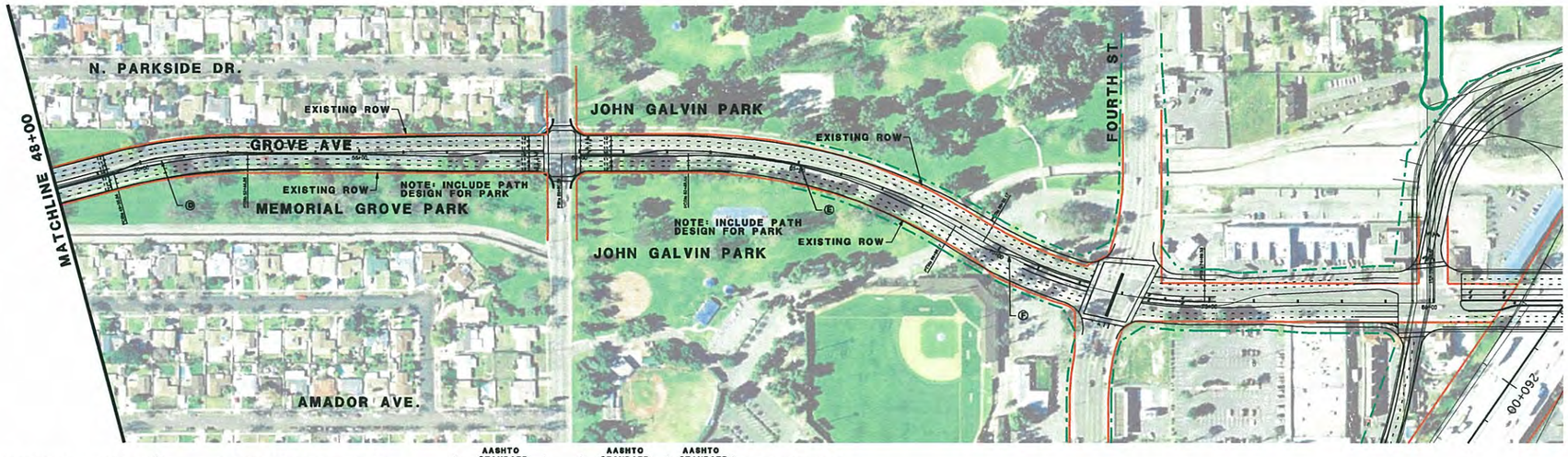
ROW IMPACT

NOTE: SIDE STREET IMPROVEMENTS ARE NOT SHOWN.

SEPTEMBER 15, 2010

CURVE DATA				
NO.	R	Δ	T	L
A	1050.00'	6°47'41"	62.33'	124.52'
B	1000.00'	24°58'48"	221.51'	435.99'
C	1200.00'	10°13'48"	107.42'	214.26'
D	1200.00'	14°45'15"	155.36'	309.01'
E	1200.00'	30°28'57"	326.96'	638.42'
F	1000.00'	30°19'07"	270.93'	529.16'





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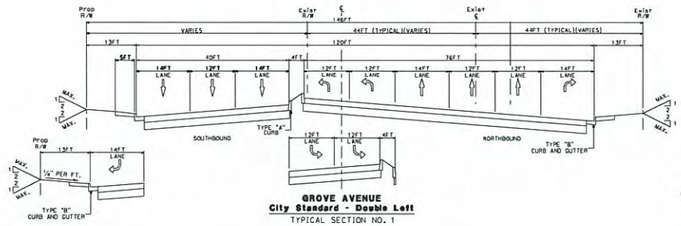

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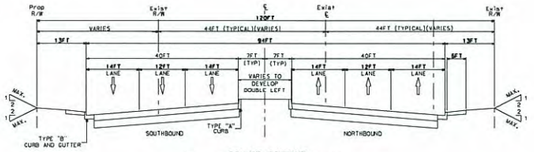
City Standard - Double Left
TYPICAL SECTION NO. 1



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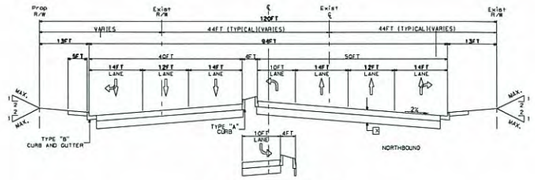
City of Ontario Standard (1002)
Divided Arterial Street
TYPICAL SECTION NO. 2



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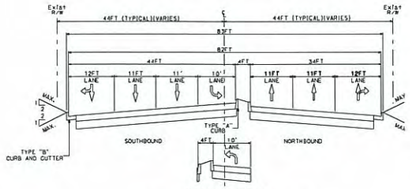
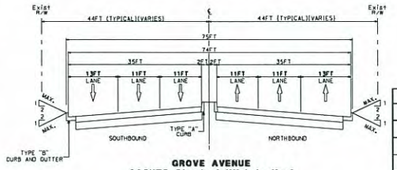
City Standard - Single Left
TYPICAL SECTION NO. 3



GROVE AVENUE
AASHTO Standard - Single Left
TYPICAL SECTION NO. 4



GROVE AVENUE
AASHTO Standard (Minimization)
TYPICAL SECTION NO. 5

CITY/AASHTO WEST

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)

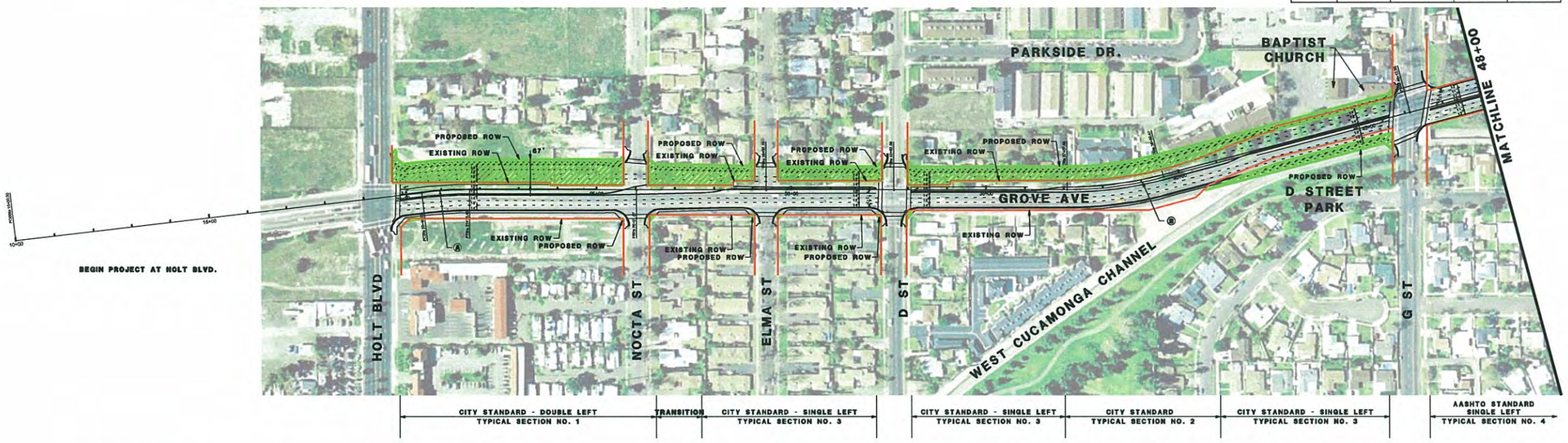
LEGEND

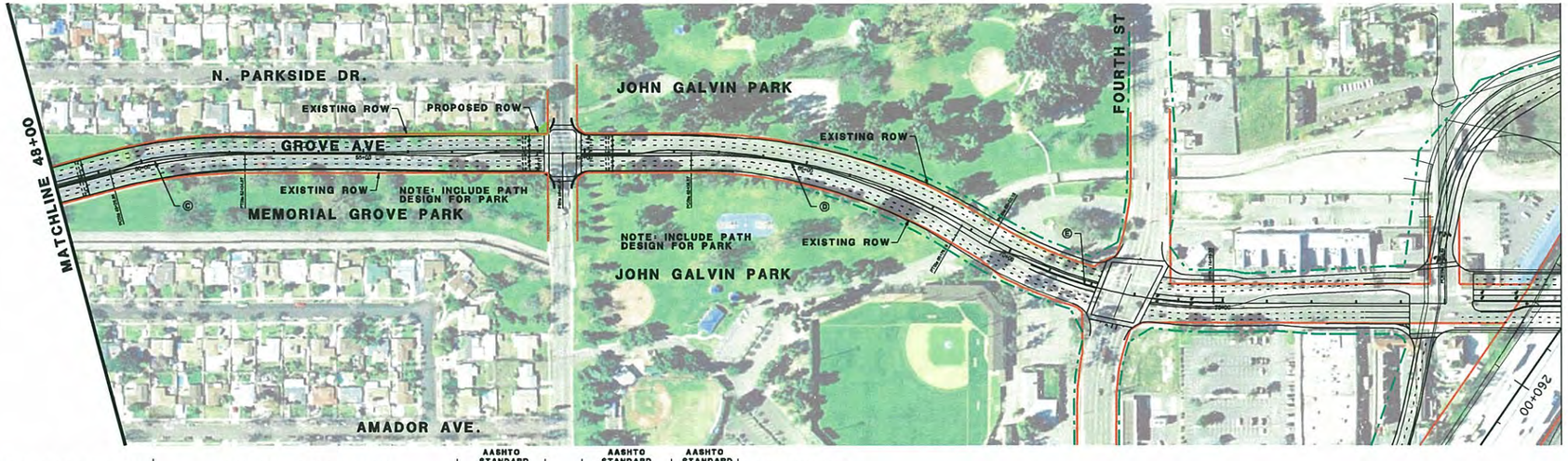
ROW IMPACT

NOTE: SIDE STREET IMPROVEMENTS ARE NOT SHOWN.

SEPTEMBER 15, 2010

CURVE DATA				
NO.	R	Δ	T	L
A	1050.00'	6°47'41"	62.33'	124.52'
B	979.00'	14°45'00"	126.72'	252.03'
C	1200.00'	14°45'15"	155.36'	309.01'
D	1200.00'	30°28'57"	326.96'	638.42'
E	1000.00'	30°19'07"	270.93'	529.16'





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ATTACHMENT 8

ADVANCE PLANNING STUDY

Caltrans

ADVANCE PLANNING STUDY REPORT

I-10 AT 4th STREET INTERCHANGE IMPROVEMENT PROJECT

08-SBd-10 (PM 4.1/6.1) EA 08-0J400K

Submitted to:

State of California Department of Transportation
Engineering Services
Office of Special Funded Projects
Contact: Nassim Elias P.E.
Tel: (909)383-6713

Prepared for:

CITY OF ONTARIO
303 East B Street
Ontario, CA 91764
Mauricio Diaz, Project Manager

Tel: (909)395-2107

Prepared by:

PBSJ

625 The City Drive South, Suite 200
Orange, CA 92868-4946
Contact: Sam Xie, PE
Tel: (714)750-7525 ext 118

April, 2009

Table of Contents

SECTION 1 – APS DESIGN MEMO

SECTION 1 – APS DESIGN MEMO

1. VICINITY MAP

2. INTRODUCTION

The existing I-10/4th Street Interchange allows on- and off- ramp access to the I-10 freeway from the east and west approach on 4th Street. The I-10 freeway is an eleven-lane freeway between post miles (PM) 4.1-6.1. According to the City of Ontario's General Plan, Grove Street is a four lane collector street from I-10 to Holt Street; whereas 4th Street is classified as a Collector Street to the west of the I-10 Freeway while it is classified as a Standard Arterial to the east of the I-10 Freeway.

This project was initiated with Request for Proposals by the City of Ontario in March of 2007 as a part of the City's initiative to mitigate existing operational, safety, and capacity deficiencies at the existing I-10 Freeway at 4th Street Interchange. City of Ontario and SANBAG officials acknowledged the immediate needs to improve the freeway and interchange to avoid further operations, safety and capacity failures.

Purpose and Need statements were developed through a series of Project Development Team (PDT) meetings occurring since May 2007. In these meetings various stakeholders including but not limited to Caltrans and its various divisions, the City of Indio, Coachella Valley Associated Government, Coachella Valley Water District, and National American Heritage Commission (NAHC) provided inputs on the challenges and opportunities the existing interchange represents. These challenges and opportunities were then turned into the alternative solutions for consensus, feedback and pertinent modifications before arriving at their current configuration.

Three project alternatives and a no-build alternative were considered in the preliminary conceptual stage. The three alternatives were presented to the PDT, which consisted of representatives from Caltrans, City of Ontario and consultants and have been carried over to the PSR process.

The 4th Street Interchange is located in the City of Ontario in San Bernardino County on the Interstate 10 (I-10) Freeway at Post Mile 4.1-6.1 (refer to Attachment 1, Regional Location Map in the Project Report). The proposed improvements are located less than a mile from the Ontario International Airport (refer to Attachment 2, Project Location Map in the Project Report). The improvements would improve traffic circulation in the area and mitigate for the growth impacts while addressing the existing travel demand in the City of Ontario. The three alternatives (1, 2 and 3) to be evaluated in this report widen Grove Avenue from four to six lanes between I-10 and Holt Street. Alternative 1 is a minimum build option that improves upon the existing I-10/4th Street Interchange ramps, widens 4th Street from Grove Avenue to I-10 freeway and widens the I-10/4th Street Undercrossing (UC) and I-10/Grove Avenue UC. Alternatives 2 and 3 are proposed diamond and partial cloverleaf (respectively) freeway interchanges to be located at Grove Avenue and include the demolition of the I-10/4th Street Interchange and lengthen the Grove Avenue UC and 4th Street UC. All three alternatives require the existing bridge structures be removed and replaced with longer and shallower structures.

3. STRUCTURE TYPE

3.1 EXISTING CONDITION OF 4TH STREET UNDERCROSSING (Br. No. 54-440)

Existing 4th Street under I-10 has one 14 feet wide traffic lane at each direction plus a center left turn lane of 10'. There is a 5' wide sidewalk at in front of each high cantilever abutment wall.

The existing 4th Street Undercrossing (UC) is a single span concrete bridge carrying I-10 freeway traffic approximately 99.5 feet long with large skew angle of approximately 55.5 degrees. The original

bridge is a 6'-0" deep Cast-In-Place Reinforced Concrete (CIP/RC) box girder bridge built in 1952 and was widened three times since: one in 1961 with 6'-0" deep Cast-In-Place Prestressed (CIP/PS) concrete box girders to fill the median gap, one in 1971 with 6'-0" deep CIP/PS concrete box girders on the outsides in both EB and WB directions, and the latest previous widening was completed in 1998 with 4'-9" deep Precasted Prestressed (PC/PS) concrete I-girders on the outsides in both EB and WB lanes and removing the old widening built in 1971.

The existing vertical clearance, as shown on the latest widening as-built plans dated 6/3/96, was 15'-3" for the original structure and 15'-9" for the 1998 widening. However, site visit revealed the minimum vertical clearance is actually only 14'-6" (see photo attachment in Section 5, Bridge As-Built Plans) as posted on the outside girder face over the roadway, which is less than the acceptable 15' minimum Caltrans standard for local street. The minimum vertical clearance is controlled by the original structure. The discrepancy in current posted minimum vertical clearance and the previous vertical clearance as indicated in the previous widening plans is probably due to street maintenance resurfacing over the years.

3.2 EXISTING CONDITION OF GROVE AVENUE UNDERCROSSING (Br. No. 54-441)

Existing Grove Avenue under I-10 has a total of 4 through traffic lanes at approximately 16', 12', 12', 12' plus 5' wide sidewalk at in front of each high cantilever abutment wall.

Similar to the existing 4th Street UC, Grove Avenue UC is also a single span concrete bridge carrying I-10 freeway traffic approximately 83.33 feet long with moderate skew angle of approximately of 34.73 degrees. The original bridge is a 4'-8" deep CIP/RC box girder bridge built in 1952 and was widened three times since: one in 1961 with 4'-8" deep CIP/PS concrete box girders to fill the median gap, one in 1971 with 4'-8" deep CIP/PS concrete box girders on the outsides in both EB and WB directions, and the latest previous widening was completed in 1998 with 4'-6" deep PC/PS I-girders on the outsides in both EB and WB lanes and removing the old widening built in 1971.

The existing vertical clearance, as shown on the latest widening plans dated 6/11/96, was 15'-6" for the original structure and 15'-4" for the 1998 widening. However, site visit revealed the minimum vertical clearance is actually only 15'-3" (see photo attachment in Section 5, Bridge As-Built Plans) as posted on the girder over roadway, which is above the acceptable 15' minimum Caltrans standard for local street. The minimum vertical clearance is controlled by the 1998 widened portion of structure. The discrepancy in current posted minimum vertical clearance and the previous vertical clearance as indicated in the previous widening design plans is probably due to street maintenance resurfacing over the years.

3.3 PROPOSED BRIDGE REPLACEMENT STRUCTURES

To be consistent with Caltrans' standard practices, CIP/PS Concrete Box Girder bridge, the most economical structure type widely used in California, will be used for the 4th Street UC and Grove Avenue UC replacement structures. In addition to the economical reason, this type of structure, CIP/PS Concrete Box Girder bridge, is proven to be the most effective bridge type in the State of California, especially in San Bernardino County in Southern California, where the seismic activities are of major concern.

Because of the proposed street widening improvement on 4th Street and Grove Avenue, the replacement structure will be a two span continuous concrete bridge at both interchanges in order to reduce the required structure depth, with a center bent and tall cantilever type of abutments.

Spread footing foundation for both replacement structures are proposed in the Preliminary Geotechnical Report, to be consistent with the foundation type shown on the as-built plans of the existing bridges. Other type of foundation might be recommended in the final Geotechnical Report later in the PS&E design phase based on bridge site specific investigation.

Preliminary bridge plans for all 3 alternatives are presented in Section 4, Bridge APS and Construction Staging Plans, of this report.

4. VERTICAL CLEARANCE

The required minimum vertical clearance per Caltrans Highway Design Manual is 15 feet over the local streets. The replacement bridge will have to maintain this minimum vertical clearance requirement without raising the existing freeway profile, which is extremely costly and causes great negative impact to the freeway traffic. Alternative 1 requires lengthen the 4th Street UC bridge (a proposed continuous two-span structure) considerably with length of 142'-2" per span, which is about 43% longer than the existing single span structure. Because the existing minimum vertical clearance is already substandard at 14'-6" for the 4th Street UC, in order to meet the 15' minimum vertical clearance requirement, the replacement structure depth to span ratio for the new 4th Street UC bridge proposed in Alternative 1 has to be about 0.032, which is much shallower than the Caltran and AASHTO recommended minimum depth to span ratio of 0.04 commonly used for continuous multi-span bridges. This will require thorough investigation, review and approval from Caltrans HQ Structures. Another way to meet both the minimum vertical clearance of 15' and the recommended minimum depth to span ratio of 0.4 for the proposed 4th Street UC bridge is to lower the street profile by about one foot or more at the interchange, which is also very costly to do considering there are many underground utilities under the local street coupled with local area drainage issue because lowering the street profile will create a area low point at the interchange.

The minimum vertical clearances shown on the Advance Planning Study (APS) plans are based on the information shown on the bridge as-built plans. Refined vertical clearance calculations, especially for the 4th Street UC proposed in Alternative 1, which vertical clearance is at the minimum required, will be necessary once detailed survey data of the local street and the freeway become available.

5. STAGE CONSTRUCTION AND FALSEWORK

Construction staging will be required to demolish and to build the replacement structures for all three alternatives.

For 4th Street Interchange reconstruction, Stage 1 will remove the off-center existing median concrete barrier and shift the median barrier 8' horizontally to the north back to the freeway centerline. Both EB and WB directions of freeway traffic will be carried by four 12' lanes on the center portion of the existing bridge consisted of the original structure and the median widening built in 1961. Stage 2 construction will demolish the outside widening on the EB and WB directions which were built in 1998, and construct the outside portions of the replacement bridge to accommodate 4 traffic lanes (11', 11', 11', and 12') plus a concrete barrier at the outside edge with sound wall and a temporary K-rail at the inside edge. Stage 3 construction will shift the EB and WB directions of the freeway traffic to the newly completed outside portions of the replacement structure, demolish the center portion of the existing structure, and build the center portion of the replacement structure. Stage 4 construction will connect the outside and center portions of the replacement structure by deck closer pour, and shift the freeway traffic from outside back to the completed replacement structure.

Construction staging for Grove Avenue Interchange reconstruction is similar to the staging used at 4th Street Interchange reconstruction, except that Stage 1 used at 4th Street UC will not be required because the existing median concrete barrier at Grove Avenue is not off-center. Other stages will be the same as those mentioned above for 4th Street Interchange reconstruction.

Staging can be combined for both 4th Street and Grove Ave bridge replacement when construction activities can be taken place simultaneously as proposed by the Contractor. In such case, the staging will follow 4th Street as mentioned above. For global construction staging involving bridges, on-ramps and off-ramps, and local street widening construction activities for all three alternatives, refer to PSR document.

Falsework will be required over the existing street for all 3 alternatives for constructing the superstructures of the replacement bridges. In order to maintain a temporary minimum vertical clearance of 15' under the falsework beam during construction, the replacement structures will be built on raised falsework. Then the bridges will be lowered onto final design grade after post-tensioning is completed..

6. IMPACT TO EXISTING UTILITIES

There are many known and/or unknown existing utilities buried under the local streets and exposed overhead within the areas of the two interchanges. See PR/PSR for detailed utility information.

7. BRIDGE AESTHETICS

No special aesthetic requirements are specified at this time. It is expected that any aesthetic requirements, as needed, can be accommodate in the later design stage.

8. BRIDGE FOUNDATION

No special issues arise at this stage of design. Preliminary Geotechnical Report for this project recommends spread footing foundation for the replacement structures and is provided for review under separate cover. Final site specific Geotechnical Report might recommend other types of foundation and will be available for PS&E design later.

9. HAZARDOUS MATERIAL

No information of known hazardous material is available at this time.

10. BRIDGE COSTS

See Section 3, Planning Cost Estimates, for bridge construction cost estimates and comparison summary for all 3 alternatives.

SECTION 2 – CONSULTANT PREPARED STRUCTURES ADVANCE PLANNING (APS) CHECKLIST

Consultant Prepared Structure Advance Planning Study (APS) Checklist

Date:	Consultant Firm (for structures):		Phone No:
April 6, 09	PBS&J		714-750-7275
Designed by:			Phone No:
Sam Xie			714-750-7275 ext 118
EA:	County:	Rte:	PM
08-0J400K	SBd	I-10	4.1/6.1
Project Description: Construct bridge replacement at 4th Street Interchange (Alternative 1) or at Grove Ave Interchange (Alternatives 2 & 3)			
Bridge No(s):	Bridge Name(s):		
54-440 54-441	Fourth Street Undercrossing Grove Avenue Undercrossing		
Total number of bridges in project:		APS Alternative Letter or Number (if more than one):	
2 bridges presented in this report		3 Alternatives, each alternative has two bridges	
Purpose of this APS:	Initial APS Cost & Feasibility ☒	Revised scope ☐	Update cost ☐

Part A Items to collect and considerations prior to beginning the APS

All items listed in Part A are to be made available and submitted if requested by the Liaison Engineer. (Mark **N/A** if not applicable)

☒ Preliminary profile grade of proposed structure.

☒ Typical section of the proposed structure. (Including barrier type, sidewalks, cross slope %, etc.)

☒ Grades or spot elevations of roadway below the structure.

☒ Typical section of roadway below the structure. (Including shoulders, gutters, embankment slope.)

☒ Site map: including horizontal alignment of new structure and the roadway below, topo, contours, etc.

☒ Stage construction or detour plan for traffic on the structure.
(number of lanes to remain open, Temp Railing, etc.)

☒ Stage construction or detour plan for the roadway below the structure.
(falsework openings for each stage and any restrictions.)

☒ "As Built" plans for existing structures.
(Note: Included in this report)

☐ **N/A** Future widening plans of upper and lower roadway (verify with Route Concept Report).

☒ Site aerial photograph (at the proposed structure).

☒ Environmental and/or permit requirements (areas of potential impact, construction windows, etc.)

☒ Overhead and underground utility plans

☐ **N/A** Any other information that you feel is necessary to complete the study. (Other concerns that may affect the APS: local agency requirements such as aesthetics, improvements in vicinity of structure, airspace usage, other obstructions, etc.)

Consultant Prepared Advance Planning Study (APS) Checklist

Part B Considerations during the APS design and cost estimate preparation

1.	Has this project been discussed with:	the OSFP Liaison Engineer?	Yes ☐ No ☒
		the Caltrans District Project Manager?	Yes ☒ No ☐
		the roadway consultant?	Yes ☒ No ☐
2.	Have the Caltrans Structures Maintenance records been reviewed?		Yes ☒ No ☐
	If the records recommend any work for the structure, is it included in the APS?		Yes ☐ No ☒
3.	Are there special aesthetic considerations?		Yes ☐ No ☒
4.	(Widenings and Modifications) Has this project been reviewed for seismic retrofit requirements?		Yes ☐ No ☒
	Are seismic retrofit requirements included in the APS?		Yes ☐ No ☒
5.	Any special Railroad requirements?		Yes ☐ No ☒
	Shoofly required?		Yes ☐ No ☒
	Cost of shoofly included as a separate item in the project cost estimate?		Yes ☐ No ☒
6.	Any special foundation requirements, including scour critical work, special excavation such as Type A, Type D, and/or hazardous or contaminated material?		Yes ☐ No ☒
7.	Any special construction requirements, including limited site accessibility or seasonal work? (Replacement will be built on raised falsework and be lowered onto final grade)		Yes ☒ No ☐
8.	Other items to be included in the cost such as slope paving, approach slabs, and/or adjacent retaining walls? (Retaining wall costs are not included)		Yes ☒ No ☐
9.	Remove existing bridge? Total Deck Area: 16418 FT^2 (Alt 1), 13750 FT^2 (Alt 2 & 3)		Yes ☒ No ☐
10.	Any other unusual or special requirements?		Yes ☐ No ☒
11.	Provide and attach a consultant prepared Design Memo to summarize and document any important assumptions, discussions, decisions, unusual items, local agency requirements such as aesthetics, improvements in vicinity of the structure, airspace usage, other obstructions, or any items noted above.	Summary attached?	Yes ☒ No ☐

Designer: (Printed Name)	Designer's Signature:	Date:
Sam Xie		April 2009

SECTION 3 – PLANNING COST ESTIMATES

I-10 AT FOURTH STREET AND GROVE AVENUE INTERCHANGES IMPROVEMENT PROJECT BRIDGE COST COMPARISON SUMMARY

	ALTERNATIVE 1 - MINIMUM BUILD		ALTERNATIVE 2 - DIAMOND INTERCHANGE AT GROVE AVE		ALTERNATIVE 3 - PARTIAL CLOVER INTERCHANGE AT GROVE AVE	
	4TH STREET UNDERCROSSING	GROVE AVE UNDERCROSSING	4TH STREET UNDERCROSSING	GROVE AVE UNDERCROSSING	4TH STREET UNDERCROSSING	GROVE AVE UNDERCROSSING
	Two-Span CIP/PS Concrete Box Girder	Two-Span CIP/PS Concrete Box Girder	Two-Span CIP/PS Concrete Box Girder	Two-Span CIP/PS Concrete Box Girder	Two-Span CIP/PS Concrete Box Girder	Two-Span CIP/PS Concrete Box Girder
Span Length	142.17' and 142.17'	68.73' and 68.73'	100.00' and 99.58'	97.92' and 83.33'	100.00' and 99.58'	68.75' and 83.33'
Total Bridge Length (ft)	**284.33**	**137.46**	**199.58**	**181.25**	**199.58**	**152.08**
Structure Depth	**4'-6"**	**3'-6"**	**4'-0"**	**4'-0"**	**4'-0"**	**3'-6"**
Depth/Span Ratio	0.032 (See Note 7)	0.051	0.040	0.041	0.040	0.042
Existing Girder Depth (ft)	Original Str = 6', Previous Widen = 4'-9"	Original Str = 4'-8"', Previous Widen = 4'-6"	Original Str = 6', Previous Widen = 4'-9"	Original Str = 4'-8"', Previous Widen = 4'-6"	Original Str = 6', Previous Widen = 4'-9"	Original Str = 4'-8"', Previous Widen = 4'-6"
Existing Vert Clr (See Note 2)	14'-6'	15'-3"	14'-6"	15'-3"	14'-6"	15'-3"
New Vert Clr (See Note 3)	**15'-0"**	**15'-9"**	**15'-6"**	**15'-3"**	**15'-6"**	**15'-9 1/2"**
Min Bridge Width (ft)	208.25	208.25	208.25	208.25	208.25	214.97
Area (sf)	59,212	28,626	41,563	37,745	41,563	32,693
Unit Cost ($/sf)	304	397	357	324	357	356
Bridge Removal Cost	600000	500000	600000	500000	600000	500000
Total Cost	**$18,600,000**	**$11,900,000**	**$15,400,000**	**$12,700,000**	**$15,400,000**	**$12,100,000**
Total Cost per Alternative	**$30,500,000**		**$28,100,000**		**$27,500,000**	

Notes:

1. Span length is based on the proposed alignment configuration provided by AECOM
2. Existing vertical clearance is based on field observation of the posting on the bridge girder above the roadway
3. New vertical clearance is approximate based on the as-built plans and the field observation posting
   Refined vertical clearance calculations will be necessary once survey data become available
4. Unit cost per square foot of new deck area is based on CT Comparative Bridge Costs dated January 2008
5. Only bridge cost is considered, not including the retaining walls cost on both ends of the bridge approaches
6. Replacement will be built on raised falsework and lowered onto final grade
7. This Depth to Span Ratio is less than CT recommended and is subject to CT HQ Structure review and approval

[ ] GENERAL PLAN ESTIMATE [X] ADVANCE PLANNING ESTIMATE

RCVD BY: IN EST: OUT EST:

BRIDGE:	Alternative 1: 4th Street UC (Repl)	**BR. No.:**	54-440	**DISTRICT:**	08
TYPE:	Cast-In-Place Prestressed Concrete Box Girder			**RTE:**	I-10
CU:	08			**CO:**	SBd
EA:	0J400K			**PM:**	5.20
		LENGTH:	284.33 **WIDTH:** 208.25	**AREA (SF) =**	59,212

DESIGN SECTION:

 # OF STRUCTURES IN PROJECT : **EST. NO.**

PRICES BY : SX **COST INDEX:**

QUANTITIES BY: VN **DATE:** 4/1/2009

QUANTITIES CHECKED BY: SX **DATE:** 4/1/2009

	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
1	STRUCTURE EXCAVATION (BRIDGE)		CY	6,500	$80.00	$520,000.00
2	STRUCTURE BACKFILL (BRIDGE)		CY	3,500	$60.00	$210,000.00
3	PRESTRESSING		LS	1	$1,200,000.00	$1,200,000.00
4	STRUCTURAL CONCRETE, BRIDGE FOOTING		CY	1,450	$450.00	$652,500.00
5	STRUCTURAL CONCRETE, BRIDGE		CY	6,800	$850.00	$5,780,000.00
6	STRUCTURAL CONCRETE, APPROACH SLAB	Type N	CY	820	$850.00	$697,000.00
7	JOINT SEAL ASSEMBLY (MR 2")		LF	735	$80.00	$58,800.00
8	SOUND WALL (MASONRY BLOCK)		SQFT	9,870	$25.00	$246,750.00
9	BAR REINFORCING STEEL (BRIDGE)		LB	2,000,000	$1.50	$3,000,000.00
10	CONCRETE BARRIER	Type 732	LF	690	$100.00	$69,000.00
11	LOWING BRIDGE SUPERSTRUCTURE		LS	1	$500,000.00	$500,000.00
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SUBTOTAL	$12,934,050
MOBILIZATION (@ 10 %)	$1,437,117
SUBTOTAL BRIDGE ITEMS	$14,371,167
CONTINGENCIES (@ 25%)	$3,592,792
BRIDGE TOTAL COST	$17,963,958
COST PER SQ. FOOT	$303.38
BRIDGE REMOVAL (CONTINGENCIES INCL.)	$600,000
WORK BY RAILROAD OR UTILITY FORCES	
GRAND TOTAL	$18,563,958
FOR BUDGET PURPOSES - SAY	**$18,600,000**

ROUTING

1. DES SECTION
2. OFFICE OF BRIDGE DESIGN - NORTH
3. OFFICE OF BRIDGE DESIGN - CENTRAL
4. OFFICE OF BRIDGE DESIGN - SOUTH
5. OFFICE OF BRIDGE DESIGN - WEST
6. OFFICE OF BRIDGE DESIGN SOUTHERN CALIFORNIA

COMMENTS:

Exist Br Deck Area = 16,417.50 SQFT

Br Removal Cost = $35.00 / SQFT

THIS ESTIMATE DOES NOT INCLUDE RET WALL COSTS

[ ] GENERAL PLAN ESTIMATE [X] ADVANCE PLANNING ESTIMATE

RCVD BY: IN EST: OUT EST:

BRIDGE:	Alternatives 2 & 3: 4th Street UC (Repl)	**BR. No.:**	54-440	**DISTRICT:**	08
TYPE:	Cast-In-Place Prestressed Concrete Box Girder			**RTE:**	I-10
CU:	08			**CO:**	SBd
EA:	0J400K			**PM:**	5.20
		LENGTH:	199.58 **WIDTH:** 208.25	**AREA (SF) =**	41,563

DESIGN SECTION:

 # OF STRUCTURES IN PROJECT : **EST. NO.**

PRICES BY : SX **COST INDEX:**

QUANTITIES BY: VN **DATE:** 4/1/2009

QUANTITIES CHECKED BY: SX **DATE:** 4/1/2009

	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
1	STRUCTURE EXCAVATION (BRIDGE)		CY	6,500	$80.00	$520,000.00
2	STRUCTURE BACKFILL (BRIDGE)		CY	3,500	$60.00	$210,000.00
3	PRESTRESSING		LS	1	$850,000.00	$850,000.00
4	STRUCTURAL CONCRETE, BRIDGE FOOTING		CY	1,450	$450.00	$652,500.00
5	STRUCTURAL CONCRETE, BRIDGE		CY	5,360	$850.00	$4,556,000.00
6	STRUCTURAL CONCRETE, APPROACH SLAB	Type N	CY	820	$850.00	$697,000.00
7	JOINT SEAL ASSEMBLY (MR 2")		LF	735	$80.00	$58,800.00
8	SOUND WALL (MASONRY BLOCK)		SQFT	7,000	$25.00	$175,000.00
9	BAR REINFORCING STEEL (BRIDGE)		LB	1,600,000	$1.50	$2,400,000.00
10	CONCRETE BARRIER	Type 732	LF	520	$100.00	$52,000.00
11	LOWING BRIDGE SUPERSTRUCTURE		LS	1	$500,000.00	$500,000.00
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SUBTOTAL	$10,671,300
MOBILIZATION (@ 10 %)	$1,185,700
SUBTOTAL BRIDGE ITEMS	$11,857,000
CONTINGENCIES (@ 25%)	$2,964,250
BRIDGE TOTAL COST	$14,821,250
COST PER SQ. FOOT	$356.60
BRIDGE REMOVAL (CONTINGENCIES INCL.)	$600,000
WORK BY RAILROAD OR UTILITY FORCES	
GRAND TOTAL	$15,421,250
FOR BUDGET PURPOSES - SAY	**$15,400,000**

ROUTING

1. DES SECTION
2. OFFICE OF BRIDGE DESIGN - NORTH
3. OFFICE OF BRIDGE DESIGN - CENTRAL
4. OFFICE OF BRIDGE DESIGN - SOUTH
5. OFFICE OF BRIDGE DESIGN - WEST
6. OFFICE OF BRIDGE DESIGN SOUTHERN CALIFORNIA

COMMENTS: Exist Br Deck Area = 16,417.50 SQFT

Br Removal Cost = $35.00 / SQFT

THIS ESTIMATE DOES NOT INCLUDE RET WALL COSTS

[ ] GENERAL PLAN ESTIMATE [X] ADVANCE PLANNING ESTIMATE

RCVD BY:

IN EST:

OUT EST:

BRIDGE:	Alternative 1: Grove Ave UC (Repl)	**BR. No.:**	54-441	**DISTRICT:**	08
TYPE:	Cast-In-Place Prestressed Concrete Box Girder			**RTE:**	I-10
CU:	08			**CO:**	SBd
EA:	0J400K			**PM:**	4.90
		LENGTH:	137.46 **WIDTH:** 208.25	**AREA (SF) =**	28,626

DESIGN SECTION:

 # OF STRUCTURES IN PROJECT : **EST. NO.**

PRICES BY : SX **COST INDEX:**

QUANTITIES BY: VN **DATE:** 4/1/2009

QUANTITIES CHECKED BY: SX **DATE:** 4/1/2009

	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
1	STRUCTURE EXCAVATION (BRIDGE)		CY	5,200	$80.00	$416,000.00
2	STRUCTURE BACKFILL (BRIDGE)		CY	3,500	$60.00	$210,000.00
3	PRESTRESSING		LS	1	$500,000.00	$500,000.00
4	STRUCTURAL CONCRETE, BRIDGE FOOTING		CY	1,100	$450.00	$495,000.00
5	STRUCTURAL CONCRETE, BRIDGE		CY	4,150	$850.00	$3,527,500.00
6	STRUCTURAL CONCRETE, APPROACH SLAB	Type N	CY	600	$850.00	$510,000.00
7	JOINT SEAL ASSEMBLY (MR 2")		LF	510	$80.00	$40,800.00
8	BAR REINFORCING STEEL (BRIDGE)		LB	1,300,000	$1.50	$1,950,000.00
9	CONCRETE BARRIER	Type 732	LF	395	$100.00	$39,500.00
10	LOWING BRIDGE SUPERSTRUCTURE		LS	1	$500,000.00	$500,000.00
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ROUTING

1. DES SECTION
2. OFFICE OF BRIDGE DESIGN - NORTH
3. OFFICE OF BRIDGE DESIGN - CENTRAL
4. OFFICE OF BRIDGE DESIGN - SOUTH
5. OFFICE OF BRIDGE DESIGN - WEST
6. OFFICE OF BRIDGE DESIGN SOUTHERN CALIFORNIA

SUBTOTAL	$8,188,800
MOBILIZATION (@ 10 %)	$909,867
SUBTOTAL BRIDGE ITEMS	$9,098,667
CONTINGENCIES (@ 25%)	$2,274,667
BRIDGE TOTAL COST	$11,373,333
COST PER SQ. FOOT	$397.31
BRIDGE REMOVAL (CONTINGENCIES INCL.)	$500,000
WORK BY RAILROAD OR UTILITY FORCES	
GRAND TOTAL	$11,873,333
FOR BUDGET PURPOSES - SAY	**$11,900,000**

COMMENTS: Exist Br Deck Area = 13,750.00 SQFT

Br Removal Cost = $35.00 / SQFT

THIS ESTIMATE DOES NOT INCLUDE RET WALL COSTS

[ ] GENERAL PLAN ESTIMATE

[X] ADVANCE PLANNING ESTIMATE

RCVD BY:

IN EST:

OUT EST:

BRIDGE: Alternative 2: Grove Ave UC (Repl) **BR. No.:** 54-441

TYPE: Cast-In-Place Prestressed Concrete Box Girder

CU: 08

EA: 0J400K

DISTRICT: 08

RTE: I-10

CO: SBd

PM: 4.90

LENGTH: 181.25 **WIDTH:** 208.25 **AREA (SF) =** 37,745

DESIGN SECTION:

 # OF STRUCTURES IN PROJECT : **EST. NO.**

PRICES BY : SX **COST INDEX:**

QUANTITIES BY: VN **DATE:** 4/1/2009

QUANTITIES CHECKED BY: SX **DATE:** 4/1/2009

	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
1	STRUCTURE EXCAVATION (BRIDGE)		CY	5,200	$80.00	$416,000.00
2	STRUCTURE BACKFILL (BRIDGE)		CY	3,500	$60.00	$210,000.00
3	PRESTRESSING		LS	1	$650,000.00	$650,000.00
4	STRUCTURAL CONCRETE, BRIDGE FOOTING		CY	1,100	$450.00	$495,000.00
5	STRUCTURAL CONCRETE, BRIDGE		CY	4,500	$850.00	$3,825,000.00
6	STRUCTURAL CONCRETE, APPROACH SLAB	Type N	CY	600	$850.00	$510,000.00
7	JOINT SEAL ASSEMBLY (MR 2")		LF	510	$80.00	$40,800.00
8	BAR REINFORCING STEEL (BRIDGE)		LB	1,400,000	$1.50	$2,100,000.00
9	CONCRETE BARRIER	Type 732	LF	485	$100.00	$48,500.00
10	LOWING BRIDGE SUPERSTRUCTURE		LS	1	$500,000.00	$500,000.00
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30						

SUBTOTAL	$8,795,300
MOBILIZATION (@ 10 %)	$977,256
SUBTOTAL BRIDGE ITEMS	$9,772,556
CONTINGENCIES (@ 25%)	$2,443,139
BRIDGE TOTAL COST	$12,215,694
COST PER SQ. FOOT	$323.63
BRIDGE REMOVAL (CONTINGENCIES INCL.)	$500,000
WORK BY RAILROAD OR UTILITY FORCES	
GRAND TOTAL	$12,715,694
FOR BUDGET PURPOSES - SAY	**$12,700,000**

ROUTING

1. DES SECTION
2. OFFICE OF BRIDGE DESIGN - NORTH
3. OFFICE OF BRIDGE DESIGN - CENTRAL
4. OFFICE OF BRIDGE DESIGN - SOUTH
5. OFFICE OF BRIDGE DESIGN - WEST
6. OFFICE OF BRIDGE DESIGN SOUTHERN CALIFORNIA

COMMENTS: Exist Br Deck Area = 13,750.00 SQFT

Br Removal Cost = $35.00 / SQFT

THIS ESTIMATE DOES NOT INCLUDE RET WALL COSTS

[ ] GENERAL PLAN ESTIMATE [X] ADVANCE PLANNING ESTIMATE

RCVD BY: IN EST: OUT EST:

BRIDGE:	Alternative 3: Grove Ave UC (Repl)	**BR. No.:**	54-441	**DISTRICT:**	08
TYPE:	Cast-In-Place Prestressed Concrete Box Girder			**RTE:**	I-10
CU:	08			**CO:**	SBd
EA:	0J400K			**PM:**	4.90
	LENGTH: 152.08	**WIDTH:**	214.98	**AREA (SF) =**	32,695

DESIGN SECTION:

 # OF STRUCTURES IN PROJECT : **EST. NO.**

PRICES BY : SX **COST INDEX:**

QUANTITIES BY: VN **DATE:** 4/1/2009

QUANTITIES CHECKED BY: SX **DATE:** 4/1/2009

	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
1	STRUCTURE EXCAVATION (BRIDGE)		CY	5,300	$80.00	$424,000.00
2	STRUCTURE BACKFILL (BRIDGE)		CY	3,500	$60.00	$210,000.00
3	PRESTRESSING		LS	1	$550,000.00	$550,000.00
4	STRUCTURAL CONCRETE, BRIDGE FOOTING		CY	1,120	$450.00	$504,000.00
5	STRUCTURAL CONCRETE, BRIDGE		CY	4,200	$850.00	$3,570,000.00
6	STRUCTURAL CONCRETE, APPROACH SLAB	Type N	CY	600	$850.00	$510,000.00
7	JOINT SEAL ASSEMBLY (MR 2")		LF	525	$80.00	$42,000.00
8	BAR REINFORCING STEEL (BRIDGE)		LB	1,350,000	$1.50	$2,025,000.00
9	CONCRETE BARRIER	Type 732	LF	425	$100.00	$42,500.00
10	LOWING BRIDGE SUPERSTRUCTURE		LS	1	$500,000.00	$500,000.00
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30						

ROUTING

1. DES SECTION
2. OFFICE OF BRIDGE DESIGN - NORTH
3. OFFICE OF BRIDGE DESIGN - CENTRAL
4. OFFICE OF BRIDGE DESIGN - SOUTH
5. OFFICE OF BRIDGE DESIGN - WEST
6. OFFICE OF BRIDGE DESIGN SOUTHERN CALIFORNIA

SUBTOTAL	$8,377,500
MOBILIZATION (@ 10 %)	$930,833
SUBTOTAL BRIDGE ITEMS	$9,308,333
CONTINGENCIES (@ 25%)	$2,327,083
BRIDGE TOTAL COST	$11,635,417
COST PER SQ. FOOT	$355.88
BRIDGE REMOVAL (CONTINGENCIES INCL.)	$500,000
WORK BY RAILROAD OR UTILITY FORCES	
GRAND TOTAL	$12,135,417
FOR BUDGET PURPOSES - SAY	**$12,100,000**

COMMENTS: Exist Br Deck Area = 13,750.00 SQFT

Br Removal Cost = $35.00 / SQFT

THIS ESTIMATE DOES NOT INCLUDE RET WALL COSTS

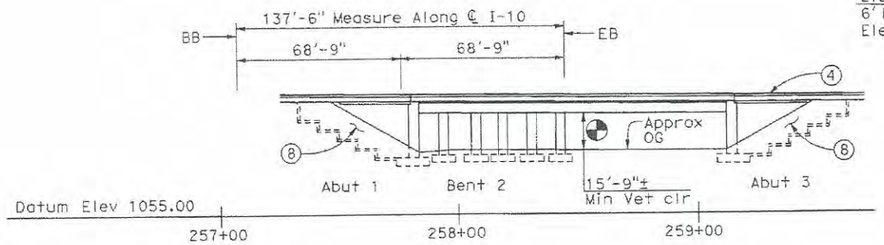
SECTION 4 – BRIDGE APS AND CONSTRUCTION STAGING PLANS

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	4.9

CITY OF ONTARIO
303 East B Street
Ontario, CA 91764

PBS&J
625 The City Drive S, Suite 200
Orange, CA 92868



ELEVATION
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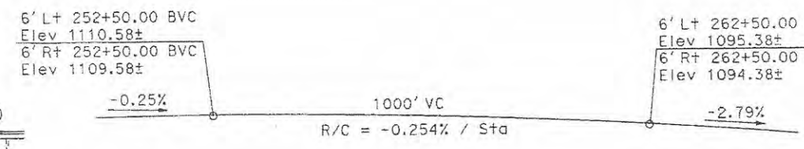

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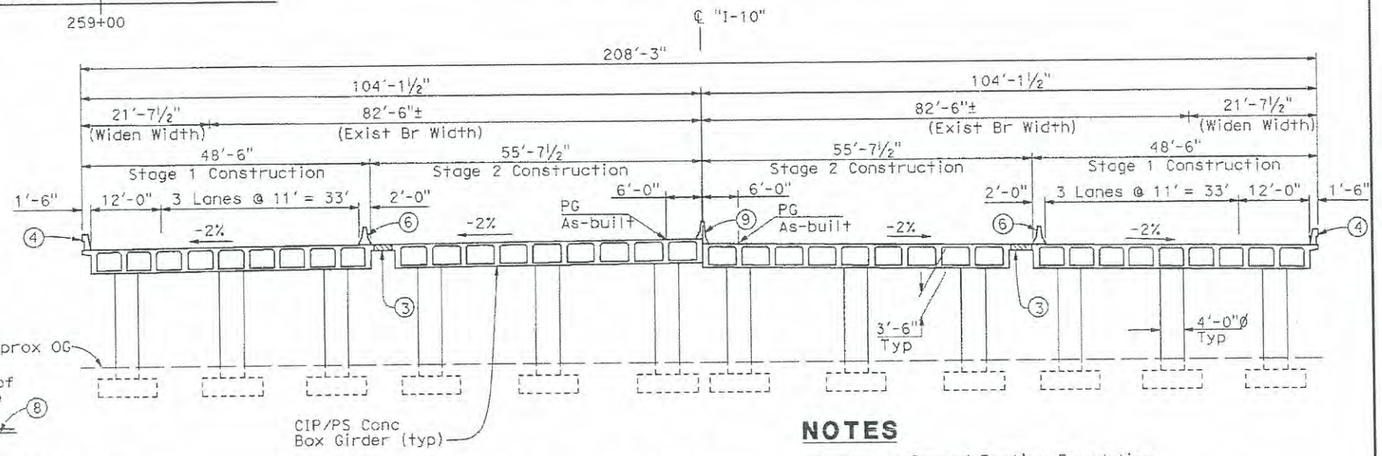
No Scale



TYPICAL SECTION
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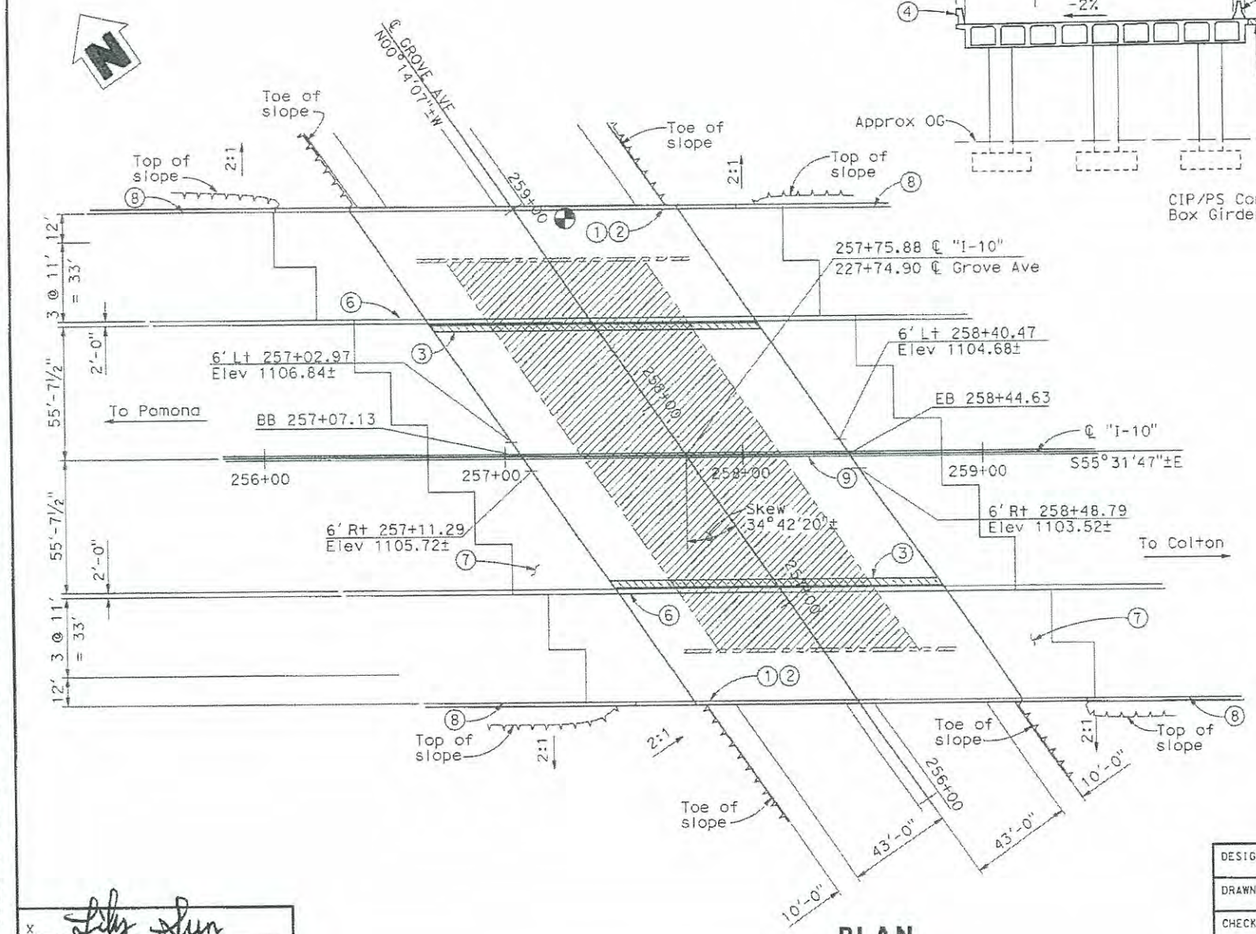


PLAN
1" = 30'

NOTES
1. Assume Spread Footing Foundation.
2. Replacement Structure will be cast high on raised Falsework and lowered into final grade.
3. Exist bridge section not shown for clarity.

LEGEND
1. Paint "Bridge No. 54-441" and year constructed
2. Paint "Grove Ave UC"
3. Closure Pour (2'-6")
4. Conc Barrier Type 732
6. Temporary Railing, Type K (See "Road Plans")
7. Structure Approach, Type N(30S)
8. Retaining wall (See "Road Plans")
9. Conc Barrier Type 60A (Mod) (See "Road Plans")

Point of Minimum Vertical Clearance (Based On Information Shown On As-Built Plans)
Indicates Closure Pour
Indicates Bridge Removal
Indicates Existing Structure
Indicates New Structure
Indicates Traffic Direction

DATE OF ESTIMATE		March 2009
BRIDGE REMOVAL	=	$ 500,000
STRUCTURE DEPTH	=	3'-6"
LENGTH	=	137'-6"
WIDTH	=	208'-3"
AREA	=	28,634 FT²
COST/FT² INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$ 397
TOTAL BRIDGE COST	=	$ 11,900,000

(Note: Ret Wall Cost Not Included)

ALTERNATIVE 1

X DESIGN OVERSIGHT
X SIGN OFF DATE 8/25/10

DESIGNED BY	S. Xie	DATE	08/10
DRAWN BY	I. Karkoutli	DATE	08/10
CHECKED BY	A. Moubayed	DATE	08/10
APPROVED		DATE	

S. Xie
PROJECT ENGINEER

PLANNING STUDY
GROVE AVENUE UC (REPL)

BRIDGE NO. 54-441	CU 08
SCALE: As Shown	EA 0J400K

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => T:\Cad\100001232-I-10 AT 4TH ST & Grove\Structural\APS Plans\Grove Ave\Grove Ave-APS ALT1.dgn

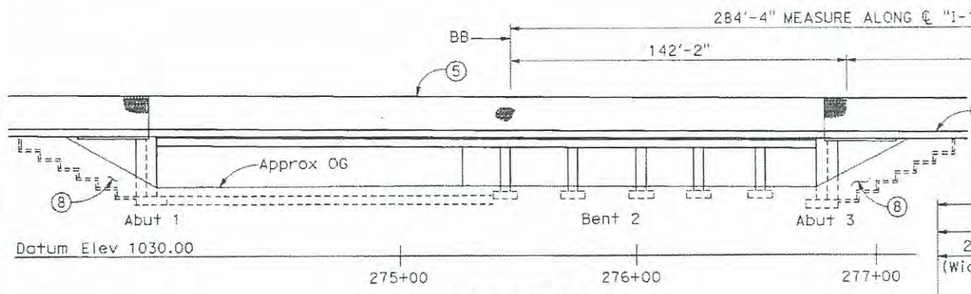
USERNAME => PBS&J
DATE PLOTTED => 8/17/2010
TIME PLOTTED => 10:28:51 AM

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

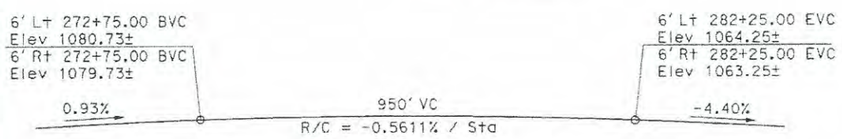
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	5.2

CITY OF ONTARIO
303 East B Street
Ontario, CA 91764

PBS&J
625 The City Drive South,
Suite 200
Orange, CA 92868



ELEVATION
1" = 30'



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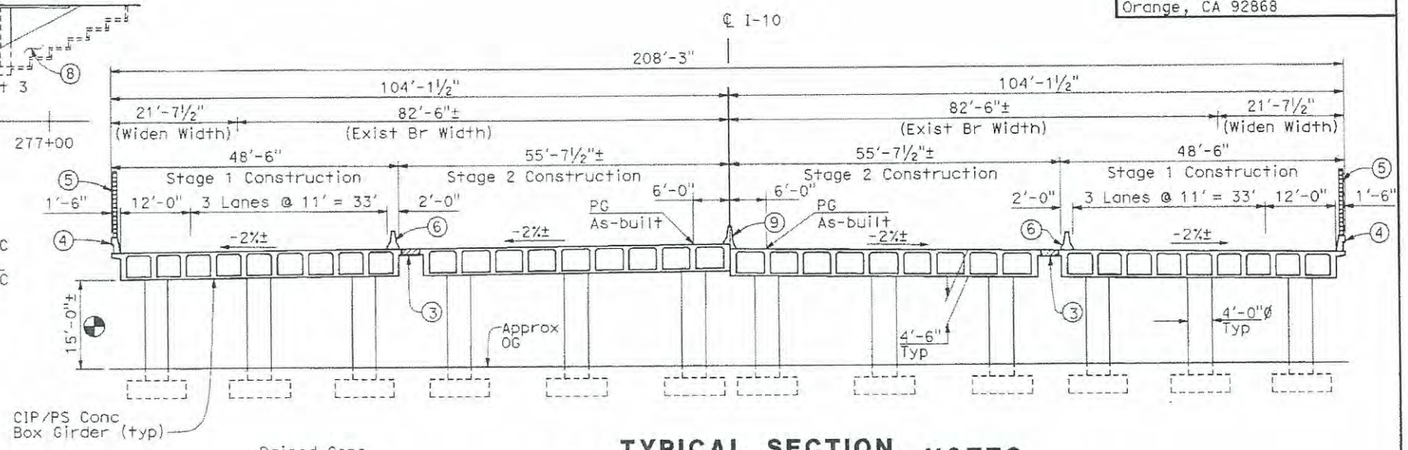
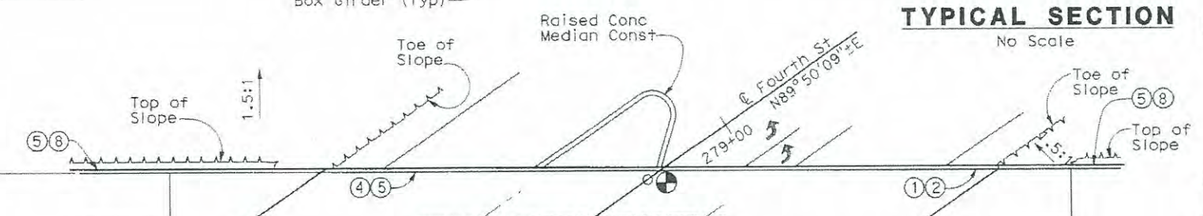
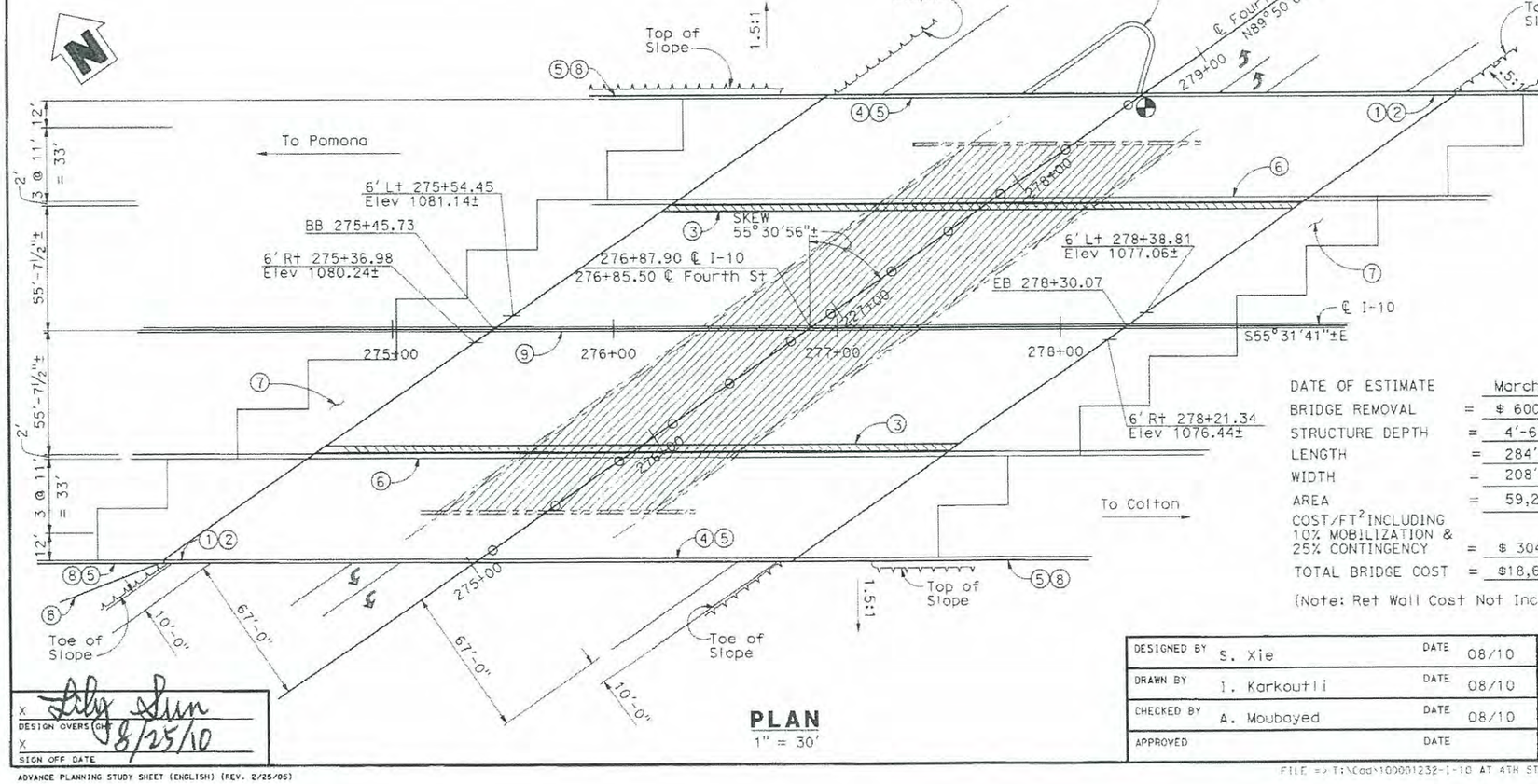
No Scale



TYPICAL SECTION
No Scale





PLAN
1" = 30'

NOTES

1. Assume Spread Footing Foundation.
2. Replacement Structure will be cast high on raised falsework and lowered into final grade.
3. Exist bridge section (to be removed) not shown for clarity.

LEGEND

① Paint "Bridge No. 54-440" and year constructed
② Paint "4th Street UC"
③ Closure Pour (2'-6")
④ Conc Barrier Type 736 (Mod)
⑤ Sound wall (Masonry Block)
⑥ Temporary Railing, Type K (See "Road Plans")
⑦ Structure Approach, Type N(30S)
⑧ Retaining wall (See "Road Plans")
⑨ Conc Barrier Type 60A (Mod) (See "Road Plans")
◓ Point of Minimum Vertical Clearance (Based On Information Shown On As-Built Plans)
▨ Indicates Closure Pour
▨ Indicates Bridge Removal
—— Indicates Existing Structure
——— Indicates New Structure
——→ Indicates Traffic Direction

DATE OF ESTIMATE		March 2009
BRIDGE REMOVAL	=	$ 600,000
STRUCTURE DEPTH	=	4'-6"
LENGTH	=	284'-4"
WIDTH	=	208'-1"
AREA	=	59,212 FT²
COST/FT² INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$ 304
TOTAL BRIDGE COST	=	$18,600,000

(Note: Ret Wall Cost Not Included)

ALTERNATIVE 1

X Lily Sun 8/25/10
DESIGN OVERSIGHT
X
SIGN OFF DATE

DESIGNED BY	S. Xie	DATE	08/10
DRAWN BY	I. Karkoutli	DATE	08/10
CHECKED BY	A. Moubayed	DATE	08/10
APPROVED		DATE	

S. Xie
PROJECT ENGINEER

PLANNING STUDY
FOURTH STREET UC (REPL)

BRIDGE NO. 54-440	CU 08
SCALE: As shown	EA 0J400K

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => T:\Cad\100001232-I-10 AT 4TH ST & Grove\Structural\APS Plans\4th St\4TH ST-APS ALT1.dgn

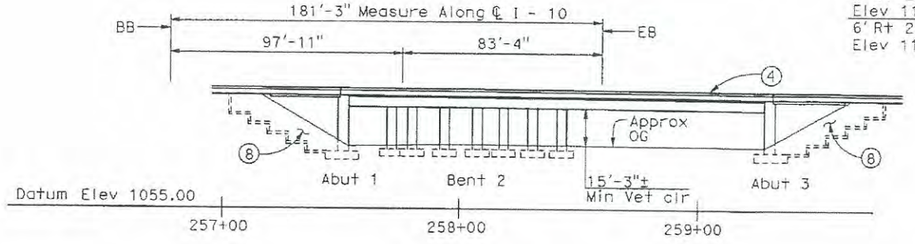
USERNAME => PBS&J
DATE PLOTTED => 8/17/2010
TIME PLOTTED => 10:26:36 AM

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

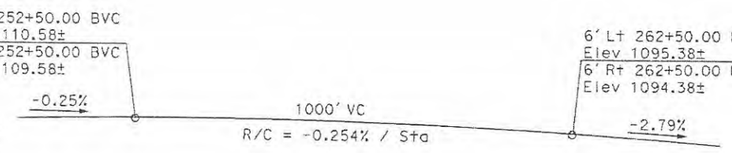
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	4.9

CITY OF ONTARIO
303 East B Street
Ontario, CA 91764

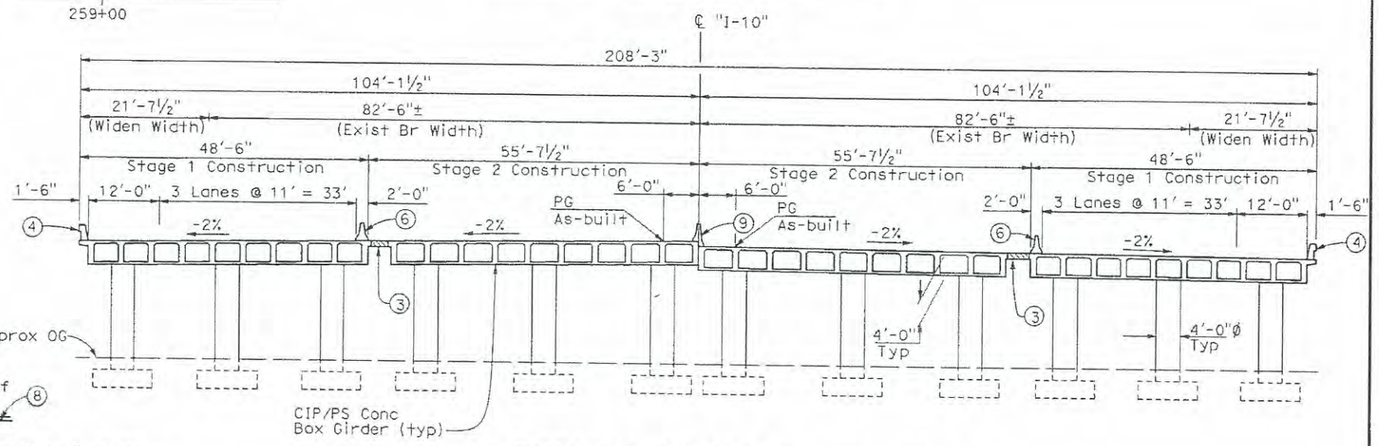
PBS&J
625 The City Drive S, Suite 200
Orange, CA 92868



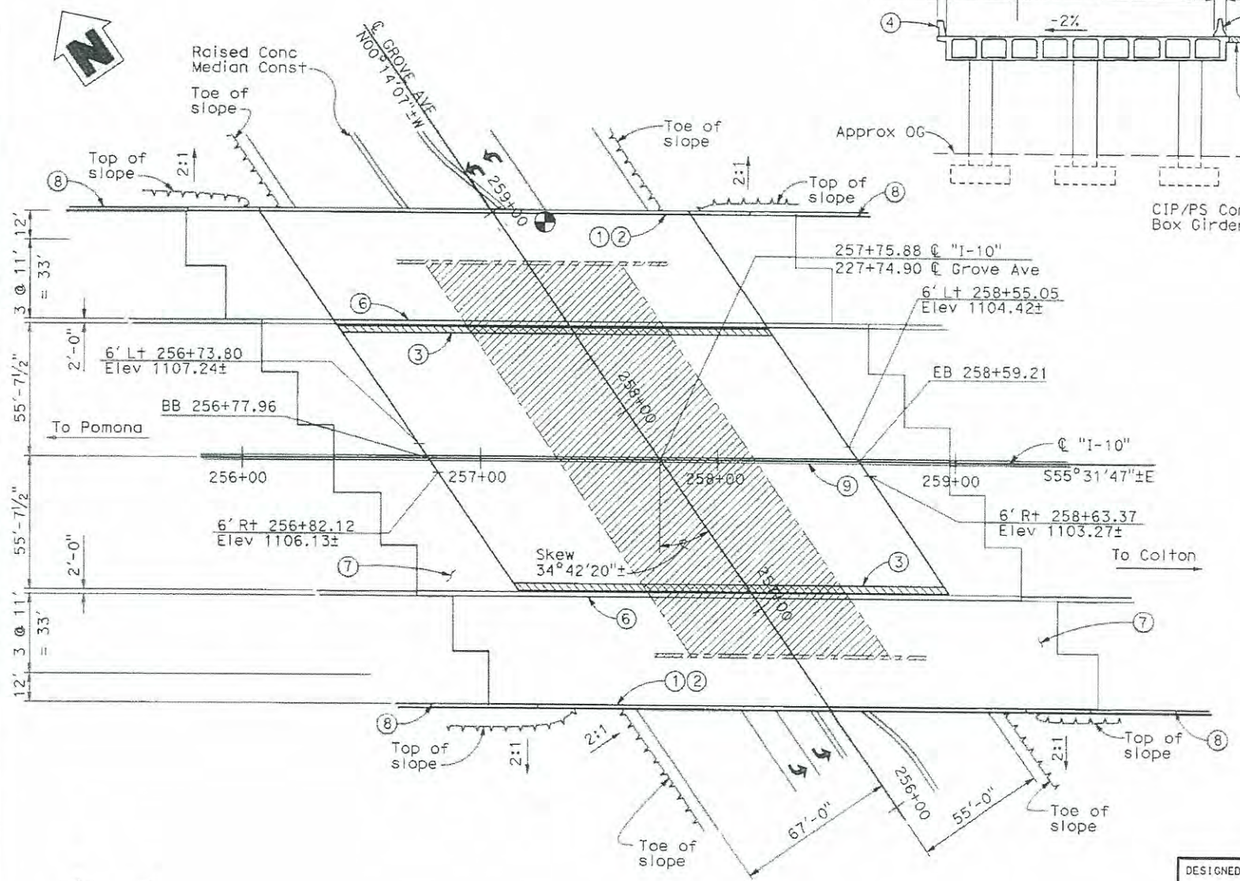
ELEVATION
1" = 30'



PROFILE GRADE (AS-BUILT)
No Scale



TYPICAL SECTION
No Scale



PLAN
1" = 30'

NOTES
1. Assume Spread Footing Foundation.
2. Replacement Structure will be cast high on raised Falsework and lowered into final grade.
3. Exist bridge section not shown for clarity.

LEGEND
- (1) Paint "Bridge No. 54-441" and year constructed
- (2) Paint "Grove Ave UC"
- (3) Closure Pour (2'-6")
- (4) Conc Barrier Type 732
- (6) Temporary Railing, Type K (See "Road Plans")
- (7) Structure Approach, Type N(30S)
- (8) Retaining wall (See "Road Plans")
- (9) Conc Barrier Type 60A (Mod) (See "Road Plans")
- Point of Minimum Vertical Clearance (Based On Information Shown On As-Built Plans)
- Indicates Closure Pour
- Indicates Bridge Removal
- Indicates Existing Structure
- Indicates New Structure
- Indicates Traffic Direction

DATE OF ESTIMATE		March 2009
BRIDGE REMOVAL	=	$ 500,000
STRUCTURE DEPTH	=	4'-0"
LENGTH	=	181'-3"
WIDTH	=	208'-3"
AREA	=	37,745 FT²
COST/FT² INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$ 324
TOTAL BRIDGE COST	=	$ 12,700,000

(Note: Ret Wall Cost Not Included)

ALTERNATIVE 2

X Lily Sun 08/25/10
DESIGN OVERSIGHT
SIGN OFF DATE

DESIGNED BY	S. Xie	DATE	08/10
DRAWN BY	I. Karkoutli	DATE	08/10
CHECKED BY	A. Moubayed	DATE	08/10
APPROVED		DATE	

S. Xie
PROJECT ENGINEER

PLANNING STUDY
GROVE AVENUE UC (REPL)

BRIDGE NO. 54-441	CU 08
SCALE: As Shown	EA 0J400K

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => T:\Cad\100001232-I-10 AT 4TH ST & Grove\Structural\APS Plans\Grove Ave\Grove Ave-APS ALT2.dgn

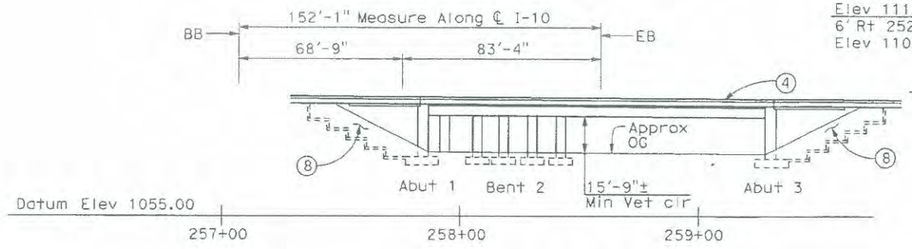
USERNAME => PBS&J DATE PLOTTED => 8/17/2010 TIME PLOTTED => 10:29:21 AM

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

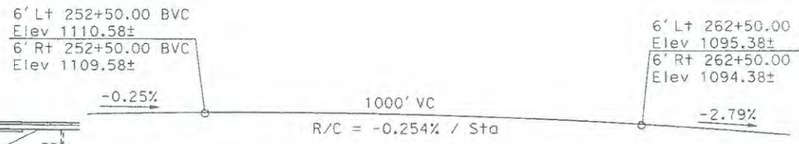
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
08	SBd	10	4.9

CITY OF ONTARIO
303 East B Street
Ontario, CA 91764

PBS&J
625 The City Drive S, Suite 200
Orange, CA 92868



ELEVATION
1" = 30'



PROFILE GRADE (AS-BUILT)
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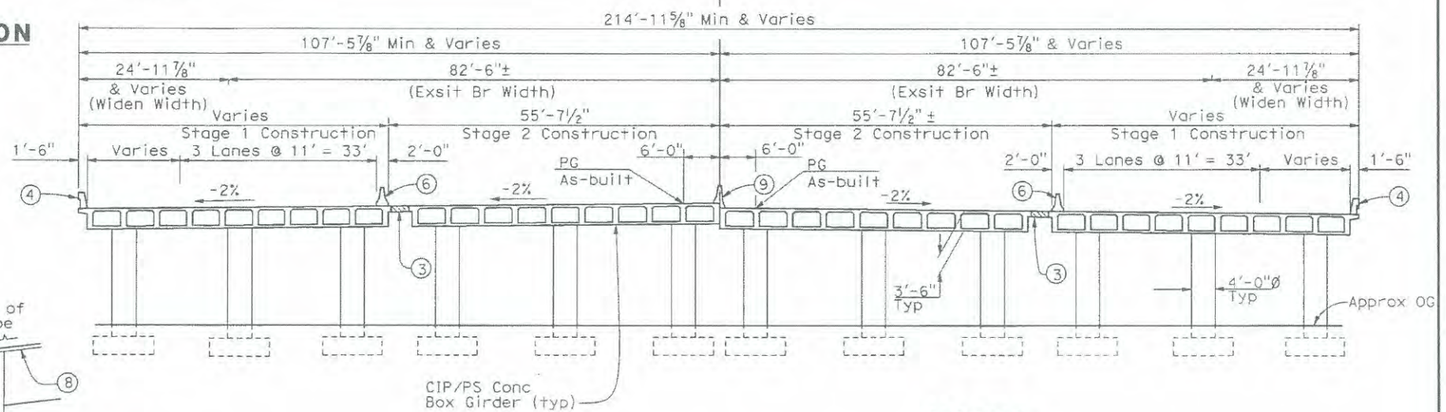
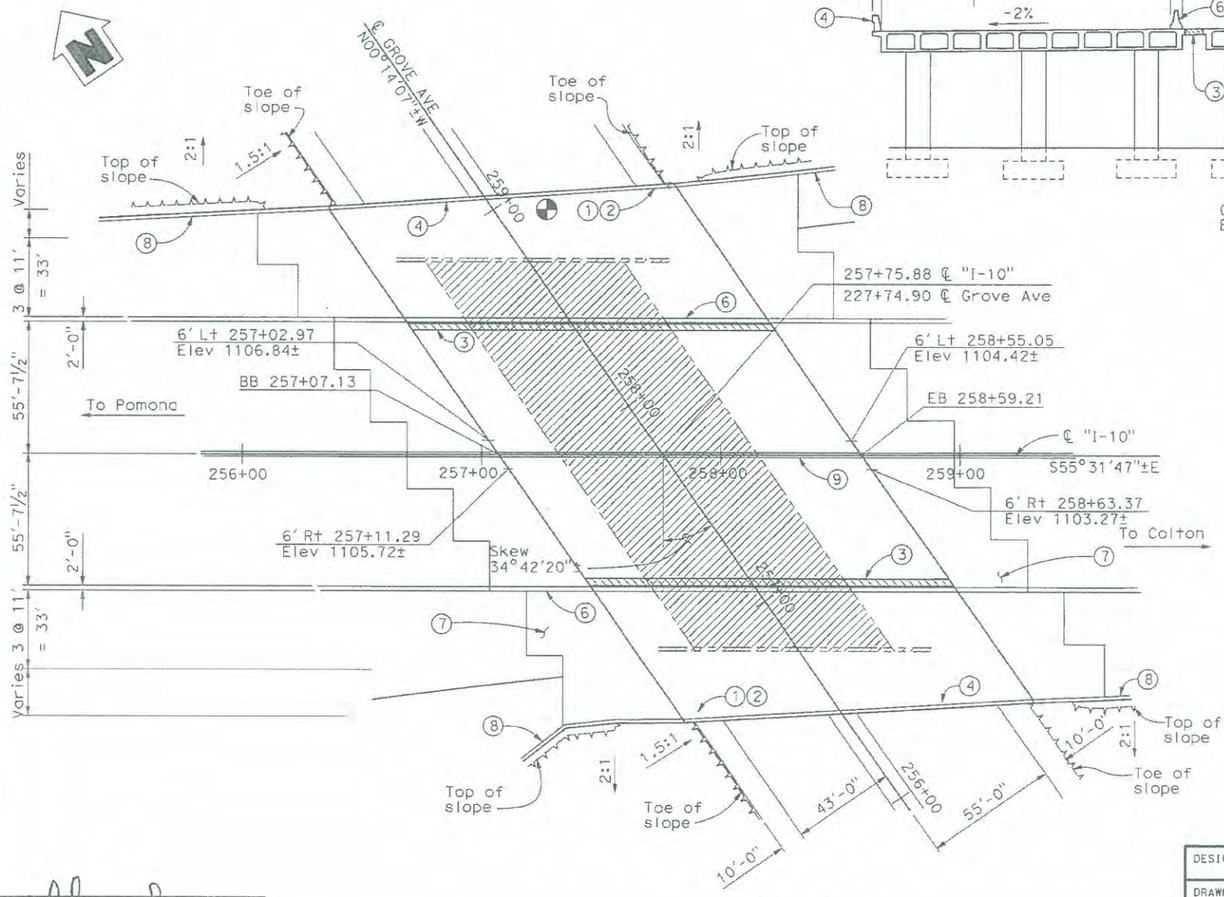




PLAN
1" = 30'

TYPICAL SECTION
No Scale

DATE OF ESTIMATE	March 2009
BRIDGE REMOVAL	= $ 500,000
STRUCTURE DEPTH	= 3'-6"
LENGTH	= 152'-1"
WIDTH	= 214'-11⅝" Min
AREA	= 32,698
COST/FT² INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $ 356 FT²
TOTAL BRIDGE COST	= $ 12,100,000

(Note: Ret Wall Cost Not Included)

NOTES
1. Assume Spread Footing Foundation.
2. Replacement Structure will be cast high on raised Falsework and lowered into final grade.
3. Exist bridge section not shown for clarity.

LEGEND
1. Paint "Bridge No. 54-441" and year constructed
2. Paint "Grove Ave UC"
3. Closure Pour (2'-6")
4. Conc Barrier Type 732
6. Temporary Railing, Type K (See "Road Plans")
7. Structure Approach, Type N(30S)
8. Retaining wall (See "Road Plans")
9. Conc Barrier Type 60A (Mod) (See "Road Plans")

Point of Minimum Vertical Clearance (Based On Information Shown On As-Built Plans)
Indicates Closure Pour
Indicates Bridge Removal
Indicates Existing Structure
Indicates New Structure
Indicates Traffic Direction

ALTERNATIVE 3

X Lely Sun
DESIGN OVERSIGHT
X 8/25/10
SIGN OFF DATE

DESIGNED BY	S. Xie	DATE	08/10
DRAWN BY	I. Karkoutli	DATE	08/10
CHECKED BY	A. Moubayed	DATE	08/10
APPROVED		DATE	

S. Xie
PROJECT ENGINEER

PLANNING STUDY

GROVE AVENUE UC (REPL)

BRIDGE NO. 54-441	CU 08
SCALE: As Shown	EA 0J400K

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

FILE => T:\Cad\100001232-I-10 AT 4TH ST & Grove\Structural\APS Plans\Grove Ave\Grove Ave-APS-ALT3.dgn

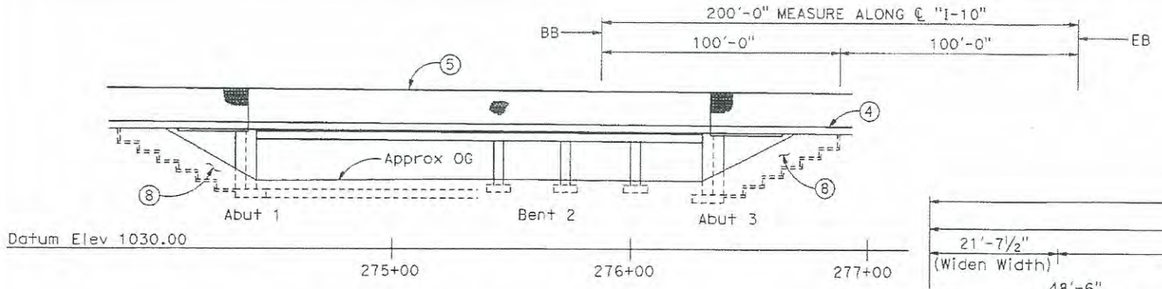
DATE PLOTTED => 8/17/2010 TIME PLOTTED => 10:29:46 AM USERNAME => PBS&J

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

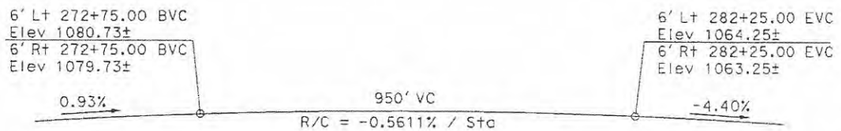
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	SBd	10	5.2

CITY OF ONTARIO
303 East B Street
Ontario, CA 91764

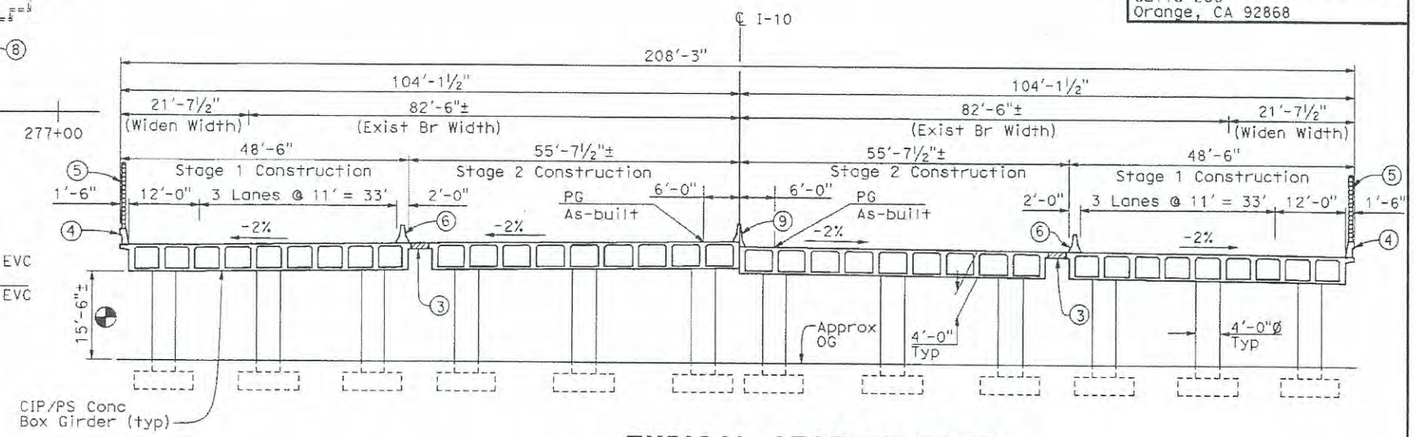
PBS&J
625 The City Drive South,
Suite 200
Orange, CA 92868



ELEVATION
1" = 30'

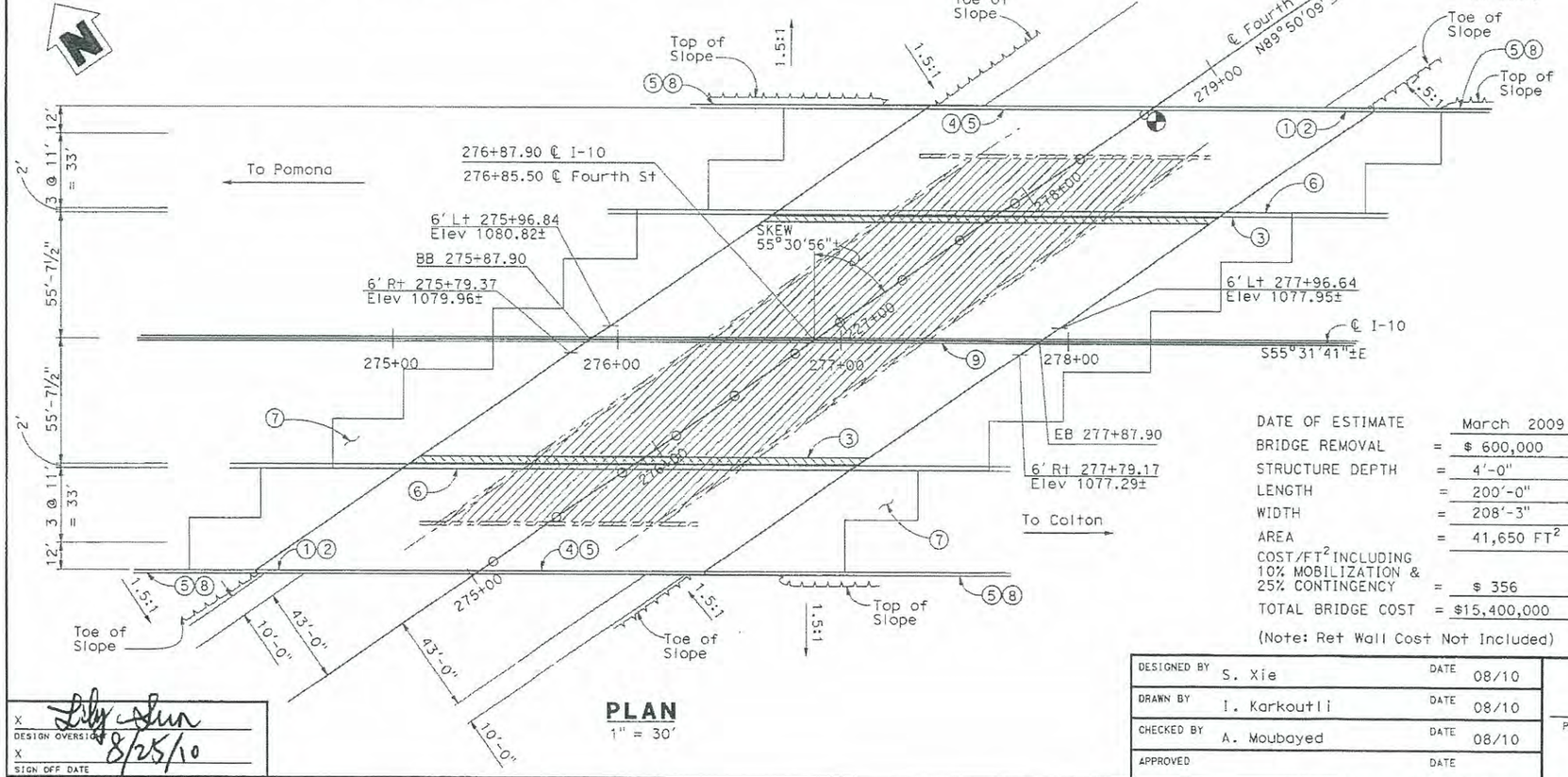


PROFILE GRADE (AS-BUILT)
No Scale



TYPICAL SECTION NOTES
No Scale

1. Assume Spread Footing Foundation.
2. Replacement Structure will be cast high on raised falsework and lowered into final grade.
3. Exist bridge section (to be removed) not shown for clarity.



PLAN
1" = 30'

LEGEND

1. Paint "Bridge No. 54-440" and year constructed
2. Paint "4th Street UC"
3. Closure Pour (2'-6")
4. Conc Barrier Type 736 (Mod)
5. Sound Wall (Masonry Block)
6. Temporary Railing, Type K (See "Road Plans")
7. Structure Approach, Type N(30S)
8. Retaining wall (See "Road Plans")
9. Conc Barrier Type 60A (Mod) (See "Road Plans")

Point of Minimum Vertical Clearance (Based On Information Shown On As-Built Plans)
Indicates Closure Pour
Indicates Bridge Removal
Indicates Existing Structure
Indicates New Structure
Indicates Traffic Direction

DATE OF ESTIMATE		March 2009
BRIDGE REMOVAL	=	$ 600,000
STRUCTURE DEPTH	=	4'-0"
LENGTH	=	200'-0"
WIDTH	=	208'-3"
AREA	=	41,650 FT²
COST/FT² INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	$ 356
TOTAL BRIDGE COST	=	$15,400,000

(Note: Ret Wall Cost Not Included)

ALTERNATIVES 2 & 3

DESIGNED BY	S. Xie	DATE	08/10
DRAWN BY	I. Karkoutli	DATE	08/10
CHECKED BY	A. Moubayed	DATE	08/10
APPROVED		DATE	

S. Xie
PROJECT ENGINEER

PLANNING STUDY
FOURTH STREET UC (REPL)

BRIDGE NO. 54-440	CU 08
SCALE: As shown	EA 0J400K

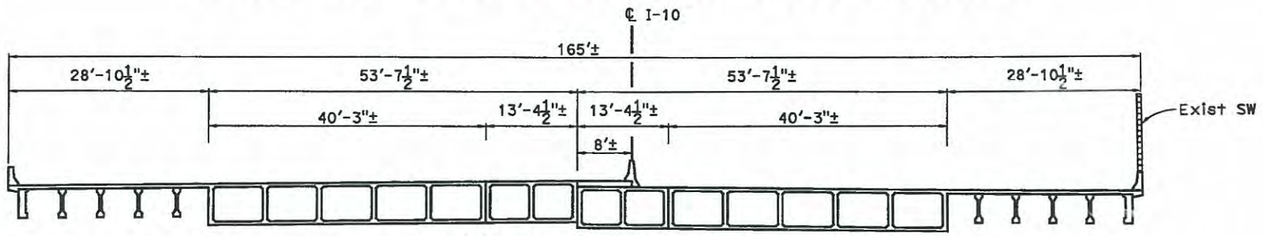
X
DESIGN OVERSIGHT
X
SIGN OFF DATE
Lily Shun 8/25/10

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 2/25/05)

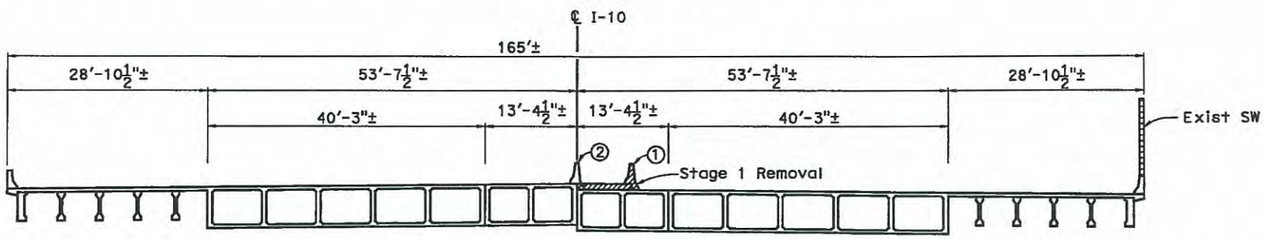
FILE => T:\Cad\100001232-I-10 AT 4TH ST & Grove\Structural\APS Plans\4th St\4TH ST-APS ALT2.dgn

USERNAME => PBS&J DATE PLOTTED => 8/17/2010 TIME PLOTTED => 10:26:54 AM

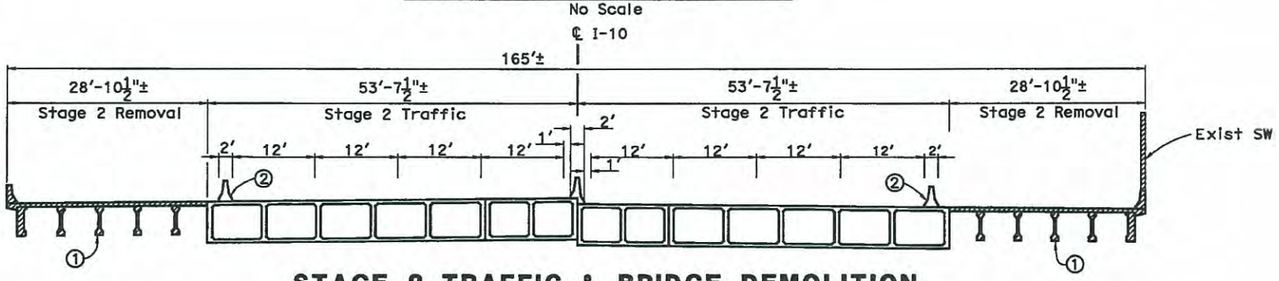
FOURTH STREET UC CONSTRUCTION STAGING AND TRAFFIC HANDLING
(GROVE AVE UC STAGING SIMILAR WITHOUT STAGE 1)



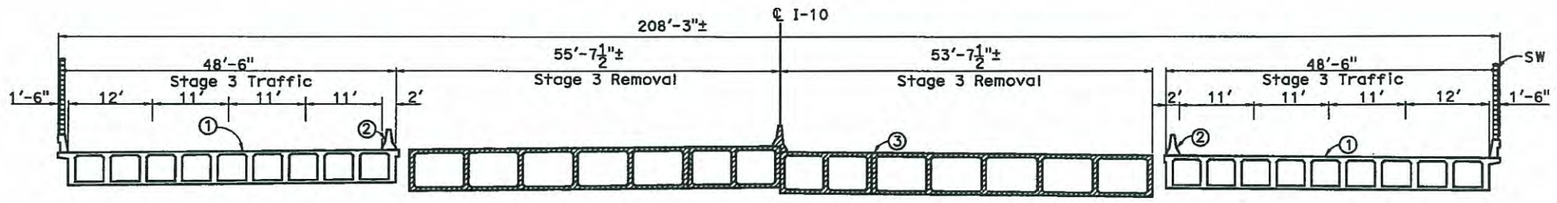
EXISTING CONDITION
No Scale



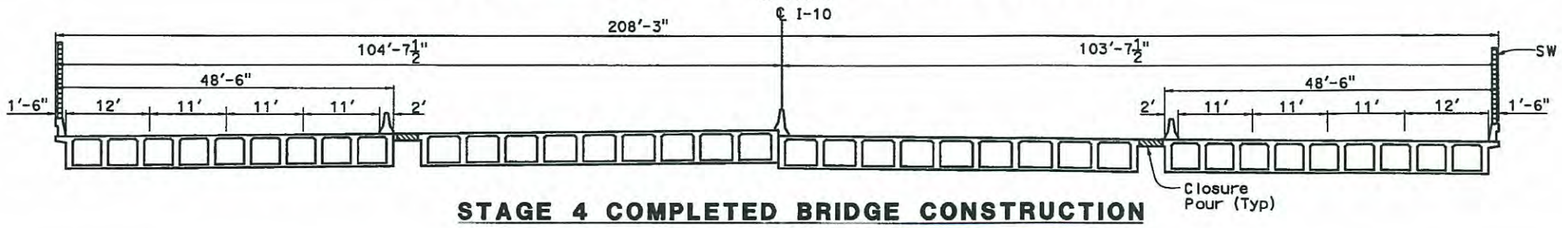
STAGE 1 SHIFTING ℄ FWY
No Scale



STAGE 2 TRAFFIC & BRIDGE DEMOLITION
No scale



STAGE 3 TRAFFIC & BRIDGE RECONSTRUCTION
No scale



STAGE 4 COMPLETED BRIDGE CONSTRUCTION
No Scale

NOTES:

1. Remove existing Barrier Type 50C and overlay
2. Construct concrete barrier Type 60GC (Mod)

NOTES:

1. Demolish portion of existing I-beam bridge & soundwall
2. Temporary Railing Type K

NOTES:

1. Construct portion of new bridge & soundwall shift traffic to two half Bridge
2. Temporary railing Type K
3. Remove remaining portion of existing Bridge

I-10 FWY AT FOURTH STREET & GROVE AVE CORRIDOR

ATTACHMENT 9

RIGHT OF WAY DATA SHEETS

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET FOR LOCAL PUBLIC AGENCIES

(Form #)

To: Mike S. Romo
Senior R/W Project Coordination & Local Programs Branch

Date: 9/9/2010

Co. 08-SBd Rte. I-10-P.M. 4.1-6.1
Expense Authorization 0J400K

Attention: David R. Chavez
R/W Local Programs

Subject: **RIGHT OF WAY DATA SHEET - LOCAL PUBLIC AGENCIES**

Project Description: **ALTERNATIVE 1**

Right of way necessary for the I-10/Fourth Street Interchange Improvement and Grove Avenue Corridor widening will be the responsibility of the City of Ontario who is the project sponsor.

The information in this data sheet was developed by Warren Kent Jorgensen
Warren Kent Jorgensen,
California Property Specialists, Inc.

I. *Right of Way Engineering*

Will Right of Way Engineering be required for this project?

- No
- (Yes) (Submit a copy of the Right of Way Engineering Surveys and Mapping Services checklist for Locally *Funded Projects*. This checklist includes, but is not limited to, the following items.)

  - Hard copy (base map) √
  - Appraisal map √
  - Acquisition Documents √
  - Property Transfer Documents √
  - R/W Record Map √
  - Record of Survey √

II. *II. Engineering Surveys*

1. Is any surveying or photogrammetric mapping required?

   No _____ Yes √ (Complete the following.)

2. Datum Requirements

   Yes Project will adhere to the following criteria:
   - Horizontal - datum policy is NAD 83, CA-HPGN, EPOCH 1991.35 and English system of units and measures.
   - Vertical - datum policy is NAVD 88.
   - Units - metric is not required.

   No Provide an explanation on additional page.

3. Will land survey monument perpetuation be scoped into the project, if required?

   Yes √
   No _____ Provide explanation on additional page.

III. ***Parcel Information (Land and Improvements)***

Are there any property rights required within the proposed project limits?

No_____ Yes__√__ (Complete the following.)

	Part Take	Full Take	Estimate $
A. Number of Vacant Land Parcels $	4	1	1,310,000
B. Number of Single Family Residential Units $	27	39	13,025,000
C. Number of Multifamily Residential Units $			
D. Number of Commercial/Industrial Parcels $	33	10	23,392,000
E. Number of Farm/Agricultural Parcels $			
F. Permanent and/or Temporary Easements $	33		165,000
G. Other Parcels (define in "Remarks" section) $			
Escalating Rate			(15%)
Totals $			43,575,800

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

For the interchange related improvements, the following property rights required partial right of way impacts to six single family homes and 11 commercial parcels. Full right of way impacts will result for one vacant land, ten single family homes and eight commercial parcels. Impacted land will be purchased by the City of Ontario, the implementing agency, and ownership of land purchased for the interchange improvement will be turned over to Caltrans. A right of entry permit will need to be obtained from the City of Ontario in order to work in their right of way during construction.

For the local improvements, the following property rights required consist of partial right of way impacts to four vacant land parcel, 21 single family homes, and 22 commercial parcels. Full right of way impacts will result for 29 single family homes and three commercial parcels. Impacted land will be purchased by the City of Ontario, the implementing agency, and is to remain as city property to be used for the local improvements.

IV. ***Dedications***

Are there any property rights which have been acquired, or anticipate will be acquired, through the "dedication" process for the Project?

No__√__ Yes_____ (Complete the following.)

Number of dedicated parcels_____

Have the dedication parcel(s) been accepted by the municipality involved?

V. ***Excess Lands / Relinquishments***

Are there Caltrans property rights which may become excess lands or potential relinquishment areas?

No ___√___ Yes _____ (Provide an explanation on additional page.)

VI. ***Relocation Information***

Are relocation displacements anticipated?

No _____ Yes ___√___ (Complete the following.)

A. Number of Single Family Residential Units	39	
Estimated RAP Payments		$ 1,610,000
B. Number of Multifamily Residential Units		
Estimated RAP Payments		$
C. Number of Business/Nonprofit	10	
Estimated RAP Payments		$ 4,000,000
D. Number of Farms		
Estimated RAP Payments		$
E. Other (define in the "Remarks" section)		
Estimated RAP Payments		$
Totals	49	$ 5,610,000

VII. ***Utility Relocation Information***

Do you anticipate any utility facilities or utility rights of way to be affected?

No _____ Yes ___√___ (Complete the following.)

		Estimate Relocation Expense		
Facility	Owner	State Obligation	Local Obligation	Utility Owner Obligation
A. Gas	So. Cal. Gas Co.	$	$ 50,000	$ 50,000
B. OH Telephone	Verizon	$	$	$ 435,000
C. OH Cable	Time Warner	$	$	$ 345,000
D. OH Electrical	So. Cal. Edison	$	$350,000	$ 350,000
	Totals	$	$ 400,000	$ 1,180,000
	Number of Facilities		2	4

Any additional information concerning utility involvement on this project?

A utility agreement and a notice to Owner will be required for this project. A utility information request has been sent to all utility owners within the project limits. Through this coordination and field review, only the utility facilities resulting in involvement are identified below as a result of the construction activity. The facilities shown will all require relocation expenses separate from the other utility impacts covered in the roadway items of the preliminary project total cost estimate in Attachment 10 of the PSR.

Involvement due to interchange improvements:

Southern California Gas Company	
Location	Utility Type
Fourth Street UC	6" Low Risk Gas Line
Grove Avenue UC	6" Low Risk Gas Line

Time Warner	
Location	Utility Type
Fourth Street/EB Ramp Intersection	Overhead Fiber Optic Cable Lines
Grove Avenue - UC to E. Princeton Street	
Fourth Street - Calaveras Avenue to UC	

Verizon	
Location	Utility Type
Fourth Street/EB Ramp Intersection	Overhead Fiber Optic Telephone Lines
Grove Avenue - UC to E. Princeton Street	
Fourth Street - Calaveras Avenue to UC	

Southern California Edison	
Location	Utility Type
Fourth Street/EB Ramp Intersection	Overhead Electrical Lines
Grove Avenue - UC to E. Princeton Street	
Fourth Street - Calaveras Avenue to UC	

Involvement due to local improvements:

Verizon	
Location	Utility Type
Grove Avenue - E. Princeton Street to Fourth Street Intersection, E. I Street to E. G Street, and E. D Street to E. Holt Boulevard	Overhead Fiber Optic Telephone Lines
Fourth Street - 500 feet W. of Grove Avenue to Calaveras Avenue	

Time Warner	
Location	Utility Type
Grove Avenue - E. Princeton Street to Fourth Street Intersection	Overhead Fiber Optic Cable Lines
Fourth Street - 500 feet W. of Grove Avenue to Calaveras Avenue	

Southern California Edison	
Location	Utility Type
Fourth Street/EB Ramp Intersection	Overhead Electrical Lines
Grove Avenue - UC to E. Princeton Street	
Fourth Street - Calaveras Avenue to UC	

VIII. ***Rail Information***

Are railroad facilities or railroad rights of way affected?

No__√__ Yes_____ (Complete the following.)

Describe railroad facilities or railroad rights of way affected.

Owner's Name	Transverse Crossing	Longitudinal Encroachment
A.		
B.		

Discuss types of agreements and rights required from the railroads. Are grade crossings that require services contracts, or grade separations that require construction and maintenance agreements involved?

IX. ***Clearance Information***

Are there improvements that require clearance?

No_____ Yes__√__ (Complete the following.)

A. Number of Structures to be Demolished ____49____
Estimated Cost of Demolition $883,600

X. ***Hazardous Materials/Waste***

Are there any site(s) and/or improvements(s) in the Project Limits that are known to contain

hazardous materials? None _____Yes__√__ (Explain in the "Remarks" section.)

Are there any site(s) and/or improvement(s) in the Project Limits that are suspected to contain

hazardous waste? None __√__ Yes_____ (Explain in the "Remarks" section.)

XI. ***Project Scheduling***

	Proposed lead time	Completion date
*Preliminary Engineering, Surveys	28 (months)	September 2013
*R/W Engineering Submittals	28 (months)	September 2013
*R/W Appraisals/Acquisition	24 (months)	December 2013
Proposed Environmental Clearance		December 2014
Proposed R/W Certification		December 2014

XII. ***Proposed Funding*** *(Escalated 2014 values)*

	Local	State	Federal	Utilities Owner Obligation	Other
Acquisition	$43,575,000				
Utilities	$400,000			$1,180,000	
Relocation Assistance Program	$5,610,000				
Other (Demo)	$883,600				
R/W Support					
Cost (Eng. Appraisals, etc.)					
Title and Escrow Fees	$400,000				

XIII. ***Remarks***

X. Aerially Deposited Lead (ADL) has been found in the project area. ADL testing will occur anywhere excavation will be taking place.

Project Sponsor Consultant
Prepared by:

Brian Balderrama, P.E.
AECOM

9/9/2010
Date

Project Sponsor
Reviewed and Approved by:

Mauricio Diaz, Project Manager
City of Ontario

9/13/2010
Date

Caltrans
Reviewed and approved based on information provided to date:

Michael S. Romo
Senior R/W Project Coordination & Local Programs Branch
District 8

9/13/2010
Date

1. Name of utility companies involved in project:

Southern California Gas Company	Time Warner
Southern California Edison	Verizon

2. Types of facilities and agreements required:

Utility Agreement	Notice to Owner
Cable TV	Telephone
Overhead electric	Gas

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.
No.

Disposition of longitudinal encroachment(s):
____ Relocation Required
____ Exception to Policy Needed
____ Other, Explain.

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).

See additional information provided on page 4 of the Right of Way Data Sheet for Local Public Agencies.

5. PMCS Input Information

Total estimated cost of State's obligation for utility relocation on this project:
$ 0.0

Note: For this project U-4 is the total number of expected lead agency expense involvements; conventional highway or freeway and federal aid for the project.

Utility Involvement

U4-1	4	U5-7	3
-2		-8	4
-3		-9	2
-4	4		

Prepared By: _____ Date: 9/9/2010
Brian Balderrama, P.E.
Right of Way Utility Estimator

This utility estimate was prepared using "project specific" data and unit values. This information is not to be utilized for the updating or preparation of this, or any other Right of Way Cost Report or Utility Information Sheet.

Back up Calculations for Estimate Relocation Expense (page 3 of 7):

Facility	Quantity	Unit Price	Total (rounded to nearest thousand)
Gas	1,200. ft	$83.33	$100,000.
OH Telephone	8,430. ft	$51.60	$435,000.
OH Cable	8,430. ft	$40.92	$345,000.
OH Electrical	8,430. ft	$83.03	$700,000.

To: Mike S. Romo
Senior R/W Project Coordination & Local Programs Branch

Date: 9/9/2010

Co. 08-SBd Rte. I-10-P.M. 4.1-6.1
Expense Authorization 0J400K

Attention: David R. Chavez
R/W Local Programs

Subject: **RIGHT OF WAY DATA SHEET - LOCAL PUBLIC AGENCIES**

Project Description: **ALTERNATIVE 2**

Right of way necessary for the I-10/Grove Interchange Improvement and Grove Avenue corridor widening will be the responsibility of the City of Ontario who is the project sponsor.

The information in this data sheet was developed by Warren Kent Jorgensen
Warren Kent Jorgensen,
California Property Specialists, Inc.

I. ***Right of Way Engineering***

Will Right of Way Engineering be required for this project?

- No
- (Yes) (Submit a copy of the Right of Way Engineering Surveys and Mapping Services checklist for Locally *Funded Projects*. This checklist includes, but is not limited to, the following items.)

  - Hard copy (base map) √
  - Appraisal map √
  - Acquisition Documents √
  - Property Transfer Documents √
  - R/W Record Map √
  - Record of Survey √

II. ***II. Engineering Surveys***

1. Is any surveying or photogrammetric mapping required?

   No _____ Yes √ (Complete the following.)

2. Datum Requirements

   Yes Project will adhere to the following criteria:
   - Horizontal - datum policy is NAD 83, CA-HPGN, EPOCH 1991.35 and English system of units and measures.
   - Vertical - datum policy is NAVD 88.
   - Units - metric is not required.

   No Provide an explanation on additional page.

3. Will land survey monument perpetuation be scoped into the project, if required?

   Yes √
   No _____ Provide explanation on additional page.

III. ***Parcel Information (Land and Improvements)***

Are there any property rights required within the proposed project limits?

No_____ Yes__√__ (Complete the following.)

	Part Take	Full Take	Estimate $
A. Number of Vacant Land Parcels $	4		906,000
B. Number of Single Family Residential Units $	44	37	13,675,000
C. Number of Multifamily Residential Units $	10	2	2,200,000
D. Number of Commercial/Industrial Parcels $	31	8	24,975,000
E. Number of Farm/Agricultural Parcels $			
F. Permanent and/or Temporary Easements $	89		445,000
G. Other Parcels (define in "Remarks" section) $			
Escalating Rate			(15%)
Totals $			50,513,750

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

For the interchange related improvements, the following property rights required consist of partial right of way impacts to one vacant land parcel, 21 single family homes, ten multifamily homes, and 17 commercial parcels. Full right of way impacts will result for the nine single family homes, two multifamily homes and six commercial parcels. Impacted land will be purchased by the City of Ontario, the implementing agency, and ownership of land purchased for the interchange improvement will be turned over to Caltrans. A right of entry permit will need to be obtained from the City of Ontario in order to work in their right of way during construction.

For the local improvements, the following property rights required consist of three vacant land parcels, 23 single family homes and 14 commercial parcels. Full right of way impacts will result for 28 single family homes and two commercial parcels. Impacted land will be purchased by the City of Ontario, the implementing agency, and is to remain as city property to be used for the local improvements.

IV. ***Dedications***

Are there any property rights which have been acquired, or anticipate will be acquired, through the "dedication" process for the Project?

No__√__ Yes_____ (Complete the following.)

Number of dedicated parcels_____

Have the dedication parcel(s) been accepted by the municipality involved?

V. ***Excess Lands / Relinquishments***

Are there Caltrans property rights which may become excess lands or potential relinquishment areas?

No ___√___ Yes _____ (Provide an explanation on additional page.)

VI. ***Relocation Information***

Are relocation displacements anticipated?

No _____ Yes ___√___ (Complete the following.)

A. Number of Single Family Residential Units	44	
Estimated RAP Payments		$ 1,540,000
B. Number of Multifamily Residential Units	6	
Estimated RAP Payments		$ 210,000
C. Number of Business/Nonprofit	8	
Estimated RAP Payments		$ 4,400,000
D. Number of Farms		
Estimated RAP Payments		$
E. Other (define in the "Remarks" section)		
Estimated RAP Payments		$
Totals	58	$ 6,150,000

VII. ***Utility Relocation Information***

Do you anticipate any utility facilities or utility rights of way to be affected?

No _____ Yes ___√___ (Complete the following.)

		Estimate Relocation Expense		
Facility	Owner	State Obligation	Local Obligation	Utility Owner Obligation
A. Gas	So. Cal. Gas Co.	$	$ 50,000	$ 50,000
B. OH Telephone	Verizon	$	$	$ 435,000
C. OH Cable	Time Warner	$	$	$ 345,000
D. OH Electrical	So. Cal. Edison	$	$350,000	$ 350,000
	Totals	$	$ 400,000	$ 1,180,000
	Number of Facilities		2	4

Any additional information concerning utility involvement on this project?

A utility agreement and a notice to Owner will be required for this project. A utility information request has been sent to all utility owners within the project limits. Through this coordination and field review, only the utility facilities resulting in involvement are identified below as a result of the construction activity. The facilities shown will all require relocation expenses separate from the other utility impacts covered in the roadway items of the preliminary project total cost estimate in Attachment 10 of the PSR.

Involvement due to interchange improvements:

Southern California Gas Company	
Location	Utility Type
Fourth Street UC	6" Low Risk Gas Line
Grove Avenue UC	6" Low Risk Gas Line

Time Warner	
Location	Utility Type
Grove Avenue - 1,180 feet N. of WB Ramps to 1,000 feet S. of E. Princeton Street	Overhead Fiber Optic Cable Lines

Verizon	
Location	Utility Type
Grove Avenue - 1,180 feet N. of WB Ramps to 1,000 feet S. of E. Princeton Street	Overhead Fiber Optic Telephone Lines

Southern California Edison	
Location	Utility Type
Grove Avenue - 1,180 feet N. of WB Ramps to 1,000 feet S. of E. Princeton Street	Overhead Electrical Lines

Involvement due to local improvements:

Verizon	
Location	Utility Type
Grove Avenue - 1,000 feet S. of E. Princeton Street to Fourth Street Intersection, E. I Street to E. G Street, and E. D Street to E. Holt Boulevard	Overhead Fiber Optic Telephone Lines
Fourth Street - 500 feet W. of Grove Avenue to UC	

Time Warner	
Location	Utility Type
Grove Avenue - 1,000 feet S. of E. Princeton Street to Fourth Street Intersection	Overhead Fiber Optic Cable Lines
Fourth Street - 500 feet W. of Grove Avenue to UC	

Southern California Edison	
Location	Utility Type
Grove Avenue - 1,000 feet S. of E. Princeton Street to Fourth Street Intersection, E. I Street to E. G Street, and E. D Street to E. Holt Boulevard	Overhead Electrical Lines
Fourth Street - 500 feet W. of Grove Avenue to UC	

VIII. ***Rail Information***

Are railroad facilities or railroad rights of way affected?

No ___√___ Yes_____ (Complete the following.)

Describe railroad facilities or railroad rights of way affected.

Owner's Name	Transverse Crossing	Longitudinal Encroachment
A.		
B.		

Discuss types of agreements and rights required from the railroads. Are grade crossings that require services contracts, or grade separations that require construction and maintenance agreements involved?

IX. ***Clearance Information***

Are there improvements that require clearance?

No_____ Yes___√___ (Complete the following.)

A. Number of Structures to be Demolished ___47___
Estimated Cost of Demolition $1,252,006

X. ***Hazardous Materials/Waste***

Are there any site(s) and/or improvements(s) in the Project Limits that are known to contain

hazardous materials? None _____Yes___√___ (Explain in the "Remarks" section.)

Are there any site(s) and/or improvement(s) in the Project Limits that are suspected to contain

hazardous waste? None ___√___ Yes_____ (Explain in the "Remarks" section.)

XI. ***Project Scheduling***

	Proposed lead time	Completion date
*Preliminary Engineering, Surveys	28 (months)	September 2013
*R/W Engineering Submittals	28 (months)	September 2013
*R/W Appraisals/Acquisition	24 (months)	December 2013
Proposed Environmental Clearance		December 2014
Proposed R/W Certification		December 2014

XII. ***Proposed Funding*** *(Escalated 2014 values)*

	Local	State	Federal	Utilities Owner Obligation	Other
Acquisition	$50,513,750				
Utilities	$400,000			$1,180,000	
Relocation Assistance Program	$6,150,000				
Other (Demo)	$ 1,252,006				
R/W Support					
Cost (Eng. Appraisals, etc.)					
Title and Escrow Fees	$476,000				

XIII. ***Remarks***

X. Aerially Deposited Lead (ADL) has been found in the project area. ADL testing will occur anywhere excavation will be taking place.

Project Sponsor Consultant
Prepared by:

Brian Balderrama, P.E.
AECOM

9/9/2010
Date

Project Sponsor
Reviewed and Approved by:

Mauricio Diaz, Project Manager
City of Ontario

9/13/2010
Date

Caltrans
Reviewed and approved based on information provided to date:

Michael S. Romo
Senior R/W Project Coordination & Local
Programs Branch
District 8

9/15/10
Date

1. Name of utility companies involved in project:

Southern California Gas Company	Time Warner
Southern California Edison	Verizon

2. Types of facilities and agreements required:

Utility Agreement	Notice to Owner
Cable TV	Telephone
Overhead electric	Gas

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.
No.

Disposition of longitudinal encroachment(s):
____ Relocation Required
____ Exception to Policy Needed
____ Other, Explain.

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).

See additional information provided on page 4 of the Right of Way Data Sheet for Local Public Agencies.

5. PMCS Input Information

Total estimated cost of State's obligation for utility relocation on this project:
$ 0.0

Note: For this project U-4 is the total number of expected lead agency expense involvements; conventional highway or freeway and federal aid for the project.

Utility Involvement

U4-1 4	U5-7 3
-2 ____	-8 4
-3 ____	-9 2
-4 4	

Prepared By: _____ Date: 9/9/2016
Brian Balderrama, P.E.
Right of Way Utility Estimator

This utility estimate was prepared using "project specific" data and unit values. This information is not to be utilized for the updating or preparation of this, or any other Right of Way Cost Report or Utility Information Sheet.

Back up Calculations for Estimate Relocation Expense (page 3 of 7):

Facility	Quantity	Unit Price	Total (rounded to nearest thousand)
Gas	1,200. ft	$83.33	$100,000.
OH Telephone	8,430. ft	$51.60	$435,000.
OH Cable	8,430. ft	$40.92	$345,000.
OH Electrical	8,430. ft	$83.03	$700,000.

To: Mike S. Romo
Senior R/W Project Coordination & Local Programs Branch

Date: 9/9/2010

Co. 08-SBd Rte. I-10-P.M. 4.1-6.1
Expense Authorization 0J400K

Attention: David R. Chavez
R/W Local Programs

Subject: **RIGHT OF WAY DATA SHEET - LOCAL PUBLIC AGENCIES**

Project Description: **ALTERNATIVE 3**

Right of way necessary for the I-10/Grove Interchange Improvement and Grove Avenue corridor widening will be the responsibility of the City of Ontario who is the project sponsor.

The information in this data sheet was developed by Warren Ken Jorgensen
Warren Kent Jorgensen,
California Property Specialists, Inc.

I. ***Right of Way Engineering***

Will Right of Way Engineering be required for this project?

- No
- (Yes) (Submit a copy of the Right of Way Engineering Surveys and Mapping Services checklist for Locally *Funded Projects*. This checklist includes, but is not limited to, the following items.)

  - Hard copy (base map) √
  - Appraisal map √
  - Acquisition Documents √
  - Property Transfer Documents √
  - R/W Record Map √
  - Record of Survey √

II. ***II. Engineering Surveys***

1. Is any surveying or photogrammetric mapping required?

   No _____ Yes ___√___ (Complete the following.)

2. Datum Requirements

   Yes Project will adhere to the following criteria:
   - Horizontal - datum policy is NAD 83, CA-HPGN, EPOCH 1991.35 and English system of units and measures.
   - Vertical - datum policy is NAVD 88.
   - Units - metric is not required.

   No Provide an explanation on additional page.

3. Will land survey monument perpetuation be scoped into the project, if required?

   Yes ___√___
   No _____ Provide explanation on additional page.

III. ***Parcel Information (Land and Improvements)***

Are there any property rights required within the proposed project limits?

No_____ Yes__√__ (Complete the following.)

	Part Take	Full Take	Estimate $
A. Number of Vacant Land Parcels $	4		906,000
B. Number of Single Family Residential Units $	49	37	14,050,000
C. Number of Multifamily Residential Units $	10	2	2,200,000
D. Number of Commercial/Industrial Parcels $	31	8	25,408,000
E. Number of Farm/Agricultural Parcels $			
F. Permanent and/or Temporary Easements $	94		470,000
G. Other Parcels (define in "Remarks" section) $			
Escalating Rate			(15%)
Totals $			49,489,100

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

For the interchange related improvements, the following property rights required consist of partial right of way impacts to one vacant land parcel, 23 single family home units, ten multifamily units, and 13 commercial parcels. Full right of way impacts will result for the nine single family homes, two multifamily homes and seven commercial parcels. Impacted land will be purchased by the City of Ontario, the implementing agency, and ownership of land purchased for the interchange improvement will be turned over to Caltrans. A right of entry permit will need to be obtained from the City of Ontario in order to work in their right of way during construction.

For the local improvements, the following property rights required consist of partial right of way impacts to three vacant parcels, 26 single family homes and 18 commercial parcels. Full right of way impacts will result for 28 single family homes and one commercial parcels. Impacted land will be purchased by the City of Ontario, the implementing agency, and is to remain as city property to be used for the local improvements.

IV. ***Dedications***

Are there any property rights which have been acquired, or anticipate will be acquired, through the "dedication" process for the Project?

No__√__ Yes_____ (Complete the following.)

Number of dedicated parcels_____

Have the dedication parcel(s) been accepted by the municipality involved?

V. ***Excess Lands / Relinquishments***

Are there Caltrans property rights which may become excess lands or potential relinquishment areas?

No ___√___ Yes _____ (Provide an explanation on additional page.)

VI. ***Relocation Information***

Are relocation displacements anticipated?

No _____ Yes ___√___ (Complete the following.)

A. Number of Single Family Residential Units	44	
Estimated RAP Payments		$ 1,540,000
B. Number of Multifamily Residential Units	6	
Estimated RAP Payments		$ 210,000
C. Number of Business/Nonprofit	8	
Estimated RAP Payments		$ 4,250,000
D. Number of Farms		
Estimated RAP Payments		$
E. Other (define in the "Remarks" section)		
Estimated RAP Payments		$
Totals	48	$ 6,000,000

VII. ***Utility Relocation Information***

Do you anticipate any utility facilities or utility rights of way to be affected?

No _____ Yes ___√___ (Complete the following.)

		Estimate Relocation Expense		
Facility	Owner	State Obligation	Local Obligation	Utility Owner Obligation
A. Gas	So. Cal. Gas Co.	$	$ 50,000	$ 50,000
B. OH Telephone	Verizon	$	$	$ 435,000
C. OH Cable	Time Warner	$	$	$ 345,000
D. OH Electrical	So. Cal. Edison	$	$350,000	$ 350,000
	Totals	$	$ 400,000	$ 1,180,000
	Number of Facilities		2	4

Any additional information concerning utility involvement on this project?

A utility agreement and a notice to Owner will be required for this project. A utility information request has been sent to all utility owners within the project limits. Through this coordination and field review, only the utility facilities resulting in involvement are identified below as a result of the construction activity. The facilities shown will all require relocation expenses separate from the other utility impacts covered in the roadway items of the preliminary project total cost estimate in Attachment 10 of the PSR.

Involvements due to interchange improvements:

Southern California Gas Company	
Location	Utility Type
Fourth Street UC	6" Low Risk Gas Line
Grove Avenue UC	6" Low Risk Gas Line

Time Warner	
Location	Utility Type
Grove Avenue - 1,180 feet N. of WB Ramps to 1,000 feet S. of E. Princeton Street	Overhead Fiber Optic Cable Lines

Verizon	
Location	Utility Type
Grove Avenue - 1,180 feet N. of WB Ramps to 1,000 feet S. of E. Princeton Street	Overhead Fiber Optic Telephone Lines

Southern California Edison	
Location	Utility Type
Grove Avenue - 1,180 feet N. of WB Ramps to 1,000 feet S. of E. Princeton Street	Overhead Electrical Lines

Involvements due to local improvements:

Verizon	
Location	Utility Type
Grove Avenue - 1,000 feet S. of E. Princeton Street to Fourth Street Intersection, E. I Street to E. G Street, and E. D Street to E. Holt Boulevard	Overhead Fiber Optic Telephone Lines
Fourth Street - 500 feet W. of Grove Avenue to UC	

Time Warner	
Location	Utility Type
Grove Avenue - 1,000 feet S. of E. Princeton Street to Fourth Street Intersection	Overhead Fiber Optic Cable Lines
Fourth Street - 500 feet W. of Grove Avenue to UC	

Southern California Edison	
Location	Utility Type
Grove Avenue - 1,000 feet S. of E. Princeton Street to Fourth Street Intersection, E. I Street to E. G Street, and E. D Street to E. Holt Boulevard	Overhead Electrical Lines
Fourth Street - 500 feet W. of Grove Avenue to UC	

VIII. ***Rail Information***

Are railroad facilities or railroad rights of way affected?

No ___√___ Yes_____ (Complete the following.)

Describe railroad facilities or railroad rights of way affected.

Owner's Name	Transverse Crossing	Longitudinal Encroachment
A.		
B.		

Discuss types of agreements and rights required from the railroads. Are grade crossings that require services contracts, or grade separations that require construction and maintenance agreements involved?

IX. ***Clearance Information***

Are there improvements that require clearance?

No_____ Yes ___√___ (Complete the following.)

A. Number of Structures to be Demolished ____47_____
Estimated Cost of Demolition $1,234,526

X. ***Hazardous Materials/Waste***

Are there any site(s) and/or improvements(s) in the Project Limits that are known to contain *hazardous materials*? None ____Yes___√___ (Explain in the "Remarks" section.)

Are there any site(s) and/or improvement(s) in the Project Limits that are suspected to contain *hazardous waste*? None ___√___ Yes_____ (Explain in the "Remarks" section.)

XI. ***Project Scheduling***

	Proposed lead time	Completion date
*Preliminary Engineering, Surveys	28 (months)	September 2013
*R/W Engineering Submittals	28 (months)	September 2013
*R/W Appraisals/Acquisition	24 (months)	December 2013
Proposed Environmental Clearance		December 2014
Proposed R/W Certification		December 2014

XII. ***Proposed Funding*** *(Escalated 2014 values)*

	Local	State	Federal	Utilities Owner Obligation	Other
Acquisition	$49,489,100				
Utilities	$400,000			$1,180,000	
Relocation Assistance Program	$6,000,000				
Other (Demo)	$ 1,234,526				
R/W Support					
Cost (Eng. Appraisals, etc.)					
Title and Escrow Fees	$497,900				

XIII. ***Remarks***

X. Aerially Deposited Lead (ADL) has been found in the project area. ADL testing will occur anywhere excavation will be taking place.

Project Sponsor Consultant
Prepared by:

Brian Balderrama, P.E.
AECOM

9/9/2010
Date

Project Sponsor
Reviewed and Approved by:

Maurico Diaz, Project Manager
City of Ontario

9/13/2010
Date

Caltrans
Reviewed and approved based on information provided to date:

Michael S. Romo
Senior R/W Project Coordination & Local Programs Branch
District 8

9/15/10
Date

1. Name of utility companies involved in project:

Southern California Gas Company	Time Warner
Southern California Edison	Verizon

2. Types of facilities and agreements required:

Utility Agreement	Notice to Owner
Cable TV	Telephone
Overhead electric	Gas

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain.
No.

Disposition of longitudinal encroachment(s):
____ Relocation Required
____ Exception to Policy Needed
____ Other, Explain.

4. Additional information concerning utility involvements on this project, i.e., long lead time materials, growing or species seasons, customer service seasons (no transmission tower relocations in summer).

See additional information provided on page 4 of the Right of Way Data Sheet for Local Public Agencies.

5. PMCS Input Information

Total estimated cost of State's obligation for utility relocation on this project:
$ 0.0

Note: For this project U-4 is the total number of expected lead agency expense involvements; conventional highway or freeway and federal aid for the project.

Utility Involvement

U4-1 4	U5-7 3
-2 ____	-8 4
-3 ____	-9 2
-4 4	

Prepared By: B. Balderrama
Brian Balderrama, P.E.
Right of Way Utility Estimator

Date: 9/9/2010

This utility estimate was prepared using "project specific" data and unit values. This information is not to be utilized for the updating or preparation of this, or any other Right of Way Cost Report or Utility Information Sheet.

Back up Calculations for Estimate Relocation Expense (page 3 of 7):

Facility	Quantity	Unit Price	Total (rounded to nearest thousand)
Gas	1,200. ft	$83.33	$100,000.
OH Telephone	8,430. ft	$51.60	$435,000.
OH Cable	8,430. ft	$40.92	$345,000.
OH Electrical	8,430. ft	$83.03	$700,000.

ATTACHMENT 10

COST ESTIMATES

Cost Estimate Summary Sheet

Subtotal Capital Outlay Costs for Interchange Improvements (Preliminary Project Total Costs Estimate)	**Alternative 1**	**Alternative 2**	**Alternative 3**
Roadway Cost	$ 31,693,000	$ 52,448,000	$ 54,311,000
Structural Cost	$ 30,500,000	$ 28,100,000	$ 27,500,000
Right of Way Cost	$ 39,868,600	$ 47,792,006	$ 46,621,526
Subtotal	$ 102,062,000	$ 128,340,000	$ 128,433,000
Subtotal Capital Outlay Costs for Local Improvements (Grove Ave. Prliminary Quantites)			
Roadway Cost	$ 17,000,000	$ 17,000,000	$ 17,000,000
Structural Cost	$ -	$ -	$ -
Right of Way Cost	$ 11,000,000	$ 11,000,000	$ 11,000,000
Subtotal	$ 28,000,000	$ 28,000,000	$ 28,000,000
Capital Construction Cost (PSR Section 1.0)	**$ 79,000,000**	**$ 98,000,000**	**$ 99,000,000**
Total Capital Construction and Right of Way Cost (PSR Sections 6.2 and 6.3)	**$ 130,000,000**	**$ 156,000,000**	**$ 156,000,000**
Total Project Cost (2010 Dollars)	**$ 145,536,000**	**$ 177,830,000**	**$ 178,979,000**
Total Project Cost at Year Of Expenditure (YOE) 2014 (PSR Section 1.0)	**$ 168,000,000**	**$ 205,000,000**	**$ 207,000,000**

Preliminary Project Total Costs Estimate

Year of Expenditure (YOE) Dollars

Reconstruct Fourth Street/ Grove Avenue Interchange

08-SBd-10
Type of Estimate: Preliminary
Program Code:
Post Mile: 4.1-6.1
EA: 0J400K

Project Title:	Reconstruct Fourth Street/ Grove Avenue Interchange	
Limits:	From Post Mile 4.1-6.1	
Proposed Improvements:	Modify existing ramps at 4th street Interchange; replace the 4th Street and Grove Avenue Undercrossings; and widen Grove Avenue corridor from I-10 to E Holt Boulevard	
Alternative Project:	**Alternative 1; Minimum Build Alternative at Fourth Street**	
Project Costs:	Roadway Items (including 20% contingency and 10% mobilization)	$31,693,000
	Structure Items (including 25% contingency and 10% mobilization)	$30,500,000
	SUBTOTAL CONSTRUCTION	$62,193,000
	Right-of-Way	$39,868,600
	TOTAL CAPITAL CONSTRUCTION COST FOR INTERCHANGE	$102,062,000
	Engineering @ 12.5% (= 3.5% for PR, 8% for PS&E, and 1% for Construction Support), Construction Management/Administration @ 15%, and Agency Oversight @ 2%	$17,103,000
	TOTAL PROJECT COST (2010 dollars)	**$119,165,000**
	Construction Cost Escalation at 6.25% per year for 4 years	$17,182,000
	TOTAL PROJECT COST AT YEAR OF EXPENDITURE (YOE) 2014	**$136,347,000**

Prepared By: **Brian Balderrama** Date **9/9/2010**

Reviewed By: **Mario Montes** Date **9/10/2010**

I. ROADWAY ITEMS

Section I - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Roadway Excavation	9,329	yd3	$16	$149,264	
Remove Concrete Curb & Gutter	680	yd3	$10	$6,800	
Imported Borrow	35,000	yd3	$20	$700,000	
Clearing and Grubbing	14.9	acre	$2,181	$32,518	
Develop Water Supply	1	LS	$30,000	$30,000	
Construction Staking	1	LS	$30,000	$30,000	
				Total Earthwork	**$948,582**

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
JPCP	7,257	yd3	$250	$1,814,250	
Hot Mix Asphalt (Type A)	12,170	ton	$80	$973,600	
Lean Concrete Base	2,941	yd3	$135	$397,035	
Aggregate Base (Class 2)	6,440	yd3	$65	$418,600	
Asphalt Rubber Hot Mix	2,200	yd3	$85	$187,000	
PCC Curb & Gutter	1,010	yd3	$400	$404,000	
PCC Sidewalk	53,300	ft3	$20	$1,066,000	
Basement Soil	12,420	yd3	$60	$745,200	
				Total Structural Section	**$6,005,685**

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Large Drainage Facilities	20	EA	$5,000	$100,000	
Install Pipe	1,900	LF	$120	$228,000	
				Total Drainage	**$328,000**

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Walls (type 1)	1	LS	$2,500,000	$2,500,000	
Barriers and Gaurdrails	1	LS	$405,000	$405,000	
Noise Attenuation	1	LS	$1,721,000	$1,721,000	
Highway Planting	1	LS	$400,000	$400,000	
Irrigation Modification	1	LS	$100,000	$100,000	
Hazardous Waste Mitigation	1	LS	$120,000	$120,000	
Environmental Mitigation	1	LS	$45,000	$45,000	
SWDR: Treatment BMPs	1	LS	$400,000	$400,000	
SWDR: Construction Site BMPS	1	LS	$1,325,000	$1,325,000	
Graffiti Control	1	LS	$100,000	$100,000	
				Subtotal Specialty Items	**$7,116,000**

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Cost	Section Cost
Street Lighting	20	EA	$5,000	$100,000	
Pavement Delineation	1	LS	$41,000	$41,000	
Traffic Signals	14	EA	$200,000	$2,800,000	
Overhead Sign Structures	3	EA	$90,000	$270,000	
Roadside Signs	16	EA	$500	$8,000	
Traffic Control System	1	LS	$275,000	$275,000	
Transportation Management Plans	1	LS	$3,645,950	$3,645,950	
Temporary Railing (Type K)	8,000	ft	$19	$152,000	
Temporary Crash Cushion Module	8	EA	$400	$3,200	
Temporary Fence	1	LS	$60,000	$60,000	
				Total Traffic Items	**$7,355,150**
				SUBTOTAL SECTIONS 1 - 5	**$21,753,417**

Section 6 - Minor Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
4% of Subtotal Sections 1 - 5	$21,753,417	X	4%	$870,137	
				Total Minor Items	**$870,137**

Section 7-Roadway Mobilization	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Subtotal Sections 1-5	$21,753,417				
Minor Items	$870,137				
Sum	$22,623,554	X	10%	$2,262,355	
				Total Mobilization	**$2,262,355**

Section 8 - Roadway Additions	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Supplemental					
Subtotal Sections 1-5	$21,753,417				
Minor Items	$870,137				
Sum	$22,623,554	X	10%	$2,262,355	
Contingencies					
Subtotal Sections 1-5	$21,753,417				
Minor Items	$870,137				
Sum	$22,623,554	X	20%	$4,524,711	
				Subtotal Roadway Additions	**$6,787,066**

Section 9 - Mitig.& Compliance	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Miscellaneous	1	LS	$20,000	$20,000	
				Subtotal Specialty Items	**$20,000**
				TOTAL ROADWAY ITEMS , SECTIONS 1 - 9	**$31,692,975**

II. STRUCTURE ITEMS **BRIDGES**

Bridge Name	**Grove Street UC (Replacement)**
Structure Type	Two-Span CIP/PS Conc Box Girder
Width feet (out to out)	208.25
Bridge Length Feet	137.46
Total Area, Sq. Feet	28,626
Footing Type (pile/spread)	Spread
Cost Per Sq. Feet (incl. 10% mobilization and 25% contingency)	$397
Bridge Removal Cost	$500,000
Total Cost for Structure	**$11,900,000**

Bridge Name	**4th Street UC (Replacement)**
Structure Type	Two-Span CIP/PS Conc Box Girder
Width feet (out to out)	208.25
Span Lengths Feet	284.33
Total Area, Sq. Feet	59,212
Footing Type (pile/spread)	Spread
Cost Per Sq. Feet (incl. 10% mobilization and 25% contingency)	$304
Bridge Removal Cost	$600,000
Total Cost for Structure	**$18,600,000**

Total Structures Items **$30,500,000**

III. RIGHT OF WAY

	Escalated Value YOE (2014)
Acquisition, including excess lands and damages and goodwill	$33,725,000
Utility Relocation	$100,000
Relocation Assistance	$4,910,000
R/W Support	$0
Title and Escrow Fees	$250,000
Other (Demolition)	$883,600

Total Right of Way **$** **39,868,600**

Preliminary Project Total Costs Estimate

Year of Expenditure (YOE) Dollars

Reconstruct Fourth Street/ Grove Avenue Interchange

08-SBd-10
Type of Estimate: Preliminary
Program Code:
Post Mile: 4.1-6.1
EA: 0J400K

Project Title:	Reconstruct Fourth Street/ Grove Avenue Interchange	
Limits:	From Post Mile 4.1-6.1	
Proposed Improvements:	Remove Interchange at Fourth Street; replace the 4th Street and Grove Avenue Undercrossings; construct diamond interchange at Grove Avenue; and widen Grove Avenue corridor from I-10 to E Holt Bouvelard	
Alternative Project:	**Alternative 2; Diamond Interchange at Grove Avenue**	
Project Costs:	Roadway Items (including 20% contingency and 10% mobilization)	$52,448,000
	Structure Items (including 25% contingency and 10% mobilization)	$28,100,000
	SUBTOTAL CONSTRUCTION	$80,548,000
	Right-of-Way	$47,792,006
	TOTAL CAPITAL CONSTRUCTION COST FOR INTERCHANGE	$128,340,000
	Engineering @ 12.5% (= 3.5% for PR, 8% for PS&E, and 1% for Construction Support), Construction Management/Administration @ 15%, and Agency Oversight @ 2%	$22,151,000
	TOTAL PROJECT COST (2010 dollars)	**$150,491,000**
	Construction Cost Escalation at 6.25% per year for 4 years	$22,254,000
	TOTAL PROJECT COST AT YEAR OF EXPENDITURE (YOE) 2014	**$172,745,000**

Prepared By: **Brian Balderrama** Date **9/9/2010**

Reviewed By: **Mario Montes** Date **9/10/2010**

I. ROADWAY ITEMS

Section I - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Roadway Excavation	25,560	yd3	$16	$408,960	
Remove Concrete Curb & Gutter	900	yd3	$10	$9,000	
Imported Borrow	550,000	yd3	$20	$11,000,000	
Clearing and Grubbing	30.6	acre	$2,181	$66,705	
Develop Water Supply	1	LS	$82,000	$82,000	
Construction Staking	1	LS	$82,000	$82,000	
				Total Earthwork	**$11,648,665**

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
JPCP	9,170	yd3	$250	$2,292,500	
Hot Mix Asphalt (Type A)	18,650	ton	$80	$1,492,000	
Lean Concrete Base	3,658	yd3	$135	$493,830	
Aggregate Base (Class 2)	9,750	yd3	$65	$633,750	
Asphalt Rubber Hot Mix	2,600	yd3	$85	$221,000	
PCC Curb & Gutter	1,328	yd3	$400	$531,200	
PCC Sidewalk	70,200	ft3	$20	$1,404,000	
Basement Soil	18,350	yd3	$60	$1,101,000	
				Total Structural Section	**$8,169,280**

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Large Drainage Facilities	25	EA	$5,000	$125,000	
Install Pipe	3,500	LF	$120	$420,000	
				Total Drainage	**$545,000**

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Walls (type 1)	1	LS	$2,800,000	$2,800,000	
Barriers and Gaurdrails	1	LS	$489,000	$489,000	
Noise Attenuation	1	LS	$3,523,000	$3,523,000	
Highway Planting	1	LS	$800,000	$800,000	
Irrigation Modification	1	LS	$300,000	$300,000	
Hazardous Waste Mitigation	1	LS	$120,000	$120,000	
Environmental Mitigation	1	LS	$60,000	$60,000	
SWDR: Treatment BMPs	1	LS	$400,000	$400,000	
SWDR: Construction Site BMPS	1	LS	$1,325,000	$1,325,000	
Graffiti Control	1	LS	$100,000	$100,000	
				Subtotal Specialty Items	**$9,917,000**

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Cost	Section Cost
Street Lighting	17	EA	$5,000	$85,000	
Pavement Delineation	1	LS	$41,000	$41,000	
Traffic Signals	4	EA	$200,000	$800,000	
Overhead Sign Structures	5	EA	$90,000	$450,000	
Roadside Signs	16	EA	$500	$8,000	
Traffic Control System	1	LS	$275,000	$275,000	
Transportation Management Plans	1	LS	$3,835,950	$3,835,950	
Temporary Railing (Type K)	8,000	ft	$19	$152,000	
Temporary Crash Cushion Module	4	EA	$400	$1,600	
Temporary Fence	1	LS	$80,000	$80,000	
				Total Traffic Items	**$5,728,550**
				SUBTOTAL SECTIONS 1 - 5	**$36,008,495**

Section 6 - Minor Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
4% of Subtotal Sections 1 - 5	$36,008,495	X	4%	$1,440,340	
				Total Minor Items	**$1,440,340**

Section 7-Roadway Mobilization	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Subtotal Sections 1-5	$36,008,495				
Minor Items	$1,440,340				
Sum	$37,448,834	X	10%	$3,744,883	
				Total Mobilization	**$3,744,883**

Section 8 - Roadway Additions	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Supplemental					
Subtotal Sections 1-5	$36,008,495				
Minor Items	$1,440,340				
Sum	$37,448,834	X	10%	$3,744,883	
Contingencies					
Subtotal Sections 1-5	$36,008,495				
Minor Items	$1,440,340				
Sum	$37,448,834	X	20%	$7,489,767	
				Subtotal Roadway Additions	**$11,234,650**

Section 9 - Mitig.& Compliance	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Miscellaneous	1	LS	$20,000	$20,000	
				Subtotal Specialty Items	**$20,000**
				TOTAL ROADWAY ITEMS , SECTIONS 1 - 9	**$52,448,368**

II. STRUCTURE ITEMS **BRIDGES**

Bridge Name	**Grove Street UC (Replacement)**
Structure Type	Two-Span CIP/PS Conc Box Girder
Width feet (out to out)	208.25
Bridge Length Feet	181.25
Total Area, Sq. Feet	37,745
Footing Type (pile/spread)	Spread
Cost Per Sq. Feet (incl. 10% mobilization and 25% contingency)	$324
Bridge Removal Cost	$500,000
Total Cost for Structure	**$12,700,000**

Bridge Name	**4th Street UC (Replacement)**
Structure Type	Two-Span CIP/PS Conc Box Girder
Width feet (out to out)	208.25
Span Lengths Feet	199.58
Total Area, Sq. Feet	41,563
Footing Type (pile/spread)	Spread
Cost Per Sq. Feet (incl. 10% mobilization and 25% contingency)	$357
Bridge Removal Cost	$600,000
Total Cost for Structure	**$15,400,000**

Total Structures Items **$28,100,000**

III. RIGHT OF WAY

	Escalated Value YOE (2014)
Acquisition, including excess lands and damages and goodwill	$40,664,000
Utility Relocation	$100,000
Relocation Assistance	$5,450,000
R/W Support	$0
Title and Escrow Fees	$326,000
Other (Demolition)	$1,252,006

Total Right of Way **$** **47,792,006**

Preliminary Project Total Costs Estimate

Year of Expenditure (YOE) Dollars

9/17/2010

Reconstruct Fourth Street/ Grove Avenue Interchange

08-SBd-10
Type of Estimate: Preliminary
Program Code:
Post Mile: 4.1-6.1
EA: 0J400K

Project Title:	Reconstruct Fourth Street/ Grove Avenue Interchange	
Limits:	From Post Mile 4.1-6.1	
Proposed Improvements:	Remove Interchange at Fourth Street; replace the 4th Street and Grove Avenue Undercrossings; construct partical cloverleaf interchange at Grove Avenue; and widen Grove Avenue corridor from I-10 to E Holt Bouvelard	
Alternative Project:	**Alternative 3; Partial Cloverleaf at Grove Avenue**	
Project Costs:	Roadway Items (including 20% contingency and 10% mobilization)	$54,311,000
	Structure Items (including 25% contingency and 10% mobilization)	$27,500,000
	SUBTOTAL CONSTRUCTION	$81,811,000
	Right-of-Way	$46,621,526
	TOTAL CAPITAL CONSTRUCTION COST FOR INTERCHANGE	$128,433,000
	Engineering @ 12.5% (= 3.5% for PR, 8% for PS&E, and 1% for Construction Support), Construction Management/Administration @ 15%, and Agency Oversight @ 2%	$22,498,000
	TOTAL PROJECT COST (2010 dollars)	**$150,931,000**
	Construction Cost Escalation at 6.25% per year for 4 years	$22,602,000
	TOTAL PROJECT COST AT YEAR OF EXPENDITURE (YOE) 2014	**$173,533,000**

Prepared By: **Brian Balderrama** Date **9/9/2010**

Reviewed By: **Mario Montes** Date **9/10/2010**

I. ROADWAY ITEMS

Section 1 - Earthwork	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Roadway Excavation	24,388	yd3	$16	$390,203	
Remove Concrete Curb & Gutter	900	yd3	$10	$9,000	
Imported Borrow	600,000	yd3	$20	$12,000,000	
Clearing and Grubbing	32.1	acre	$2,181	$69,917	
Develop Water Supply	1	LS	$78,000	$78,000	
Construction Staking	1	LS	$78,000	$78,000	
				Total Earthwork	**$12,625,120**

Section 2 - Structural Section	Quantity	Unit	Unit Price	Unit Cost	Section Cost
JPCP	8,038	yd3	$250	$2,009,500	
Hot Mix Asphalt (Type A)	22,060	ton	$80	$1,764,800	
Lean Concrete Base	3,125	yd3	$135	$421,875	
Aggregate Base (Class 2)	11,430	yd3	$65	$742,950	
Asphalt Rubber Hot Mix	2,500	yd3	$85	$212,500	
PCC Curb & Gutter	1,328	yd3	$400	$531,200	
PCC Sidewalk	70,200	ft3	$20	$1,404,000	
Basement Soil	20,500	yd3	$60	$1,230,000	
				Total Structural Section	**$8,316,825**

Section 3 - Drainage	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Large Drainage Facilities	28	EA	$5,000	$140,000	
Install Pipe	4,000	LF	$120	$480,000	
				Total Drainage	**$620,000**

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Retaining Walls (type 1)	1	LS	$2,900,000	$2,900,000	
Barriers and Gaurdrails	1	LS	$495,000	$495,000	
Noise Attenuation	1	LS	$3,523,000	$3,523,000	
Highway Planting	1	LS	$800,000	$800,000	
Irrigation Modification	1	LS	$300,000	$300,000	
Hazardous Waste Mitigation	1	LS	$120,000	$120,000	
Environmental Mitigation	1	LS	$60,000	$60,000	
SWDR: Treatment BMPs	1	LS	$400,000	$400,000	
SWDR: Construction Site BMPS	1	LS	$1,325,000	$1,325,000	
Graffiti Control	1	LS	$100,000	$100,000	
				Subtotal Specialty Items	**$10,023,000**

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Cost	Section Cost
Street Lighting	17	EA	$5,000	$85,000	
Pavement Delineation	1	LS	$41,000	$41,000	
Traffic Signals	4	EA	$200,000	$800,000	
Overhead Sign Structures	5	EA	$90,000	$450,000	
Roadside Signs	16	EA	$500	$8,000	
Traffic Control System	1	LS	$275,000	$275,000	
Transportation Management Plans	1	LS	$3,835,950	$3,835,950	
Temporary Railing (Type K)	8,000	ft	$19	$152,000	
Temporary Crash Cushion Module	4	EA	$400	$1,600	
Temporary Fence	1	LS	$90,000	$90,000	
				Total Traffic Items	**$5,738,550**
				SUBTOTAL SECTIONS 1 - 5	**$37,323,495**

Section 6 - Minor Items	Quantity	Unit	Unit Price	Unit Cost	Section Cost
4% of Subtotal Sections 1 - 5	$37,323,495	X	4%	$1,455,616	
				Total Minor Items	**$1,455,616**

Section 7-Roadway Mobilization	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Subtotal Sections 1-5	$37,323,495				
Minor Items	$1,455,616				
Sum	$38,779,111	X	10%	$3,877,911	
				Total Mobilization	**$3,877,911**

Section 8 - Roadway Additions	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Supplemental					
Subtotal Sections 1-5	$37,323,495				
Minor Items	$1,455,616				
Sum	$38,779,111	X	10%	$3,877,911	
Contingencies					
Subtotal Sections 1-5	$37,323,495				
Minor Items	$1,455,616				
Sum	$38,779,111	X	20%	$7,755,822	
				Subtotal Roadway Additions	**$11,633,733**

Section 9 - Mitig.& Compliance	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Miscellaneous	1	LS	$20,000	$20,000	
				Subtotal Specialty Items	**$20,000**
				TOTAL ROADWAY ITEMS , SECTIONS 1 - 9	**$54,310,756**

II. STRUCTURE ITEMS

BRIDGES

Bridge Name	**Grove Street UC (Replacement)**
Structure Type	Two-Span CIP/PS Conc Box Girder
Width feet (out to out)	214.97
Bridge Length Feet	152.08
Total Area, Sq. Feet	32,693
Footing Type (pile/spread)	Spread
Cost Per Sq. Feet (incl. 10% mobilization and 25% contingency)	$356
Bridge Removal Cost	$500,000
Total Cost for Structure	**$12,100,000**

Bridge Name	**4th Street UC (Replacement)**
Structure Type	Two-Span CIP/PS Conc Box Girder
Width feet (out to out)	208.25
Span Lengths Feet	199.58
Total Area, Sq. Feet	41,563
Footing Type (pile/spread)	Spread
Cost Per Sq. Feet (incl. 10% mobilization and 25% contingency)	$357
Bridge Removal Cost	$600,000
Total Cost for Structure	**$15,400,000**

Total Structures Items **$27,500,000**

III. RIGHT OF WAY

	Escalated Value YOE (2014)
Acquisition, including excess lands and damages and goodwill	$39,639,100
Utility Relocation	$100,000
Relocation Assistance	$5,300,000
R/W Support	$0
Title and Escrow Fees	$347,900
Other (Demolition)	$1,234,526

Total Right of Way **$** **46,621,526**

Grove Ave. Preliminary Quantities

		City / AASHTO Symmetrical			City / AASHTO East			City / AASHTO West		
		AASHTO Typical Section Symmetrical about the Existing Centerline			AASHTO Typical Section East of the Existing Centerline			AASHTO Typical Section West of the Existing Centerline		
Item	Unit	Quantity	Unit Cost	Sub-Total	Quantity	Unit Cost	Sub-Total	Quantity	Unit Cost	Sub-Total
Curb and Gutter Type A	LF	9902	25	$ 247,550	9902	25	$ 247,550	9902	25	$ 247,550
Curb and Gutter Type B	LF	10557	26	$ 274,482	10557	26	$ 274,482	10557	26	$ 274,482
Median Cover Material	CF	32715	3	$ 98,145	32715	3	$ 98,145	32715	3	$ 98,145
Sidewalk	CY	979.455	555	$ 543,598	979.455	555	$ 543,598	979.455	555	$ 543,598
Pavement	SY	53876	65	$ 6,501,940	53876	65	$ 6,501,940	53876	65	$ 6,501,940
8" Solid White Striping	LF	6425	0.2	$ 1,285	6425	0.2	$ 1,285	6425	0.2	$ 1,285
4" Skip White Striping	LF	20664	0.1	$ 2,066	20664	0.1	$ 2,066	20664	0.1	$ 2,066
4" Double Yellow Striping	LF	3764	0.56	$ 2,108	3764	0.56	$ 2,108	3764	0.56	$ 2,108
12" Solid White Striping	LF	4500	0.25	$ 1,125	4500	0.25	$ 1,125	4500	0.25	$ 1,125
Signal Poles	EA	16	200000	$ 3,200,000	16	200000	$ 3,200,000	16	200000	$ 3,200,000
Roadway Items				$ 10,872,000			$ 10,872,000			$ 10,872,000

Roadway Items (Subtotal Sections 1-5)			$ 10,872,000
Minor Items (Section 6)	$ 10,872,000	x 10%	$ 1,087,200
Roadway Mobilization (Section 7)	$ 11,959,200	x 10%	$ 1,195,920
Roadway Additions (Section 8)			
Supplemental	$ 11,959,200	x 10%	$ 1,195,920
Contingencies	$ 11,959,200	x 25%	$ 2,989,800
Mitigation & Compliance (Section 9)		LS	$ 20,000

Subtotal Construction				$ 17,000,000			$ 17,000,000			$ 17,000,000
Right of Way Items	LS	1	11000000	$ 11,000,000	1	11000000	$ 11,000,000	1	11000000	$ 11,000,000
TOTAL CAPITAL CONSTRUCTION COSTS FOR LOCAL IMPROVEMENTS				$ 28,000,000			$ 28,000,000			$ 28,000,000
CONSTRUCTION COST ESCALATION AT 6.25% PER YEAR FOR 4 YEARS				$ 5,000,000			$ 5,000,000			$ 5,000,000
TOTAL PROJECT COST AT YEAR OF EXPENDITURE (YOE) 2015				**$ 33,000,000**			**$ 33,000,000**			**$ 33,000,000**

ATTACHMENT 11

STORM WATER DATA REPORT APPROVAL

Caltrans

Dist-County-Route: 08-SBD-10

Post Mile (Kilometer Post) Limits:
4.61/6.61 (7.42/10.64) 4.1/6.1 (6.60/9.82)

Project Type: Reconstruct Grove Avenue/ Fourth Street Interchange

EA: 0J400K

RU: 08-185

Program Identification: 400.010

Phase: ☒PID ☐PA/ED ☐PS&E

Regional Water Quality Control Board(s): Santa Ana RWQCB (8)

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

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

  If No, a Technical Data Report must be submitted to the RWQCB at least 60 days prior to PS&E Submittal. List submittal date: _____

Total Disturbed Soil Area: 1,251,124 sf (28.7 acres)

Estimated Construction Start Date: 12-01-2014 Construction Completion Date: 12-1-2017

Notification of Construction (NOI) Date to be submitted: 11-01-2014

Notification of ADL reuse (if Yes, provide date) ☐Yes Date: _____ ☒No

Separate Dewatering Permit (if Yes, permit number) ☐Yes Permit #: _____ ☒No

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

Brian B. Balderrama, *Registered Project Engineer* — Date 5/19/2010

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

REGISTERED PROFESSIONAL ENGINEER
BRIAN BENJAMIN BALDERRAMA
No. C 72084
Exp. 6/30/12
CIVIL
STATE OF CALIFORNIA

Nassim Elias, *Project Manager* — Date 6/7/2010

Jim Dodd, *Designated Maintenance Representative* — Date 6-9-10

Ray Desselle, *Designated Landscape Architect Representative* — Date 6/22/10

Catherine Jochai, *District/Regional SW Coordinator or Designee* — Date 9/16/10

CK 9-16-10

ATTACHMENT 12

INITIAL SITE ASSESSMENT (ISA) CHECKLIST

DIAZ•YOURMAN
& ASSOCIATES
Geotechnical Services

June 3, 2009

Mr. Ed Kouzi
Boyle | AECOM
1501 Quail Street
Newport Beach, CA 92660-2746

Subject: Addendum Number 1
Environmental Initial Site Assessment Phase I
Interstate 10 at Grove Avenue and Fourth Street Interchange
Ontario, California

Dear Mr. Kouzi:

This addendum number 1 presents the results of Diaz•Yourman & Associates (DYA) review of the revised alternatives for the subject project. The alternatives are similar to the conceptual plans provided in Appendix A of DYA's Environmental Initial Site Assessment Phase I (ISA) report dated April 24, 2008 as summarized below.

- The current 4th Street Layout Alternative 1: Mid-Build - is equivalent to the Interchange Alternative 6, Figure 8, in DYA's ISA Report Appendix A. The alternative consists Widening of Fourth Street and related widening of the I-10 freeway bridge over Fourth Street, with associated eastbound offramp modifications.

- The current Grove Avenue Layout Alternative 2: Diamond - is equivalent to the Interchange Alternative 2, Figure 4, in DYA's ISA Report Appendix A. The alternative consists of a "Diamond" interchange configuration for onramp and offramp access to Grove Avenue.

- The current Grove Avenue Layout Alternative 3: PARCLO is equivalent Interchange Alternative 1, Figure 3, in DYA's ISA Report Appendix A. The alternative consists of an "L-9" circular ramp configuration for onramp and offramp access to Grove Avenue.

- The current Alternatives 1, 2, and 3 - include proposed Grove Avenue Improvements from 4th Street to Holt Street, Figure 10, in DYA's ISA Report Appendix A.

Since the current alternatives are similar to those addressed in DYA's ISA report, the information provided in our report is still applicable to the project. We trust this provides the information you require at this time. We appreciate the opportunity to provide our services to you on this project.

Sincerely,

DIAZ•YOURMAN & ASSOCIATES

REGISTERED PROFESSIONAL ENGINEER
GARY K. GILBERT
No. C 62781
Exp. 06-30-10
CIVIL
STATE OF CALIFORNIA

Mr. Gary Gilbert
Civil Engineer 62781

1616 EAST 17th STREET SANTA ANA, CA 92705-8509 TEL. (714) 245-2920 FAX (714) 245-2950

Initial Site Assessment (ISA) Checklist

Project Information

District 8 County San Bernardino Route I-10 Kilometer Post (Post Mile) N/A
EA _____

Description The proposed project will consist of proposed traffic improvements associated with the Interstate (I) 10 freeway at the Grove Avenue and Fourth Street bridge crossings in Ontario, California. Proposed improvements consist of widening and lane improvements to Grove Avenue from the freeway south to Holt Avenue. In addition, possible alternatives include an interchange at Grove Avenue, or I-10 freeway bridge widening at Fourth Street, with related widening and lane improvements on Fourth Street between Grove Avenue and Baker Avenue.

Is the project on the HW Study Minimal-Risk Projects List (HW1)? No

Project Manager Gary Gilbert phone # 714-245-2920

Project Engineer Gary Halbert phone # 714-245-2920

Project Screening

Attach the project location map to this checklist to show location of all know and/or potential HW sites identified.

1. Project Features: New R/W Yes Excavation Yes Railroad Involvement No

   Structure demolition/modification Yes Subsurface utility relocation Yes

2. Project Setting Existing Freeway, Grove Ave., interchange revision and add new interchange

   Rural or Urban Urban

   Current land uses Roadways, commercial businesses

   Adjacent land uses Commercial on all adjacent areas
   (industrial, light industry, commercial, agricultural, residential, etc.)

3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project.

4. Conduct Field Inspection. Date April 2, 2008 Use the attached map to locate potential or known HW sites.

   STORAGE STRUCTURES / PIPELINES:

   Underground tanks Yes Surface tanks None Observed
   Sumps None Observed Ponds None Observed
   Drums None Observed Basins None Observed
   Transformers None Observed Landfill None Observed

Other _____

CONTAMINATION: (spills, leaks, illegal dumping, etc.)

Surface staining Not Observed Oil sheen Not Observed

Odors None Observed Vegetation damage Not Observed

Other _____

HAZARDOUS MATERIALS: (asbestos, lead, etc.)

Buildings N/A Spray-on fireproofing N/A

Pipe wrap N/A Friable tile N/A

Acoustical plaster N/A Serpentine N/A

Paint Potential Lead-Based Paint in Thermoplastic Roadway Striping

Other Potential Asbestos in existing bridges/culverts

5. Additional record search of subsequent land uses was performed.

6. Other comments and/or observations: Aerially-Deposited Lead (ADL) in unpaved areas adjacent to existing roadway should be investigated.

ISA Determination

Does the project have potential hazardous waste involvement? Yes If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? Yes If "YES," explain; then give an estimate of additional time required:

SEE ATTACHED EXECUTIVE SUMMARY MEMO FROM INITIAL SITE ASSESSMENT ENVIRONEMNTAL REPORT, PREPARED BY DIAZ YOURMAN & ASSOCIATES (DYA) DATED April 24, 2008.
Regulatory file review for underground storage tanks was postponed pending a decision on the selected alternative.
Estimated time required for regulatory agency file review and Phase II subsurface investigations: 3 months

A brief memo should be prepared to transmit the ISA conclusions to the Project Manager and Project Engineer.

ISA Conducted by _____ **Date** _____

MEMORANDUM

MEMO TO: Boyle Engineering, Newport Beach, CA

FROM: Gary Gilbert, P.E.

DATE: April 23, 2009

SUBJECT: **ISA Checklist Memo**
I-10 at Grove Avenue & 4TH Street Interchange
Ontario, CA

DYA Project 2008-007

Diaz•Yourman & Associates (DYA) identified the following potential recognized environmental concerns (RECs) directly related to the project:

- An existing Valero Service Station, 1155 North Grove Avenue, with underground storage tanks (USTs), is located one block south of the I-10 freeway on the southwest corner of Grove Avenue and Princeton Street. This site is within a proposed construction ramp for Grove Avenue Interchange Alternative 1. It is assumed this parcel will need to be acquired and the USTs removed. In the event Alternative 1 is selected, Phase II soil sampling is recommended to investigate possible soil contamination on the site for the USTs and appurtenances. Review of the UST file for this site should be completed as part of the Phase II investigation.
- An existing vacant lot at 1305 Fourth Street, formerly a Chevron Station with former USTs, is located on the northeastern corner of Grove Avenue and Fourth Street. This former UST site is not listed as a Leaking Underground Storage Tanks (LUST) case. However, the exact UST location and closure status is unknown. This site could impact the proposed Grove Avenue improvements. Review of the UST file for this site should be completed as part of the Phase II investigation.
- A currently vacated service station at the address of 1315 Fourth Street, located on the north side of Fourth Street, is adjacent to the east side of the vacant lot/former Chevron station described in the previous paragraph. The site has USTs remaining in the ground, approximately 40 feet north of Fourth Street. The

LUST status is given as "soil only, pollution characterization." Research for the site indicates that there was a site assessment in 2006, with no report provided. This site could impact the Grove Avenue Improvements and the Fourth Street Alternative (Number 6). Review of the UST file for this site should be completed as part of the Phase II investigation.

- Three additional existing service stations with existing USTs, all with closed LUST cases, are located on Fourth Street (Unocal 1425, 7/11 1544 and ARCO 1565) within the proposed Fourth Street Alternative 6 improvement segment. Detailed final design surveys for street improvements may encroach close to the existing USTs, piping and dispensers that are within 20 to 30 feet of existing street easements. This could result in a significant environmental impact if these UST facilities require relocation and Phase II file review and soil sampling would be recommended. At this stage of planning, DYA recommends that UST and dispenser locations in relation to street improvements be taken into consideration during evaluation of Alternatives.
- Soils adjacent to paved areas within the project corridor may contain aerially deposited lead (ADL) from vehicle exhaust. Areas within the project corridor where soil may be disturbed during construction should be tested for ADL according to Caltrans ADL testing guidelines.
- Potential lead based paint (LBP) was not observed. If the final construction alternative involves the acquisition of land with structures, the structures should be evaluated for suspect LBP. Lead and other heavy metals such as chromium may be present within yellow thermoplastic paint markings on the pavement. These surfacing materials should be tested for LBP prior to removal.
- Asbestos-containing materials (ACM) were not directly observed within the existing project right-of-way (ROW). If the final construction alternative involves the acquisition of land with structures or modification to the existing bridges, the structures or bridges should be evaluated for suspect ACM prior to demolition.

ATTACHMENT 13

PEAR APPROVAL

12. Review 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 environmental assessment or environmental impact statement, I verify that the HQ DEA Coordinator has concurred in the Class of Action.

List of Reviewers:

Cultural Resources Specialist	Gary Jones	Date: 10/25/2009
Biologist	Josh Jaffery	Date: 10/25/2009
Community Impacts Specialist	Gita Tokhmafshan	Date: 10/25/2009
Noise and Vibration Specialist	Farhana Islam	Date: 10/25/2009
Air Quality Specialist	Chris Gonzalez	Date: 10/25/2009
Paleontology Specialist/Liaison	Gabrielle Duff	Date: 10/25/2009
Storm Water Quality Specialist	Alan Nakano	Date: 08/16/2010
Hydrology and Floodplain Specialist	Ali Tadjalli	Date: 10/25/2009
Landscape Architecture Specialist	Miriam Bishop	Date: 10/25/2009
Hazardous Waste	Donald Cheng	Date: 08/16/2010
PEAR Reviewer	Gita Tokmafshan	Date: 08/16/2010

Environmental Branch Chief _____ Date: 9/29/10

Project Manager _____ Date: 9/29/10

REQUIRED ATTACHMENTS:

Attachment A: PEAR Environmental Studies Checklist
Attachment B: Estimated Resources by WBS Code
Attachment C: Schedule (Gantt Chart)
Attachment D: PEAR Environmental Commitments Cost Estimate (Standard PSR)

SUPPLEMENTAL ATTACHMENTS:

Attachment E: Report Figures
Attachment F: ISA Checklist

ATTACHMENT 14

TRANSPORTATION MANAGEMENT PLAN DATA SHEETS

TRANSPORTATION MANAGEMENT PLAN (TMP) DATA SHEET # 1 for PSR

Phase - This TMP is valid for **two years** from date of preparation, unless the project or impact changes.

T:\DTM.TMP\project docs\SBD-210\)m360K\081230\0M360K Data Sheet # 1.xls (includes signature/background sheet, estimate, table, DTM requirements, and Revisions & Notes)

TEMPLATE: 0 TMP Data Sheet revised 090109.xls. CT & CONSULTANTS, PLEASE REQUEST THE LATEST TEMPLATE SINCE IT WILL HAVE THE CURRENT RATES, etc. CAUTION - ck for formulas in cells - amounts flow from Tab 3 to 2 to 1.

EA **08-0J400K** **DATE** **8/6/2009**

08-SBD-10- PM 4.1-6.1

Location: In San Bernardino County

Work: Alternative 1: Reconstruct the I-10 Interchange at 4th Street, 4th Street UC and Grove Avenue UC, and widen Grove Avenue from Holt Blvd to I-10 Interchange

Date of TMP/Review Request memo:

Documents available:

TMP request letter, Title sheet, Plans.

Construction period per PE

EST START DATE	Dec-2014
EST END DATE	Dec-2017

Construction period per WPS

EST START DATE	?
EST END DATE	?

BACKGROUND INFORMATION:

DURATION: 950 WORKING DAYS

2009 PROJECT COST: $135,600,000

TMP ESTIMATE: **$3,645,950** or 2.69% OF THE PROJECT COST

IMPACT	High	Medium	Low	NA
STATE HWY	X			
LOCAL RD	X			
Ramps/connectors			X	

Details: Stage 1 work will be done in the medain on I-10. During construction, the medain will be protected with K-rail on both sides and four 12' lanes will be provided in both directions. Stage 2 and Stage 3 include the demolition of a portion of the existing Grove Ave and 4th St structures and construction of the structure widening. Full freeway closures will be required for the structure demolition, falsework erection and falsework demolition. During construction of the widening I-10 traffic in both directions will be accommodated in 4 lanes (3 - 11' lanes and a 12' outside lane) with a temporary K rail on the inside edge. A 1' buffer will be provided between the lanes and railing. Stage 4 will maintain the traffic handling set-up from Stage 3 on I-10. K-rail setup and removal, pavement overlay for existing lanes, and striping work will be done at night with lane and ramp closures within rolling work areas. Up to 34 days of full cross street closures are anticipated for demolition of the existing Grove Ave and 4th St bridge structures, and an additional 16 overnight closures of one direction at a time for falsework erection and demolition.

This Transportation Management Plan (TMP) has been prepared under the direction of the following Registered Engineer. The Registered Civil Engineer attests to the technical information contained therein and the engineering data upon which recommendations, conclusions, and decisions are based.

Prepared by Signature ORIGINAL SIGNED BY Emily Flagg Date 8/6/2009

Name	Emily L. Flagg
Title	C68614 Expiration 9/30/09
Organization	PBS&J
Telephone/FAX	(303) 221-7275/(303) 221-7276
email	eflagg@pbsj.com

TMP ESTIMATE	EA	08-0J400K	DATE	8/6/2009

1. Public Information	NO	[YES]	MAYBE	$1,500,000
2. Motorist Information Strategies	NO	YES	[MAYBE]	$0
3. Incident Management	NO	[YES]	MAYBE	$1,995,950
4. Construction Strategies	NO	YES	[MAYBE]	$75,000
5. Demand Management (DM)	NO	YES	[MAYBE]	$0
6. Alternate Route Strategies	NO	YES	[MAYBE]	$75,000
7. Other Strategies	NO	YES	[MAYBE]	$0
			TMP TOTAL	$ 3,645,950

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

An X in the check box means you need to include this in the project unless staging, material, or work hour changes eliminate the need for the item. A ? in the box means TMP anticipates this - please check into this. A blank box means the item is not needed at this time based on the information received.

1 Public Information/Public Awareness Campaign (PAC)

BEES 066063 - Traffic Management Plan Public Information.
Cost to be reduced by Public Affairs (PA) and Construction Liaison (CL) only.

		PA COST	CL COST	COST
		600000	900000	
1.0	[X] Include Rideshare information in PA/CL project material to encourage vehicles reduction in work area			
1.1	[X] Brochures and Mailers			
1.2	[X] Media Releases (& minority media sources)			
1.3	[X] Paid Advertising			
1.4	[ ] Public Information Center/Kiosk			
1.5	[X] Public Meetings/PAC Mtgs./Speakers Bureau (show cost also for room rental)			
1.6	[X] Handdeliver notices to vicinity			
1.7	[ ] Broadcast fax service			
1.8	[X] Telephone Hotline OR			
1.9	[X] 1-800-COMMUTE or 511 (the telephone number is shown on CS-Info signs) - contact Cyrin Kwong, 383-4256, to place msg into the 1800C telephone system.			
1.10	[ ] Visual Information (videos, slide shows, etc.)			
1.11	[ ] Local cable TV and News			
	[ ]			
1.13	[X] Internet, E-mail			
1.14	[X] Notification to targeted groups:			
	[ ] Revised Transit Schedules/maps			
	[X] Rideshare organizations			
	[ ] schools			
	[ ] organizations representing people with disabilities			
	[ ] bicycle organizations			
1.15	[ ] Include PA/CL/Consultant resources in WPS			
1.16	[ ] Commercial traffic reporters/feeds - e.g. brief Traffic Information people (TIP) group			
1.17	[X] Insert SSP (no number at this time) "A representative of the Contractor, at Superintendent level or higher, and authorized to commit the Contractor, shall attend and participate in all Public Awareness Campaign meetings. Time commitment for the meeting(s) varies from two to four hours per month."			
1.18	[ ] Others			
	Subtotals	$600,000	$ 900,000	
			SUBTOTAL	$1,500,000

2 Traveler Information Strategies

Project team needs to coordinate with Traffic Design!

2.1 [ ] Existing Electronic Message Signs (Stationary) - list locations. See Note 5

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

☐ New Installation (Stationary) - BEES 860530 CHANGEABLE MESSAGE SIGN SYSTEM - list locations. See Note 5

2.2 ☒ Portable Changeable Message Signs (PCMS).

Construction prefers Rental Lumpsum BEES 066578 in Supplemental Funds

And include SSP 12-370

These PCMS advise motorists to divert at remote advance decision points - outside the usual work limits. Unlike stationary CMS, you are allowed to use them for advance motorist information - e.g. a week ahead. Their placement may need to be cleared **environmentally** so that they can be included in plans and SSP later. They may be **in addition** to Traffic Design's PCMS for regular traffic handling in and next to a work area. 0

Placement Details:

2.3 ☐ BEES 860503 Extinguishable Signs (only shown because they are on the TMP Guidelines list. Usually found at Weigh Stations - Weigh Station "open/closed".)

2.4 Ground Mounted Signs / Fabric signs Note 2

- ☒ C40/40A Double Fine Sign - black and white $0
- ☐ BEES 860926 Regulatory speed signs
- ☐ SC6-4 (per MUTCD) (Ramp will be closed...)
- ☒ CS-SPECIAL w/ SC6-2 PANEL ("Dates/Days/Hours/Expect delay") Use when conventional highways or local roads will be affected for longer periods. To encourage traffic to detour so delay in your work area is less, use at advance location and add the work location. **Use fabric signs if short duration or fast moving operation.**

- ☒ CS-INFO/1-800-COMMUTE Panel Sign. **Also see 1.9.**
- ☒ Blue and white Rideshare guide signs, including website (1-800-COMMUTE/www.commutesmart.info). **Need to be installed at the same time as the funding signs.**

2.5 ☐ BEES 860520 Commercial Traffic Radio (usually only applicable in the Upper desert)

☐ Highway Advisory Radio (HAR) - Fixed. List locations here. They can be obtained from TMC Manager. See Note 5.

☐ Highway Advisory Radio - mobile (signs alerting motorists to the HAR will also be needed) Contact TMC manager for assistance with specifications to include portable HARs as bid item in the contract. To avoid FCC fines, CT Portable HAR cannot be used except for emergencies. Seldom used. See Note 5

List proposed locations here:

2.6 ☒ Lane Closure Web Site

2.7 ☒ Caltrans Highway Information Network (CHIN)

2.8 ☐ Radar Speed Message Sign (Specter sign) BEES 066064 (approx. EA @ $30,000)

2.9 ☐ Bicycle and pedestrian information, e.g. Detour maps

2.10 ☐ Others

SUBTOTAL $0

3 Incident Management

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

3.1 CHP's Construction or Maintenance Zone Enhanced Enforcement Program – COZEEP or MAZEEP. BEES 066062 - show under "State or Agency furnished" in the Cost Estimate. **SSP 12-225 has been deleted per HQ OE.** See note 1.

Consider the LC hours and add CHP driving time to/from their office

Hourly Cozeep overtime loaded rate: $ 95

COZEEP - to protect active closures

			75	10	2	$142,500
# of days	hours	# of officers (1 per car)	**nights**	**hours**	# of officers (Remember - nights require 2 per car)	

ECOZEEP - to mitigate continuos restrictions. Add weekends days if needed.

			50	10	2	$95,000
# of days	hours	# of officers	**nights**	**hours**	see above	

(add weekends days as needed)

CHP TRAFFIC HANDLING - reduce delay by keeping traffic flowing and/or to enforce closures - total facility/structure/major traffic shifts/ramps/connectors/local road/extended closures. Freeway closures with local road detours may require **2 officers per intersection** to direct traffic.

10	18	12	50	10	12	$775,200
days	hours	# of officers	**nights**	**hours**	see above	

CHP Officer in TMC during major construction closures

10	27	1	$25,650
days	hours	# of officers	

CHP Officer for Command Post during regional impact construction closures

			$0
days	hours	# of officers	

3.1 Total $1,038,350

3.2 BLANK

3.3 **Freeway Service Patrol (FSP) for Construction (CFSP)** $/hr/truck $75

BEES 066065 - show under "State or Agency furnished" in the Cost Estimate

Short duration or remote area CFSP usually is bid w much higher hourly rates. If enhancement of program FSP feasible, CFSP could tie into the lower long-term FSP rates.

FOR SERVICE **WITHIN** REGULAR FSP HOURS:

A days & hrs: ____ ____ # of trucks: ____ $0

FOR SERVICE **OUTSIDE** REGULAR FSP HOURS:

Extend Peak hour coverage

B days & hrs: 950 8 # of trucks: 1 $570,000

Night support during structure freeway closures and major traffic shifts

C days & hrs: ____ ____ # of trucks: ____ $0

Weekend support___

TMP TABLE			EA	08-0J400K	DATE	8/6/2009
D	days & hrs:		# of trucks:			$0

Local agency (SAFE) support — 8% of truck cost — $45,600

CFSP CHP support — 25% of truck cost — $0
THIS % ONLY IF **WITHIN** REGULAR FSP HOURS AND AREA!

Equipment/Supplies — 10% — $57,000
% of truck cost unless more detail available

CONSULT W INLAND DIVISION CHP OR BORDER IN SOUTHERN RIVERSIDE CO. which method is acceptable FOR B,C,D WHICH ARE OUTSIDE REGULAR FSP HOURS OR AREA!

Method 1

CFSP CHP support - including time for meetings — 50% of truck cost — $285,000

or

Method 2

CFSP Dispatcher @ **$55**

		0	$ -
days/nights	hours	Dispatcher(s)	

CFSP CHP Officers (See Cozeep rate)

		0	0	0	0	$ -
days	hours	# of officers	**nights**	**hours**		

Include time for meetings:

		0			0	$ -
days	hours	# of officers	**nights**	**hours**		

☐ Cooperative Agreement or Task Order with SAFE for $615,600

☐ Task Order with CHP (Statewide Master Agreement for FSP support). for $285,000

Contact District FSP Coordinator for task orders.

☐ Service Contract

☐ Local Agency will arrange CFSP with SAFE

☐ Local Agency will arrange CFSP administration with CHP

3.3 Total $957,600

3.4 ☐ CHP Helicopter/Airplane

3.5 ☐ Traffic Surveillance Stations for construction impact mitigation (loop detectors and CCTV)

Keep existing operational during construction

☐ New CCTV

☐ New loops

3.6 **Call Boxes - also see NOTE 4 in the Revisions & Notes tab**

TEMPORARY INSTALLATION to mitigate impact ($5000/box/move from project funds to SAFE). Project Report/Design PE: Please discuss with the D8 Call box coordinator if it is feasible to keep this motorist aid available during construction. If it is not, please notify TMP, then other mitigation needs to be considered. For location in SBd County see Q:\Ops\Call Boxes\SBD\Excel List. Apparently no list available for Riv County.

☐ ☐ callboxes x ☐ moves x $5,000.00 = $0

☐ *Add 15% to callbox cost since contractor will need to pay SAFE through CCO.*

TMP TABLE		EA	08-0J400K	DATE	8/6/2009

3.7 [ ] 911 Cellular Calls

3.8 [X] Project needs to provide resources to Transportation Management Center Unit 370 for additional staff during high impact closures

3.9 [ ] Traffic Management Teams (TMT) needed to assist w system diversion/impact reduction. Project needs to provide resources.

See 7/3/05 in Tab 6 - Revisions

3.10 [ ] On-site Traffic Advisor

3.11 [ ] Others

SUBTOTAL $ 1,995,950

4 Construction Strategies

4.1 [X] Coordinate with adjacent construction and planned projects - also on detour routes.

Use SSP 07-850

4.2 This TMP presumes work is planned as below. If different, TMP needs to be revised. The Lead Project Engineer is responsible to include all appropriate closure charts.

- [X] Off peak
- [X] Night
- [X] Weekend

4.3

- [ ] Flagging
- [X] Shoulder
- [X] Lane
- [X] Street
- [X] Ramp
- [ ] **Connector***
- [ ] **Extended Weekend Closures***
- [ ] **Total Facility Closures***

***Consult w TMP and DTM re Cozeep & other cost. Show your detour and traffic diversion plans.**

4.4 [ ] Contra Flow (put traffic into opposing roadbed)

4.5 [ ] Reversible Lanes

4.6 [ ] Project Phasing

4.7 [ ] BEES 152372 - If K-Rail is placed, consider including cost item for lateral shifting to open a minimum of 2.4 m (8') shoulder space as soon as possible. Please include supplemental work funds in the estimate to pay for the extra work. See Standard Specifications 12-4, Measurement and Payment. **PE must discuss this and traffic screen w Traffic Design!**

4.8 [X] BEES 129150 Temporary Traffic Screens (Gawk Screen - see 5/10/06 entry in Revisions tab) 75000

4.9 [ ] Movable Barrier

4.10 [ ] Truck Traffic Restrictions

4.11 [ ] BEES 066008 Incentives/Disincentives

4.12 [X] BEES 070010 Strictly enforce Constr. Progress Schedule (CPM)

CAUTION: If the Lane Closure Chart (LCC) for full mainline closures (one or both directions on a highway or freeway) does not show a maximum number of allowable days, the PSE cannot be certified by DTM/TMP.

Please contact Saleh Yadegari, 4232, to get Delay Calculations, lane closure charts, Table Z and Special events list. Inform him of any concerns/committments re special LC days, times, season, events; environmental restrictions; if work may be affected by snow and low or high temperatures. E.g. desert heat may delay AC digout curing which may increase traffic impact when vehicles overheat in the queue; etc. IF traffic volumes vary significantly between seasons, consider 2 sets of closure charts to avoid CCOs later.

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

Use SSP 12-130 and following

4.13 [ ] Include Specification 12-220

4.15 [ ] **Delay Damages (DD)** **Please contact Saleh Yadegari, 4232, regarding Delay Calculations.**

4.16 [ ] Others

SUBTOTAL $ 75,000

5 Demand Management (DM)

Project team needs to coordinate with RCTC/SANBAG/CVAG

Traffic diversion may increase available work hours.

5.1 [ ] A coop will be executed - mentioned in PSR or PR.

[ ] Instead of a coop, 15% is added to the cost of DM elements since the payment to the local agency will be routed through the contractor.

[ ] Instead of a coop, the local agency will make their own arrangements with RCTC/SANBAG.

[X] PA/CL or local agency need to inform commuters through RCTC/SANBAG. Funds part of PA/CL.

5.2 [ ] HOV Lanes/Ramps (New or Convert)

5.3 [ ] Park-and-Ride Lots

[ ] LEASED SPACES (Sponsored spaces may be feasible in exchange for signs and print coverage)

5.4 [ ] Parking Management/Pricing (Coordination with local agency required)

5.5 [ ] BEES 066069 Rideshare Promotion

5.6 Rideshare Incentives -

As far as D8 DTM.TMP knows, incentives to individuals cannot be paid by the State, however, State can pay for Local Transportation agency staff time, postage, cost of extra busses, etc.

- [ ] Carpool/vanpool
- [ ] Transit
- [ ] Train
- [ ] Light-Rail

5.7 BEES 066066

- [ ] Public Transit Support/Improvements/Shuttle Service
- [ ] School Shuttle Service

5.8 [ ] Variable Work Hours

5.9 [ ] Telecommute

5.10 [ ] Ramp Metering (Modify or new)

5.11 [X] Blue and white Rideshare signs needed - unless already signed. See 2.4

5.12 [ ] Others

SUBTOTAL $ -

6 Alternate Route Strategies

Caution - signed detours may require environmental clearance

Traffic diversion may increase available work hours. Please work with Traffic Design.

6.1 [ ] Add Capacity to Freeway connector

6.2.1 [ ] Upstream Ramp Closures needed to avoid conflicts with closure tapers, etc., during construction

6.2.2 [ ] Upstream Connector Closures needed to avoid conflicts with closure tapers, etc., during construction

6.3 [X] Temporary Highway Lanes or Shoulder Use

6.4 [ ] Parking Restrictions

6.5 [ ] Street Improvements

- [ ] State R/W - Signals, Widen, etc.

TMP TABLE		EA	08-0J400K	DATE	8/6/2009
	☐ Local R/W - Signals, Widen, etc. Coop or Permit may be needed				
6.6	☐ Local Street USE - Coop or Permit may be needed				
6.7	☐ Traffic Control Officers (see 3.1 Cozeep)				
6.8	☐ Signed detour - using State routes				
6.9	☒ Signed detour - using local streets and roads				25000
6.10	☒ Adjust signals (time signals to allow detour traffic to flow)			$	50,000
6.11	☐ Temporary bicycle or pedestrian facilities				
6.12	☐ Others				
				SUBTOTAL	$ 75,000.00
7	**Other Strategies**				
7.1	☐ Application of new technology				
7.2	☐ Innovative products				
7.3	☐ Others				
				SUBTOTAL	$ -
			TOTAL	$	3,645,950

TRANSPORTATION MANAGEMENT PLAN (TMP) DATA SHEET # 1 for PSR

Phase - This TMP is valid for **two years** from date of preparation, unless the project or impact changes.

T:\DTM.TMP\project docs\SBD-210\)m360K\081230\0M360K Data Sheet # 1.xls (includes signature/background sheet, estimate, table, DTM requirements, and Revisions & Notes)

TEMPLATE: 0 TMP Data Sheet revised 090109.xls. **CT & CONSULTANTS, PLEASE REQUEST THE LATEST TEMPLATE SINCE IT WILL HAVE THE CURRENT RATES, etc. CAUTION - ck for formulas in cells - amounts flow from Tab 3 to 2 to 1.**

EA **08-0J400K** **DATE** **8/6/2009**

08-SBD-10- PM 4.1-6.1

Location: In San Bernardino County

Work: Alternative 2: Reconstruct the 4th Street UC and Grove Avenue UC, Remove I-10 Interchange at 4th Street and Replace at Grove Avenue and widen Grove Avenue from Holt Blvd to I-10 Interchange

Date of TMP/Review Request memo:

Documents available:

TMP request letter, Title sheet, Plans.

Construction period per PE

EST START DATE	Dec-2014
EST END DATE	Dec-2017

Construction period per WPS

EST START DATE	?
EST END DATE	?

BACKGROUND INFORMATION:

DURATION:	950	WORKING DAYS		
2009 PROJECT COST:	$162,800,000			
TMP ESTIMATE:	**$3,835,950**	or	2.36%	OF THE PROJECT COST

IMPACT	High	Medium	Low	NA
STATE HWY	X			
LOCAL RD	X			
Ramps/connectors			X	

Details: Stage 1 work will be done in the medain on I-10. During construction, the medain will be protected with K-rail on both sides and four 12' lanes will be provided in both directions. Stage 2 and Stage 3 include the demolition of a portion of the existing Grove Ave and 4th St structures and construction of the structure widening. Full freeway closures will be required for the structure demolition, falsework erection and falsework demolition. During construction of the widening I-10 traffic in both directions will be accommodated in 4 lanes (3 - 11' lanes and a 12' outside lane) with a temporary K rail on the inside edge. A 1' buffer will be provided between the lanes and railing. Stage 4 will maintain the traffic handling set-up from Stage 3 on I-10. K-rail setup and removal, pavement overlay for existing lanes, and striping work will be done at night with lane and ramp closures within rolling work areas. Up to 34 days of full cross street closures are anticipated for demolition of the existing Grove Ave and 4th St bridge structures, and an additional 16 overnight closures of one direction at a time for falsework erection and demolition. Additional construction activities to relocate the interchange from 4th street to Grove Ave will be performed, but impacts to traffic will be limited.

This Transportation Management Plan (TMP) has been prepared under the direction of the following Registered Engineer. The Registered Civil Engineer attests to the technical information contained therein and the engineering data upon which recommendations, conclusions, and decisions are based.

Prepared by	Signature ORIGINAL SIGNED BY Emily Flagg	Date	8/6/2009

Name	Emily L. Flagg
Title	C68614 Expiration 9/30/09
Organization	PBS&J
Telephone/FAX	(303) 221-7275/(303) 221-7276
email	eflagg@pbsj.com

TMP ESTIMATE	EA	08-0J400K	DATE	8/6/2009

1. Public Information	NO	**YES**	MAYBE	$1,500,000
2. Motorist Information Strategies	NO	YES	**MAYBE**	$0
3. Incident Management	NO	**YES**	MAYBE	$2,185,950
4. Construction Strategies	NO	YES	**MAYBE**	$75,000
5. Demand Management (DM)	NO	YES	**MAYBE**	$0
6. Alternate Route Strategies	NO	YES	**MAYBE**	$75,000
7. Other Strategies	NO	YES	**MAYBE**	$0
			TMP TOTAL	**$ 3,835,950**

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

An X in the check box means you need to include this in the project unless staging, material, or work hour changes eliminate the need for the item. A ? in the box means TMP anticipates this - please check into this. A blank box means the item is not needed at this time based on the information received.

1 Public Information/Public Awareness Campaign (PAC)

BEES 066063 - Traffic Management Plan Public Information.
Cost to be reduced by Public Affairs (PA) and Construction Liaison (CL) only.

		PA COST	CL COST	COST
		600000	900000	
1.0	[X] Include Rideshare information in PA/CL project material to encourage vehicles reduction in work area			
1.1	[X] Brochures and Mailers			
1.2	[X] Media Releases (& minority media sources)			
1.3	[X] Paid Advertising			
1.4	[ ] Public Information Center/Kiosk			
1.5	[X] Public Meetings/PAC Mtgs./Speakers Bureau (show cost also for room rental)			
1.6	[X] Handdeliver notices to vicinity			
1.7	[ ] Broadcast fax service			
1.8	[X] Telephone Hotline OR			
1.9	[X] 1-800-COMMUTE or 511 (the telephone number is shown on CS-Info signs) - contact Cyrin Kwong, 383-4256, to place msg into the 1800C telephone system.			
1.10	[ ] Visual Information (videos, slide shows, etc.)			
1.11	[ ] Local cable TV and News			
	[ ]			
1.13	[X] Internet, E-mail			
1.14	[X] Notification to targeted groups:			
	[ ] Revised Transit Schedules/maps			
	[X] Rideshare organizations			
	[ ] schools			
	[ ] organizations representing people with disabilities			
	[ ] bicycle organizations			
1.15	[ ] Include PA/CL/Consultant resources in WPS			
1.16	[ ] Commercial traffic reporters/feeds - e.g. brief Traffic Information people (TIP) group			
1.17	[X] Insert SSP (no number at this time) "A representative of the Contractor, at Superintendent level or higher, and authorized to commit the Contractor, shall attend and participate in all Public Awareness Campaign meetings. Time commitment for the meeting(s) varies from two to four hours per month."			
1.18	[ ] Others			
	Subtotals	$600,000	$ 900,000	
			SUBTOTAL	$1,500,000

2 Traveler Information Strategies

Project team needs to coordinate with Traffic Design!

2.1	[ ] Existing Electronic Message Signs (Stationary) - list locations. See Note 5	

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

☐ New Installation (Stationary) - BEES 860530 CHANGEABLE MESSAGE SIGN SYSTEM - list locations. See Note 5

2.2 ☒ Portable Changeable Message Signs (PCMS).

Construction prefers Rental Lumpsum BEES 066578 in Supplemental Funds

And include SSP 12-370

These PCMS advise motorists to divert at remote advance decision points - outside the usual work limits. Unlike stationary CMS, you are allowed to use them for advance motorist information - e.g. a week ahead. Their placement may need to be cleared **environmentally** so that they can be included in plans and SSP later. They may be **in addition** to Traffic Design's PCMS for regular traffic handling in and next to a work area. 0

Placement Details:

2.3 ☐ BEES 860503 Extinguishable Signs (only shown because they are on the TMP Guidelines list. Usually found at Weigh Stations - Weigh Station "open/closed".)

2.4 Ground Mounted Signs / Fabric signs Note 2

- ☒ C40/40A Double Fine Sign - black and white $0
- ☐ BEES 860926 Regulatory speed signs
- ☐ SC6-4 (per MUTCD) (Ramp will be closed...)
- ☒ CS-SPECIAL w/ SC6-2 PANEL ("Dates/Days/Hours/Expect delay") Use when conventional highways or local roads will be affected for longer periods. To encourage traffic to detour so delay in your work area is less, use at advance location and add the work location. **Use fabric signs if short duration or fast moving operation.**

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- ☒ Blue and white Rideshare guide signs, including website (1-800-COMMUTE/www.commutesmart.info). **Need to be installed at the same time as the funding signs.**

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2.9 ☐ Bicycle and pedestrian information, e.g. Detour maps

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SUBTOTAL $0

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Hourly Cozeep overtime loaded rate: $ 95

COZEEP - to protect active closures

# of days	hours	# of officers (1 per car)	nights	hours	# of officers (Remember - nights require 2 per car)	
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# of days	hours	# of officers	nights	hours	see above	
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(add weekends days as needed)

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10	18	12	50	10	12	$775,200

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days	hours	# of officers	
10	27	1	$25,650

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days	hours	# of officers	
			$0

3.1 Total $1,228,350

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FOR SERVICE **WITHIN** REGULAR FSP HOURS:

	days & hrs:			# of trucks:		
A						$0

FOR SERVICE **OUTSIDE** REGULAR FSP HOURS:

Extend Peak hour coverage

	days & hrs:			# of trucks:		
B		950	8		1	$570,000

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	days & hrs:			# of trucks:		
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or

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		0	$ -
days/nights	hours	Dispatcher(s)	

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		0	0	0	0	$ -
days	hours	# of officers	**nights**	**hours**		

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SUBTOTAL $ 2,185,950

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4.2 This TMP presumes work is planned as below. If different, TMP needs to be revised. The Lead Project Engineer is responsible to include all appropriate closure charts.

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SUBTOTAL $ 75,000

5 Demand Management (DM)

Project team needs to coordinate with RCTC/SANBAG/CVAG

Traffic diversion may increase available work hours.

5.1 [ ] A coop will be executed - mentioned in PSR or PR.

[ ] Instead of a coop, 15% is added to the cost of DM elements since the payment to the local agency will be routed through the contractor.

[ ] Instead of a coop, the local agency will make their own arrangements with RCTC/SANBAG.

[X] PA/CL or local agency need to inform commuters through RCTC/SANBAG. Funds part of PA/CL.

5.2 [ ] HOV Lanes/Ramps (New or Convert)

5.3 [ ] Park-and-Ride Lots

[ ] LEASED SPACES (Sponsored spaces may be feasible in exchange for signs and print coverage)

5.4 [ ] Parking Management/Pricing (Coordination with local agency required)

5.5 [ ] BEES 066069 Rideshare Promotion

5.6 Rideshare Incentives -

As far as D8 DTM.TMP knows, incentives to individuals cannot be paid by the State, however, State can pay for Local Transportation agency staff time, postage, cost of extra busses, etc.

- [ ] Carpool/vanpool
- [ ] Transit
- [ ] Train
- [ ] Light-Rail

5.7 BEES 066066

- [ ] Public Transit Support/Improvements/Shuttle Service
- [ ] School Shuttle Service

5.8 [ ] Variable Work Hours

5.9 [ ] Telecommute

5.10 [ ] Ramp Metering (Modify or new)

5.11 [X] Blue and white Rideshare signs needed - unless already signed. See 2.4

5.12 [ ] Others

SUBTOTAL $ -

6 Alternate Route Strategies

Caution - signed detours may require environmental clearance

Traffic diversion may increase available work hours. Please work with Traffic Design.

6.1 [ ] Add Capacity to Freeway connector

6.2.1 [ ] Upstream Ramp Closures needed to avoid conflicts with closure tapers, etc., during construction

6.2.2 [ ] Upstream Connector Closures needed to avoid conflicts with closure tapers, etc., during construction

6.3 [X] Temporary Highway Lanes or Shoulder Use

6.4 [ ] Parking Restrictions

6.5 [ ] Street Improvements

- [ ] State R/W - Signals, Widen, etc.

TMP TABLE		EA	08-0J400K	DATE	8/6/2009
	☐ Local R/W - Signals, Widen, etc. Coop or Permit may be needed				
6.6	☐ Local Street USE - Coop or Permit may be needed				
6.7	☐ Traffic Control Officers (see 3.1 Cozeep)				
6.8	☐ Signed detour - using State routes				
6.9	☒ Signed detour - using local streets and roads				25000
6.10	☒ Adjust signals (time signals to allow detour traffic to flow)			$	50,000
6.11	☐ Temporary bicycle or pedestrian facilities				
6.12	☐ Others				
				SUBTOTAL	$ 75,000.00
7	**Other Strategies**				
7.1	☐ Application of new technology				
7.2	☐ Innovative products				
7.3	☐ Others				
				SUBTOTAL	$ -
			TOTAL	$	3,835,950

TRANSPORTATION MANAGEMENT PLAN (TMP) DATA SHEET # 1 for PSR

Phase - This TMP is valid for **two years** from date of preparation, unless the project or impact changes.

T:\DTM.TMP\project docs\SBD-210\)m360K\081230\0M360K Data Sheet # 1.xls (includes signature/background sheet, estimate, table, DTM requirements, and Revisions & Notes)

TEMPLATE: 0 TMP Data Sheet revised 090109.xls. **CT & CONSULTANTS, PLEASE REQUEST THE LATEST TEMPLATE SINCE IT WILL HAVE THE CURRENT RATES, etc. CAUTION - ck for formulas in cells - amounts flow from Tab 3 to 2 to 1.**

EA **08-0J400K** **DATE** **8/6/2009**

08-SBD-10- PM 4.1-6.1

Location: In San Bernardino County

Work: Alternative 3: Reconstruct the 4th Street UC and Grove Avenue UC, Remove I-10 Interchange at 4th Street and Replace at Grove Avenue and widen Grove Avenue from Holt Blvd to I-10 Interchange

Date of TMP/Review Request memo:

Documents available:

TMP request letter, Title sheet, Plans.

Construction period per PE

EST START DATE	Dec-2014
EST END DATE	Dec-2017

Construction period per WPS

EST START DATE	?
EST END DATE	?

BACKGROUND INFORMATION:

DURATION: 950 WORKING DAYS

2009 PROJECT COST: $169,000,000

TMP ESTIMATE: **$3,835,950** or 2.27% OF THE PROJECT COST

IMPACT	High	Medium	Low	NA
STATE HWY	X			
LOCAL RD	X			
Ramps/connectors			X	

Details: Stage 1 work will be done in the medain on I-10. During construction, the medain will be protected with K-rail on both sides and four 12' lanes will be provided in both directions. Stage 2 and Stage 3 include the demolition of a portion of the existing Grove Ave and 4th St structures and construction of the structure widening. Full freeway closures will be required for the structure demolition, falsework erection and falsework demolition. During construction of the widening I-10 traffic in both directions will be accommodated in 4 lanes (3 - 11' lanes and a 12' outside lane) with a temporary K rail on the inside edge. A 1' buffer will be provided between the lanes and railing. Stage 4 will maintain the traffic handling set-up from Stage 3 on I-10. K-rail setup and removal, pavement overlay for existing lanes, and striping work will be done at night with lane and ramp closures within rolling work areas. Up to 34 days of full cross street closures are anticipated for demolition of the existing Grove Ave and 4th St bridge structures, and an additional 16 overnight closures of one direction at a time for falsework erection and demolition. Additional construction activities to relocate the interchange from 4th street to Grove Ave will be performed, but impacts to traffic will be limited.

This Transportation Management Plan (TMP) has been prepared under the direction of the following Registered Engineer. The Registered Civil Engineer attests to the technical information contained therein and the engineering data upon which recommendations, conclusions, and decisions are based.

Prepared by	Signature ORIGINAL SIGNED BY Emily Flagg	Date	8/6/2009

Name	Emily L. Flagg
Title	C68614 Expiration 9/30/09
Organization	PBS&J
Telephone/FAX	(303) 221-7275/(303) 221-7276
email	eflagg@pbsj.com

TMP ESTIMATE	EA	08-0J400K	DATE	8/6/2009
1. Public Information	NO	**YES**	MAYBE	$1,500,000
2. Motorist Information Strategies	NO	YES	**MAYBE**	$0
3. Incident Management	NO	**YES**	MAYBE	$2,185,950
4. Construction Strategies	NO	YES	**MAYBE**	$75,000
5. Demand Management (DM)	NO	YES	**MAYBE**	$0
6. Alternate Route Strategies	NO	YES	**MAYBE**	$75,000
7. Other Strategies	NO	YES	**MAYBE**	$0
			TMP TOTAL	**$ 3,835,950**

TMP TABLE **EA** **08-0J400K** **DATE** **8/6/2009**

An X in the check box means you need to include this in the project unless staging, material, or work hour changes eliminate the need for the item. A ? in the box means TMP anticipates this - please check into this. A blank box means the item is not needed at this time based on the information received.

1 Public Information/Public Awareness Campaign (PAC)

BEES 066063 - Traffic Management Plan Public Information.
Cost to be reduced by Public Affairs (PA) and Construction Liaison (CL) only.

			PA COST	CL COST	COST
			600000	900000	
1.0	[X]	Include Rideshare information in PA/CL project material to encourage vehicles reduction in work area			
1.1	[X]	Brochures and Mailers			
1.2	[X]	Media Releases (& minority media sources)			
1.3	[X]	Paid Advertising			
1.4	[ ]	Public Information Center/Kiosk			
1.5	[X]	Public Meetings/PAC Mtgs./Speakers Bureau (show cost also for room rental)			
1.6	[X]	Handdeliver notices to vicinity			
1.7	[ ]	Broadcast fax service			
1.8	[X]	Telephone Hotline OR			
1.9	[X]	1-800-COMMUTE or 511 (the telephone number is shown on CS-Info signs) - contact Cyrin Kwong, 383-4256, to place msg into the 1800C telephone system.			
1.10	[ ]	Visual Information (videos, slide shows, etc.)			
1.11	[ ]	Local cable TV and News			
	[ ]				
1.13	[X]	Internet, E-mail			
1.14	[X]	Notification to targeted groups:			
	[ ]	Revised Transit Schedules/maps			
	[X]	Rideshare organizations			
	[ ]	schools			
	[ ]	organizations representing people with disabilities			
	[ ]	bicycle organizations			
1.15	[ ]	Include PA/CL/Consultant resources in WPS			
1.16	[ ]	Commercial traffic reporters/feeds - e.g. brief Traffic Information people (TIP) group			
1.17	[X]	Insert SSP (no number at this time) "A representative of the Contractor, at Superintendent level or higher, and authorized to commit the Contractor, shall attend and participate in all Public Awareness Campaign meetings. Time commitment for the meeting(s) varies from two to four hours per month."			
1.18	[ ]	Others			
		Subtotals	$600,000	$ 900,000	
				SUBTOTAL	$1,500,000

2 Traveler Information Strategies

Project team needs to coordinate with Traffic Design!

2.1	[ ]	Existing Electronic Message Signs (Stationary) - list locations. See Note 5	

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

☐ New Installation (Stationary) - BEES 860530 CHANGEABLE MESSAGE SIGN SYSTEM - list locations. See Note 5

2.2 ☒ Portable Changeable Message Signs (PCMS).

Construction prefers Rental Lumpsum BEES 066578 in Supplemental Funds

And include SSP 12-370

These PCMS advise motorists to divert at remote advance decision points - outside the usual work limits. Unlike stationary CMS, you are allowed to use them for advance motorist information - e.g. a week ahead. Their placement may need to be cleared **environmentally** so that they can be included in plans and SSP later. They may be **in addition** to Traffic Design's PCMS for regular traffic handling in and next to a work area. 0

Placement Details:

2.3 ☐ BEES 860503 Extinguishable Signs (only shown because they are on the TMP Guidelines list. Usually found at Weigh Stations - Weigh Station "open/closed".)

2.4 Ground Mounted Signs / Fabric signs Note 2

- ☒ C40/40A Double Fine Sign - black and white $0
- ☐ BEES 860926 Regulatory speed signs
- ☐ SC6-4 (per MUTCD) (Ramp will be closed...)
- ☒ CS-SPECIAL w/ SC6-2 PANEL ("Dates/Days/Hours/Expect delay") Use when conventional highways or local roads will be affected for longer periods. To encourage traffic to detour so delay in your work area is less, use at advance location and add the work location. **Use fabric signs if short duration or fast moving operation.**

- ☒ CS-INFO/1-800-COMMUTE Panel Sign. **Also see 1.9.**
- ☒ Blue and white Rideshare guide signs, including website (1-800-COMMUTE/www.commutesmart.info). **Need to be installed at the same time as the funding signs.**

2.5 ☐ BEES 860520 Commercial Traffic Radio (usually only applicable in the Upper desert)

☐ Highway Advisory Radio (HAR) - Fixed. List locations here. They can be obtained from TMC Manager. See Note 5.

☐ Highway Advisory Radio - mobile (signs alerting motorists to the HAR will also be needed) Contact TMC manager for assistance with specifications to include portable HARs as bid item in the contract. To avoid FCC fines, CT Portable HAR cannot be used except for emergencies. Seldom used. See Note 5

List proposed locations here:

2.6 ☒ Lane Closure Web Site

2.7 ☒ Caltrans Highway Information Network (CHIN)

2.8 ☐ Radar Speed Message Sign (Specter sign) BEES 066064 (approx. EA @ $30,000)

2.9 ☐ Bicycle and pedestrian information, e.g. Detour maps

2.10 ☐ Others

SUBTOTAL $0

3 Incident Management

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

3.1 CHP's Construction or Maintenance Zone Enhanced Enforcement Program – COZEEP or MAZEEP. BEES 066062 - show under "State or Agency furnished" in the Cost Estimate. **SSP 12-225 has been deleted per HQ OE.** See note 1.

Consider the LC hours and add CHP driving time to/from their office

Hourly Cozeep overtime loaded rate: $ 95

COZEEP - to protect active closures

# of days	hours	# of officers (1 per car)	nights	hours	# of officers (Remember - nights require 2 per car)	
0			175	10	2	$332,500

ECOZEEP - to mitigate continuos restrictions. Add weekends days if needed.

# of days	hours	# of officers	nights	hours	see above	
			50	10	2	$95,000

(add weekends days as needed)

CHP TRAFFIC HANDLING - reduce delay by keeping traffic flowing and/or to enforce closures - total facility/structure/major traffic shifts/ramps/connectors/local road/extended closures. Freeway closures with local road detours may require **2 officers per intersection** to direct traffic.

days	hours	# of officers	nights	hours	see above	
10	18	12	50	10	12	$775,200

CHP Officer in TMC during major construction closures

days	hours	# of officers	
10	27	1	$25,650

CHP Officer for Command Post during regional impact construction closures

days	hours	# of officers	
			$0

3.1 Total $1,228,350

3.2 BLANK

3.3 **Freeway Service Patrol (FSP) for Construction (CFSP)** $/hr/truck $75

BEES 066065 - show under "State or Agency furnished" in the Cost Estimate

Short duration or remote area CFSP usually is bid w much higher hourly rates. If enhancement of program FSP feasible, CFSP could tie into the lower long-term FSP rates.

FOR SERVICE **WITHIN** REGULAR FSP HOURS:

	days & hrs:			# of trucks:		
A						$0

FOR SERVICE **OUTSIDE** REGULAR FSP HOURS:

Extend Peak hour coverage

	days & hrs:			# of trucks:		
B		950	8		1	$570,000

Night support during structure freeway closures and major traffic shifts

	days & hrs:			# of trucks:		
C						$0

Weekend support___

TMP TABLE		EA	08-0J400K	DATE	8/6/2009
D	days & hrs:		# of trucks:		$0

Local agency (SAFE) support — 8% of truck cost — $45,600

CFSP CHP support — 25% of truck cost — $0
THIS % ONLY IF **WITHIN** REGULAR FSP HOURS AND AREA!

Equipment/Supplies — 10% — $57,000
% of truck cost unless more detail available

CONSULT W INLAND DIVISION CHP OR BORDER IN SOUTHERN RIVERSIDE CO. which method is acceptable FOR B,C,D WHICH ARE OUTSIDE REGULAR FSP HOURS OR AREA!

Method 1

CFSP CHP support - including time for meetings — 50% of truck cost — $285,000

or

Method 2

CFSP Dispatcher @ **$55**

		0	$ -
days/nights	hours	Dispatcher(s)	

CFSP CHP Officers (See Cozeep rate)

		0	0	0	0	$ -
days	hours	# of officers	**nights**	**hours**		

Include time for meetings:

		0			0	$ -
days	hours	# of officers	**nights**	**hours**		

☐ Cooperative Agreement or Task Order with SAFE for $615,600

☐ Task Order with CHP (Statewide Master Agreement for FSP support). for $285,000

Contact District FSP Coordinator for task orders.

☐ Service Contract

☐ Local Agency will arrange CFSP with SAFE

☐ Local Agency will arrange CFSP administration with CHP

3.3 Total $957,600

3.4 ☐ CHP Helicopter/Airplane

3.5 ☐ Traffic Surveillance Stations for construction impact mitigation (loop detectors and CCTV)

Keep existing operational during construction

☐ New CCTV

☐ New loops

3.6 **Call Boxes - also see NOTE 4 in the Revisions & Notes tab**

TEMPORARY INSTALLATION to mitigate impact ($5000/box/move from project funds to SAFE). Project Report/Design PE: Please discuss with the D8 Call box coordinator if it is feasible to keep this motorist aid available during construction. If it is not, please notify TMP, then other mitigation needs to be considered. For location in SBd County see Q:\Ops\Call Boxes\SBD\Excel List. Apparently no list available for Riv County.

☐ callboxes x ☐ moves x $5,000.00 = $0

☐ *Add 15% to callbox cost since contractor will need to pay SAFE through CCO.*

TMP TABLE		EA	08-0J400K	DATE	8/6/2009

3.7 [ ] 911 Cellular Calls

3.8 [X] Project needs to provide resources to Transportation Management Center Unit 370 for additional staff during high impact closures

3.9 [ ] Traffic Management Teams (TMT) needed to assist w system diversion/impact reduction. Project needs to provide resources.

See 7/3/05 in Tab 6 - Revisions

3.10 [ ] On-site Traffic Advisor

3.11 [ ] Others

SUBTOTAL $ 2,185,950

4 Construction Strategies

4.1 [X] Coordinate with adjacent construction and planned projects - also on detour routes.

Use SSP 07-850

4.2 This TMP presumes work is planned as below. If different, TMP needs to be revised. The Lead Project Engineer is responsible to include all appropriate closure charts.

- [X] Off peak
- [X] Night
- [X] Weekend

4.3

- [ ] Flagging
- [X] Shoulder
- [X] Lane
- [X] Street
- [X] Ramp
- [ ] **Connector***
- [ ] **Extended Weekend Closures***
- [ ] **Total Facility Closures***

***Consult w TMP and DTM re Cozeep & other cost. Show your detour and traffic diversion plans.**

4.4 [ ] Contra Flow (put traffic into opposing roadbed)

4.5 [ ] Reversible Lanes

4.6 [ ] Project Phasing

4.7 [ ] BEES 152372 - If K-Rail is placed, consider including cost item for lateral shifting to open a minimum of 2.4 m (8') shoulder space as soon as possible. Please include supplemental work funds in the estimate to pay for the extra work. See Standard Specifications 12-4, Measurement and Payment. **PE must discuss this and traffic screen w Traffic Design!**

4.8 [X] BEES 129150 Temporary Traffic Screens (Gawk Screen - see 5/10/06 entry in Revisions tab) 75000

4.9 [ ] Movable Barrier

4.10 [ ] Truck Traffic Restrictions

4.11 [ ] BEES 066008 Incentives/Disincentives

4.12 [X] BEES 070010 Strictly enforce Constr. Progress Schedule (CPM)

CAUTION: If the Lane Closure Chart (LCC) for full mainline closures (one or both directions on a highway or freeway) does not show a maximum number of allowable days, the PSE cannot be certified by DTM/TMP.

Please contact Saleh Yadegari, 4232, to get Delay Calculations, lane closure charts, Table Z and Special events list. Inform him of any concerns/committments re special LC days, times, season, events; environmental restrictions; if work may be affected by snow and low or high temperatures. E.g. desert heat may delay AC digout curing which may increase traffic impact when vehicles overheat in the queue; etc. IF traffic volumes vary significantly between seasons, consider 2 sets of closure charts to avoid CCOs later.

TMP TABLE	EA	08-0J400K	DATE	8/6/2009

Use SSP 12-130 and following

4.13 [ ] Include Specification 12-220

[ ]

4.15 [ ] **Delay Damages (DD)** **Please contact Saleh Yadegari, 4232, regarding Delay Calculations.**

4.16 [ ] Others

SUBTOTAL $ 75,000

5 Demand Management (DM)

Project team needs to coordinate with RCTC/SANBAG/CVAG

Traffic diversion may increase available work hours.

5.1 [ ] A coop will be executed - mentioned in PSR or PR.

[ ] Instead of a coop, 15% is added to the cost of DM elements since the payment to the local agency will be routed through the contractor.

[ ] Instead of a coop, the local agency will make their own arrangements with RCTC/SANBAG.

[X] PA/CL or local agency need to inform commuters through RCTC/SANBAG. Funds part of PA/CL.

5.2 [ ] HOV Lanes/Ramps (New or Convert)

5.3 [ ] Park-and-Ride Lots

[ ] LEASED SPACES (Sponsored spaces may be feasible in exchange for signs and print coverage)

5.4 [ ] Parking Management/Pricing (Coordination with local agency required)

5.5 [ ] BEES 066069 Rideshare Promotion

5.6 Rideshare Incentives -

As far as D8 DTM.TMP knows, incentives to individuals cannot be paid by the State, however, State can pay for Local Transportation agency staff time, postage, cost of extra busses, etc.

[ ] Carpool/vanpool

[ ] Transit

[ ] Train

[ ] Light-Rail

5.7 BEES 066066

[ ] Public Transit Support/Improvements/Shuttle Service

[ ] School Shuttle Service

5.8 [ ] Variable Work Hours

5.9 [ ] Telecommute

5.10 [ ] Ramp Metering (Modify or new)

5.11 [X] Blue and white Rideshare signs needed - unless already signed. See 2.4

5.12 [ ] Others

SUBTOTAL $ -

6 Alternate Route Strategies

Caution - signed detours may require environmental clearance

Traffic diversion may increase available work hours. Please work with Traffic Design.

6.1 [ ] Add Capacity to Freeway connector

6.2.1 [ ] Upstream Ramp Closures needed to avoid conflicts with closure tapers, etc., during construction

6.2.2 [ ] Upstream Connector Closures needed to avoid conflicts with closure tapers, etc., during construction

6.3 [X] Temporary Highway Lanes or Shoulder Use

6.4 [ ] Parking Restrictions

6.5 [ ] Street Improvements

[ ] State R/W - Signals, Widen, etc.

TMP TABLE		EA	08-0J400K	DATE	8/6/2009
	☐ Local R/W - Signals, Widen, etc. Coop or Permit may be needed				
6.6	☐ Local Street USE - Coop or Permit may be needed				
6.7	☐ Traffic Control Officers (see 3.1 Cozeep)				
6.8	☐ Signed detour - using State routes				
6.9	☒ Signed detour - using local streets and roads				25000
6.10	☒ Adjust signals (time signals to allow detour traffic to flow)			$	50,000
6.11	☐ Temporary bicycle or pedestrian facilities				
6.12	☐ Others				
				SUBTOTAL	$ 75,000.00
7	**Other Strategies**				
7.1	☐ Application of new technology				
7.2	☐ Innovative products				
7.3	☐ Others				
				SUBTOTAL	$ -
			TOTAL	$	3,835,950

ATTACHMENT 15

LIFE CYCLE COST ANALYSIS FORMS

EA 0J400K
08-SBd-010-PM4.1/6.1
September 2010

PAVEMENT LIFE-CYCLE COST ANALYSIS

This pavement life-cycle cost analysis 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.

9/28/10

BRIAN B. BALDERRAMA, P.E. *DATE*
AECOM USA, Inc.

Life Cycle Cost Analysis Form – AUX LANES

Alternative 1 (Preferred Alternative)

40-year Rigid, 0.10' JPCP/0.50' LCB

Pavement Design Life: 40 Years		
Initial Construction Costs:	$ 1,556,660.00	
Initial Project Support Costs:	$ 0	
Future Maintenance & Rehabilitation Costs:	$ 74,020.00	
TOTAL AGENCY COSTS (PRESENT VALUE):		$ 1,636,490.00
USER COSTS (PRESENT VALUE):		$ 328,150.00
TOTAL LIFE-CYCLE COSTS (PRESENT VALUE):		$ 1,964,640.00

Alternative 2:

40-year Rigid, Flexible Composite, 0.20' RHMA/ 1.10' JPCP/ 0.50' LCB

Pavement Design Life: 40 Years		
Initial Construction Costs:	$ 1,850,180.00	
Initial Project Support Costs:	$ 0	
Future Maintenance & Rehabilitation Costs:	$ 91,370.00	
TOTAL AGENCY COSTS (PRESENT VALUE):		$ 2,020,050.00
USER COSTS (PRESENT VALUE):		$ 98,850.00
TOTAL LIFE-CYCLE COSTS (PRESENT VALUE):		$ 2,118,900.00

Reason that this is not Preferred Alternative: Not the lowest life cycle cost.

Life Cycle Cost Analysis Form - RAMPS

Alternative 1 (Preferred Alternative)

40-year Flexible 0.90' HMA/ 0.55' AB

Pavement Design Life: 40 Years		
Initial Construction Costs:	$ 1,001,556.00	
Initial Project Support Costs:	$ 0	
Future Maintenance & Rehabilitation Costs:	$ 63,760.00	
TOTAL AGENCY COSTS (PRESENT VALUE):		$ 1,409,610.00
USER COSTS (PRESENT VALUE):		$ 32,710.00
TOTAL LIFE-CYCLE COSTS (PRESENT VALUE):		$ 1,442,320.00

Alternative 2:

40-year Rigid, 0.95' JPCP/0.50' LCB

Pavement Design Life: 40 Years		
Initial Construction Costs:	$ 1,333,215.00	
Initial Project Support Costs:	$ 0	
Future Maintenance & Rehabilitation Costs:	$ 89,920.00	
TOTAL AGENCY COSTS (PRESENT VALUE):		$ 1,988,080.00
USER COSTS (PRESENT VALUE):		$ 14,640.00
TOTAL LIFE-CYCLE COSTS (PRESENT VALUE):		$ 2,002,720.00

Reason that this is not Preferred Alternative:

Flexible pavement preferred in this roadway segment. Historically, ramps are constructed of flexible pavement. Highest total cost.

Life Cycle Cost Analysis Form - RAMPS

Alternative 3

40-year Flexible, 0.10' RHM/ 0.80' HMA/ 0.55' AB

Pavement Design Life: 40 Years		
Initial Construction Costs:	$ 1,040,713.00	
Initial Project Support Costs:	$ 0	
Future Maintenance & Rehabilitation Costs:	$ 81,570.00	
TOTAL AGENCY COSTS (PRESENT VALUE):		$ 1,803,480.00
USER COSTS (PRESENT VALUE):		$ 28,730.00
TOTAL LIFE-CYCLE COSTS (PRESENT VALUE):		$ 1,832,210.00

Reason that this is not Preferred Alternative:

Not the lowest total cost.

Alternative 4:

40-year Flexible 1.2' HMA

Pavement Design Life: 40 Years		
Initial Construction Costs:	$ 1,175,092.00	
Initial Project Support Costs:	$ 0	
Future Maintenance & Rehabilitation Costs:	$ 71,610.00	
TOTAL AGENCY COSTS (PRESENT VALUE):		$ 1,583,140.00
USER COSTS (PRESENT VALUE):		$ 40,570.00
TOTAL LIFE-CYCLE COSTS (PRESENT VALUE):		$ 1,623,710.00

Reason that this is not Preferred Alternative:

High User Costs. Not the lowest total cost.

ATTACHMENT 16

EXECUTED COOPERATIVE AGREEMENT

08-SBD-10-PM 4.1/6.1
I-10/Grove Avenue
Construct New IC
City of Ontario
0J400K
District Agreement No. 8-1486

COOPERATIVE AGREEMENT

THIS AGREEMENT, ENTERED INTO EFFECTIVE ON _____, 20__, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "CALTRANS," and the

CITY OF ONTARIO, a body politic and a municipal corporation of the State of California, referred to herein as "CITY."

RECITALS

1. CALTRANS and CITY, pursuant to Streets and Highways Code sections 114 and 130, are authorized to enter into a Cooperative Agreement for improvements to the State Highway System (SHS) within CITY's jurisdiction.

2. CITY desires to construct a new interchange on Interstate 10 (I-10) at Grove Avenue and/or reconstruct the existing Fourth Street interchange, widen Grove Avenue corridor from four to six lanes between the I-10 freeway and Holt Boulevard, and partial or full removal of the interchange at I-10 and Fourth Street, in the city of Ontario, referred to herein as "PROJECT."

3. CITY is willing to be responsible for one hundred percent (100%) of all costs, except that the costs of CALTRANS' Independent Quality Assurance (IQA) of PROJECT Project Approval and Environmental Document (PA&ED), hereinafter referred to as "WORK," and CALTRANS' costs incurred as the California Environmental Quality Act (CEQA) Lead Agency and National Environmental Policy Act (NEPA) Lead Agency, if NEPA applies, in the review, comment and approval of the PROJECT environmental documentation prepared entirely by CITY, will be borne by CALTRANS.

4. CALTRANS' funds will not be used to finance any of the WORK costs except as set forth in this Agreement.

5. The terms of this Agreement shall supersede any inconsistent terms of any prior Memorandum of Understanding (MOU) or agreement relating to WORK.

6. PROJECT design, right of way and construction will be the subject of separate future agreements.

7. This Agreement will define the roles and responsibilities of the CEQA Lead Agency and CEQA Responsible Agency regarding environmental documentation, studies, and reports necessary for compliance with CEQA. This Agreement will also define the roles and responsibilities of the parties for compliance with NEPA, if NEPA applies.

8. The parties now define herein below the terms and conditions under which PROJECT is to be developed and financed.

SECTION I

CITY AGREES:

1. To be responsible for one hundred percent (100%) of all WORK costs except for costs of CALTRANS' IQA and CALTRANS' costs incurred as the CEQA Lead Agency and NEPA Lead Agency, if NEPA applies, in the review, comment and approval of the PROJECT environmental documentation prepared entirely by CITY.

2. To not use CALTRANS' funds for WORK costs except as set forth in this Agreement.

3. WORK performed by CITY, or performed on CITY's behalf, shall be performed in accordance with all State and Federal laws, regulations, policies, procedures, and standards that CALTRANS would normally follow as shown in Attachment 1, attached to and made a part of this Agreement. WORK shall be submitted to CALTRANS for CALTRANS' review, comment, concurrence, and/or acceptance at appropriate stages of development.

4. WORK, except as set forth in this Agreement, is to be performed by CITY. Should CITY request CALTRANS to perform any portion of WORK, except as otherwise set forth in this Agreement, CITY shall first agree to reimburse CALTRANS for such work pursuant to an amendment to this Agreement.

5. To have a Project Report (PR) prepared, at no cost to CALTRANS, and to submit to CALTRANS for CALTRANS' review, concurrence, and/or approval at appropriate stages of development. The PR for PROJECT shall be signed on behalf of CITY by a Civil Engineer registered in the State of California.

6. To permit CALTRANS to monitor, participate, and oversee selection of personnel who will prepare the PR, prepare environmental documentation, including the investigative studies and technical environmental reports for PROJECT. CITY agrees to consider any request by CALTRANS to avoid a contract award or to discontinue services of any personnel considered by CALTRANS to be unqualified on the basis of credentials, professional expertise, failure to perform, and/or other pertinent criteria.

7. Personnel who prepare environmental documentation, including investigative studies and technical environmental reports or other qualified personnel shall be made available to CALTRANS, at no cost to CALTRANS, through completion of PROJECT construction to discuss problems which may arise during PS&E, Right of Way, and Construction phases of the PROJECT, and/or to supplement environmental documentation.

8. Personnel, who prepare the preliminary engineering, including investigative studies, or other qualified personnel, shall be made available to CALTRANS, at no cost to CALTRANS, through completion of PROJECT construction to discuss problems which may arise during PS&E, Right of Way, and Construction phases of the PROJECT, and/or to make design revisions for contract change orders.

9. To make written application to CALTRANS for necessary encroachment permits authorizing entry of CITY onto SHS right of way to perform required WORK as more specifically defined elsewhere in this Agreement. CITY shall also require CITY's consultants and contractors to make written application to CALTRANS for the same necessary encroachment permits.

10. To identify and locate all utility facilities within the area of PROJECT as part of the design responsibility for PROJECT. All utility facilities not relocated or removed in advance of construction shall be identified on the PS&E for PROJECT.

11. If any existing utility facilities conflict with PROJECT construction or violate CALTRANS' encroachment policy, CITY shall make all necessary arrangements with the owners of such facilities for their timely accommodation, protection, relocation, or removal.

    The costs for the PROJECT's positive identification and location, protection, relocation, or removal of utility facilities whether inside or outside SHS right of way shall be determined in accordance with Federal and California laws and regulations, and CALTRANS' policies and procedures, standards, practices, and applicable agreements including, but not limited to, Freeway Master Contracts.

12. To be responsible for, and to CALTRANS' satisfaction, the investigation of potential hazardous material sites within and outside existing SHS right of way that could impact PROJECT. If CITY discovers hazardous material or contamination within the PROJECT study area during said investigation, CITY shall immediately notify CALTRANS.

13. If CITY desires to have CALTRANS advertise, award, and administer the construction contract for PROJECT, CITY shall provide CALTRANS with plans in a format acceptable to CALTRANS. Reimbursement to CALTRANS for costs incurred by CALTRANS to advertise, award, and administer the construction contract for PROJECT will be covered in the separate Cooperative Agreement.

14. All aerial photography and photogrammetric mapping shall conform to CALTRANS' current standards.

15. A copy of all original survey documents resulting from surveys performed for PROJECT, including original field notes, adjustment calculations, final results, and appropriate intermediate documents, shall be delivered to CALTRANS and shall become property of CALTRANS. For aerial mapping, all information and materials listed in the document "Materials Needed to Review Consultant Photogrammetric Mapping" shall be delivered to CALTRANS and shall become property of CALTRANS.

SECTION II

CALTRANS AGREES:

1. At no cost to CITY, to complete CALTRANS' review, comment and approval as the CEQA Lead Agency and NEPA Lead Agency, if NEPA applies, of the environmental documentation prepared entirely by CITY and to provide IQA of all CITY's WORK necessary for completion of the environmental documentation and PR for PROJECT done by CITY, including, but not limited to, investigation of potential hazardous material sites undertaken by CITY or its designee, and provide prompt reviews, comments, concurrence, and/or approvals as appropriate, of submittals by CITY, while cooperating in timely processing of documents necessary for completion of the environmental documentation and PR for PROJECT.

2. To issue, upon CALTRANS satisfaction of all requirements of the encroachment permit application, and at no cost to CITY, an encroachment permit required for work within SHS right of way. Any third party agent (including but not limited to contractors, consultants, and utility owners) must obtain an encroachment permit issued in their name, prior to performing any work within the SHS R/W. Third party agents may be subject to a permit fee assessed by CALTRANS.

3. CALTRANS will administer all federal subvention funds identified on the FUNDING SUMMARY.

SECTION III

IT IS MUTUALLY AGREED:

1. All obligations of CALTRANS under the terms of this Agreement are subject to the appropriation of resources by the Legislature, State Budget Act authority and the allocation of funds by the California Transportation Commission (CTC).

2. Invoices for CALTRANS support costs include all direct and applicable indirect costs. Applicable indirect costs are determined by the type of funds being used to pay for support. State and federal funds are subject to the Program Functional Rate. Local funds (Measure money, developer fees, special assessments, etc.) are subject to the Program Functional Rate and the Administration Rate. CALTRANS establishes the Program

Functional Rate and the Administration Rate annually according to State and Federal regulations.

3. The parties to this Agreement understand and agree that CALTRANS' Independent Quality Assurance (IQA) is to ensure CITY activities result in WORK being developed in accordance with standards and procedure agreed to in this Agreement. IQA does not include any work necessary to actually develop or deliver WORK nor any validation by verifying nor rechecking work performed by CITY, nor providing guidance to CITY and no liability will be assignable to CALTRANS, its officers and employees by CITY under the terms of this Agreement or by third parties by reason of CALTRANS' IQA activities.

4. The Project Study Report (PSR) for PROJECT, approved on NEED DATE, is by this reference, made an express part of this Agreement. The description of PROJECT is defined in the PSR.

5. The basic design features shall comply with those addressed in the approved PSR, unless modified as required for completion of the PROJECT's environmental documentation and/or if applicable, requested by the Federal Highway Administration (FHWA) and CALTRANS.

6. The investigative studies and technical reports, for PROJECT shall be performed in accordance with all applicable Federal and CALTRANS standards and practices current as of the date of performance. The preparation of the environmental documentation, including the investigative studies and technical environmental reports, shall be performed in accordance with all State and Federal laws, regulations, policies, procedures, and standards current as of the date of performance including, but not limited to, the guidance provided in the Standard Environmental Reference available at www.dot.ca.gov/ser and if applicable, the guidance provided in the FHWA Environmental Guidebook available at www.fhwa.dot.gov/hep/index.htm.

7. CALTRANS will be the CEQA Lead Agency and CITY will be a CEQA Responsible Agency. CALTRANS will be the NEPA Lead Agency, if NEPA applies. CITY will assess PROJECT impacts on the environment and CITY will prepare the appropriate level of environmental documentation and necessary associated supporting investigative studies and technical environmental reports in order to meet the requirements of CEQA and if NEPA applies, NEPA. CITY will submit to CALTRANS all investigative studies and technical environmental reports for CALTRANS' review, comment, and approval. The environmental document and/or categorical exemption/exclusion determination, including the administrative draft, draft, administrative final, and final environmental documentation, as applicable, will require CALTRANS' review, comment, and approval prior to public availability.

   If, during preparation of preliminary engineering, preparation of the PS&E, performance of right of way activities, or performance of PROJECT construction, new information is obtained which requires the preparation of additional environmental documentation to comply with CEQA and if NEPA applies, NEPA, this Agreement will be amended to include completion of those additional tasks by CITY or CALTRANS.

8. CITY, subject to CALTRANS' prior review and approval, shall be responsible for preparing, submitting, publicizing and circulating all public notices related to the CEQA environmental process and if NEPA applies, the NEPA environmental process, including, but not limited to, notice(s) of availability of the environmental document and/or determinations and notices of public hearings. Public notices shall comply with all State and Federal laws, regulations, policies and procedures. The cost to review, approve, prepare, submit, publicize and/or circulate the public notice(s) is a PROJECT cost. CALTRANS will work with the appropriate Federal agency to publish notices in the Federal Register, if NEPA applies.

CALTRANS shall be responsible for overseeing the planning, scheduling and holding of all public meetings/hearings related to the CEQA environmental process and if NEPA applies, the NEPA environmental process. CITY, to the satisfaction of CALTRANS and subject to all of CALTRANS' and FHWA's policies and procedures, shall be responsible for performing the planning, scheduling and details of holding all public meetings/hearings related to the CEQA environmental process and if NEPA applies, the NEPA environmental process. CALTRANS will participate as CEQA Lead Agency and if NEPA applies, the NEPA Lead Agency, in all public meetings/hearings related to the CEQA environmental process and if NEPA applies, the NEPA environmental process, for PROJECT. CITY shall provide CALTRANS the opportunity to provide comments on any public meeting/hearing exhibits, handouts or other materials at least ten (10) days prior to any such public meetings/hearings. CALTRANS maintains final editorial control of exhibits, handouts or other materials to be used at public meetings/hearings. The cost to oversee, plan, schedule, hold, and participate in the public meetings/hearings related to the CEQA environmental process and if NEPA applies, the NEPA environmental process, for PROJECT is a WORK cost.

9. In the event CITY would like to hold separate and/or additional public meetings/hearings regarding the PROJECT, CITY must clarify in any meeting/hearing notices, exhibits, handouts or other materials that CALTRANS is the CEQA Lead Agency and if NEPA applies, the NEPA Lead Agency, and CITY is the CEQA Responsible Agency. Such notices, handouts and other materials shall also specify that public comments gathered at such meetings/hearings are not part of the CEQA and if NEPA applies, NEPA, public review process. CITY shall provide CALTRANS the opportunity to provide comments on any meeting/hearing exhibits, handouts or other materials at least ten (10) days prior to any such meetings/hearings. CALTRANS maintains final editorial control of exhibits, handouts or other materials to be used at public meetings/hearings solely with respect to text or graphics that could lead to public confusion over CEQA and if NEPA applies, NEPA, related roles and responsibilities.

10. CALTRANS and CITY, as set forth in Exhibit A, attached hereto and incorporated herein, will coordinate, obtain, implement, renew and amend the necessary regulatory agency permits, agreements, and/or approvals. The cost to coordinate, obtain, implement, renew and amend the necessary regulatory agency permits, agreements, and/or approvals is a WORK cost.

11. CITY will prepare the applications for any required regulatory agency permits, agreements and/or approvals for PROJECT, unless otherwise set forth in Exhibit A. CITY will submit all said applications to CALTRANS for review, comment and approval. CITY will submit the final applications to the appropriate regulatory agencies, unless otherwise set forth in Exhibit A. The costs to prepare, review, comment, and submit the application to the appropriate regulatory agency is a WORK cost.

12. CALTRANS and CITY will comply with all of the commitments and conditions set forth in the environmental documentation, permits, approvals, and applicable agreements as those commitments and conditions apply to each parties' responsibilities in this Agreement.

13. If there is a legal challenge to the environmental documentation, including investigative studies and/or technical environmental report(s), permits, agreements, and/or approval(s) for PROJECT, all legal costs associated with those said legal challenges shall be a WORK cost.

14. All administrative draft and administrative final reports, studies, materials, and documentation relied upon, produced, created or utilized for WORK will be held in confidence to the extent permitted by law, and where applicable, the provisions of California Government Code section 6254.5(e) shall govern the disclosure of such documents in the event said documents are shared between the Parties. Parties will not distribute, release, or share said documents with anyone other than employees, agents, and consultants who require access to complete the work described herein this Agreement without the written consent of the party authorized to release them, unless required or authorized to do so by law.

15. The party that discovers HM will immediately notify the other party(ies) to this Agreement.

    HM-1 is defined as hazardous material (including but not limited to hazardous waste) that requires removal and disposal pursuant to federal or state law, whether it is disturbed by PROJECT or not.

    HM-2 is defined as hazardous material (including but not limited to hazardous waste) that may require removal and disposal pursuant to federal or state law, only if disturbed by PROJECT.

16. CALTRANS, independent of PROJECT, is responsible for any HM-1 found within existing SHS right of way. CALTRANS will undertake HM-1 management activities with minimum impact to PROJECT schedule and will pay all costs associated with HM-1 management activities.

    CALTRANS has no responsibility for management activities or costs associated with HM-1 found outside the existing SHS right of way. CITY, independent of PROJECT, is responsible for any HM-1 found within PROJECT limits outside existing SHS right of way. CITY will undertake, or cause to be undertaken, HM-1 management activities with

minimum impact to PROJECT schedule, and CITY will pay, or cause to be paid, all costs associated with HM-1 management activities.

17. If HM-2 is found within the limits of PROJECT, the public agency responsible for advertisement, award, and administration (AAA) of the PROJECT construction contract will be responsible for HM-2 management activities. Any management activity cost associated with HM-2 is a PROJECT construction cost.

18. Management activities associated with either HM-1 or HM-2 include, without limitation, any necessary manifest requirements and designation of disposal facility.

19. CALTRANS' acquisition of or acceptance of title to any property on which any hazardous material is found will proceed in accordance with CALTRANS' policy on such acquisition.

20. A separate Cooperative Agreement or agreements will be required to cover responsibilities and funding for the design, right of way and construction phases of PROJECT.

21. Nothing within the provisions of this Agreement is intended to create rights in third parties not parties to this Agreement or to affect the legal liability of either party to the Agreement by imposing any standard of care with respect to the development, design, construction, operation, or maintenance of the SHS and public facilities different from the standard of care imposed by law.

22. Neither CALTRANS nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction conferred upon CITY under this Agreement. It is understood and agreed that CITY shall fully defend, indemnify and save harmless CALTRANS and all its officers and employees from all claims, suits or actions of every name, kind and description brought forth under, including, but not limited to, tortious, contractual, inverse condemnation or other theories or assertions of liability occurring by reason of anything done or omitted to be done by CITY under this Agreement.

23. Neither CITY nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by CALTRANS, under or in connection with any work, authority or jurisdiction conferred upon CALTRANS under this Agreement. It is understood and agreed that CALTRANS shall fully defend, indemnify and save harmless CITY and all its officers and employees from all claims, suits or actions of every name, kind and description brought forth under, including, but not limited to, tortious, contractual, inverse condemnation or other theories or assertions of liability occurring by reason of anything done or omitted to be done by CALTRANS under this Agreement.

24. Prior to the commencement of any work pursuant to this Agreement, either CALTRANS or CITY may terminate this Agreement by written notice to the other party.

25. No alteration or variation of the terms of this Agreement shall be valid unless made by a formal amendment executed by the parties hereto and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.

26. This Agreement will terminate upon completion of WORK that all parties have met all scope, cost, and schedule commitments included in this Agreement and have signed a cooperative agreement closure statement, which is a document signed by parties that verifies the completion of WORK.

    However, all indemnification, document, retention, audit, claims, environmental commitment, legal challenge, hazardous material, operation, maintenance and ownership articles will remain in effect until terminated or modified in writing by mutual agreement.

SIGNATURES ON FOLLOWING PAGE:

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CINDY MCKIM
Director

By: _____
RAYMOND W. WOLFE, PHD
District Director

APPROVED AS TO FORM AND PROCEDURE:

By: _____
Attorney,
Department of Transportation

CERTIFIED AS TO FUNDS:

By: _____
LISA PACHECO
District Budget Manager

CERTIFIED AS TO FINANCIAL TERMS AND POLICIES:

By: _____
Accounting Administrator

CITY OF ONTARIO

By: _____
CHRIS HUGHES
City Manager

Attest: _____
MARY E. WIRTS
City Clerk

APPROVED AS TO FORM AND PROCEDURE:

By: _____
City Attorney

FUNDING SUMMARY

Funding Source	Funding Partner	Fund Type	Fund Amount	CALTRANS
FEDERAL	CITY	Interstate Maintenance Discretionary	$2,400,000.00	0%
LOCAL	CITY	Development Impact Fees (Matching)	$ 600,000.00	0%
		Total	$3,000,000.00	0%

EXHIBIT A

INSTRUCTION: Check all boxes that apply. If a permit/agreement/approval is not required for a project, then check the N/A box. If the N/A box is checked on permit that already states that STATE will complete, then remove the references to STATE.

ENVIRONMENTAL PERMITS, APPROVALS, & AGREEMENTS							
REQUIRED PERMITS, APPROVALS, & AGREEMENTS	**N/A**	**COORDINATE**	**PREPARE APPLICATION**	**OBTAIN**	**IMPLEMENT**	**RENEW**	**AMEND**
404 USACOE		CITY	CITY	CITY	CITY	CITY	CITY
401 RWQCB		CITY	CITY	CITY	CITY	CITY	CITY
NPDES SWRCB		CITY	CITY	CITY	CITY	CITY	CITY
State Waste Discharge Requirements (Porter Cologne) RWQCB	X						
FESA Section 7 USFWS		**CALTRANS**		**CALTRANS**		**CALTRANS**	**CALTRANS**
BO Section 7 USFWS		**CALTRANS**		**CALTRANS**		**CALTRANS**	**CALTRANS**
FESA Section 7 NOAA/NMFS		**CALTRANS**		**CALTRANS**		**CALTRANS**	**CALTRANS**
BO Section 7 NOAA/NMFS		**CALTRANS**		**CALTRANS**		**CALTRANS**	**CALTRANS**
FESA Section 10 USFWS	X						
EFH - NOAA/NMFS		**CALTRANS**		**CALTRANS**		**CALTRANS**	**CALTRANS**
Coastal Development Permit CCC	X						
Fed. Coastal Zone Mgt. Act – Consistency Determination CCC		**CALTRANS**		**CALTRANS**		**CALTRANS**	**CALTRANS**
BCDC Permit	X						
Fed. Coastal Zone Mgt. Act – Consistency Determination BCDC		**CALTRANS**		**CALTRANS**		**CALTRANS**	**CALTRANS**
1602 DFG		CITY	CITY	CITY	CITY	CITY	CITY
2080.1 DFG	X						
2080(B) DFG	X						
Air Quality Permits	X						
Other (specify)	X						

ATTACHMENT 1

WBS Code	WBS Description	RESPONSIBILITY	
		CALTRANS	LOCAL AGENCY
2.160	PERFORM PRELIMINARY ENGINEERING STUDIES AND DRAFT PROJECT REPORT	X	X
2.160.05	UPDATED PROJECT INFORMATION		X
2.160.05.05	APPROVED PID REVIEW	X	
2.160.05.10	GEOTECHNICAL INFORMATION REVIEW		X
2.160.05.15	MATERIALS INFORMATION REVIEW		X
2.160.05.20	TRAFFIC DATA AND FORECASTS REVIEW		X
2.160.05.25	GEOMETRICS REVIEW		X
2.160.05.30	PROJECT SCOPE REVIEW		X
2.160.05.35	PROJECT COST ESTIMATE REVIEW		X
2.160.05.99	OTHER UPDATED PROJECT INFORMATION PRODUCTS		X
2.160.10	ENGINEERING STUDIES		X
2.160.10.10	TRAFFIC FORECASTS/MODELING		X
2.160.10.15	GEOMETRIC PLANS FOR PROJECT ALTERNATIVES		X
2.160.10.20	VALUE ANALYSIS		X
2.160.10.25	HYDRAULICS/HYDROLOGY STUDIES		X
2.160.10.30	HIGHWAY PLANTING DESIGN CONCEPTS		X
2.160.10.35	TRAFFIC OPERATIONAL ANALYSIS		X
2.160.10.40	UPDATED RIGHT OF WAY DATA SHEET		X
2.160.10.45	UTILITY LOCATIONS DETERMINED FOR PRELIMINARY ENGINEERING		X
2.160.10.50	RAILROAD STUDY		X
2.160.10.55	MULTI-MODAL STUDY		X
2.160.10.60	PARK & RIDE STUDY		X
2.160.10.65	RIGHT OF WAY RELINQUISHMENT AND VACATION STUDY		X
2.160.10.70	TRAFFIC STUDIES		X
2.160.10.75	UPDATED MATERIALS INFORMATION		X
2.160.10.80	UPDATED GEOTECHNICAL INFORMATION		X
2.160.10.85	STRUCTURES ADVANCE PLANNING STUDY [APS] AND PRELIMINARY ENGINEERING		X
2.160.10.90	HIGH OCCUPANCY VEHICLE REPORT		X
2.160.10.95	UPDATED PRELIMINARY TRANSPORTATION MANAGEMENT PLAN		X
2.160.10.99	OTHER ENGINEERING STUDIES		X
2.160.15	DRAFT PROJECT REPORT		X
2.160.15.05	COST ESTIMATES FOR ALTERNATIVES		X
2.160.15.10	FACT SHEET FOR EXCEPTIONS TO DESIGN STANDARDS		X
2.160.15.15	APPROVED EXCEPTIONS TO ENCROACHMENT POLICY		X
2.160.15.20	DRAFT PROJECT REPORT		X
2.160.15.25	DRAFT PROJECT REPORT CIRCULATION REVIEW & APPROVAL		X
2.160.15.99	OTHER DRAFT PROJECT REPORT PRODUCTS		X
2.160.20	ENGINEERING AND LAND NET SURVEYS		X
2.160.20.25	EXISTING RECORDS		X
2.160.20.30	LAND NET SURVEYS		X
2.160.20.35	LAND NET MAP		X
2.160.20.40	RIGHT OF WAY ENGINEERING PRODUCTS		X

2.160.20.50	CONTROL SURVEYS		X
2.160.20.55	PHOTOGRAMMETRIC MAPS AND PRODUCTS		X
2.160.20.60	ENGINEERING SURVEYS		X
2.160.20.65	AS-BUILT CENTERLINE SURVEYS		X
2.160.20.70	PAVEMENT SURVEYS		X
2.160.30	ENVIRONMENTAL STUDY REQUEST [ESR]		X
2.160.30.05	MAPS FOR ESR		X
2.160.30.10	SURVEYS AND MAPPING FOR ENVIRONMENTAL STUDIES		X
2.160.30.15	PROPERTY ACCESS RIGHTS FOR ENVIRONMENTAL/ENGINEERING STUDIES		X
2.160.40	NEPA DELEGATION	X	
2.160.45	BASE MAPS AND PLAN SHEETS FOR PA&ED DEVELOPMENT		X
2.165	PERFORM ENVIRONMENTAL STUDIES AND PREPARE DRAFT ENVIRONMENTAL DOCUMENT		X
2.165.05	ENVIRONMENTAL SCOPING OF ALTERNATIVES IDENTIFIED FOR STUDIES IN THE PID		X
2.165.05.05	PROJECT INFORMATION REVIEW		X
2.165.05.10	PUBLIC AND AGENCY SCOPING PROCESS		X
2.165.05.15	ALTERNATIVES FOR FURTHER STUDY		X
2.165.05.99	OTHER ENVIRONMENTAL SCOPING OF ALTERNATIVES IDENTIFIED FOR STUDIES IN PID		X
2.165.10	GENERAL ENVIRONMENTAL STUDIES		X
2.165.10.15	COMMUNITY IMPACT ANALYSIS LAND USE AND GROWTH STUDIES		X
2.165.10.20	VISUAL IMPACT ASSESSMENT AND SCENIC RESOURCE EVALUATION		X
2.165.10.25	NOISE STUDY		X
2.165.10.30	AIR QUALITY STUDY		X
2.165.10.35	WATER QUALITY STUDIES		X
2.165.10.40	ENERGY STUDIES		X
2.165.10.45	SUMMARY OF GEOTECHNICAL REPORT		X
2.165.10.55	DRAFT RIGHT OF WAY RELOCATION IMPACT DOCUMENT		X
2.165.10.60	LOCATION HYDRAULIC & FLOODPLAIN STUDY REPORTS		X
2.165.10.65	PALEONTOLOGY STUDY		X
2.165.10.70	WILD AND SCENIC RIVERS COORDINATION		X
2.165.10.75	ENVIRONMENTAL COMMITMENTS RECORD		X
2.165.10.80	HAZARDOUS WASTE INITIAL SITE ASSESSMENTS/INVESTIGATIONS		X
2.165.10.85	HAZARDOUS WASTE PRELIMINARY SITE INVESTIGATIONS		X
2.165.10.99	OTHER ENVIRONMENTAL STUDIES		X
2.165.15	BIOLOGICAL STUDIES		X
2.165.15.05	BIOLOGICAL ASSESSMENT		X
2.165.15.10	WETLANDS STUDY		X
2.165.15.15	RESOURCE AGENCY PERMIT RELATED COORDINATION		X
2.165.15.20	NATURAL ENVIRONMENT STUDY [NES] REPORT		X
2.165.15.99	OTHER BIOLOGICAL STUDIES		X
2.165.20	CULTURAL RESOURCE STUDIES		X
2.165.20.05	ARCHAEOLOGICAL SURVEY		X
2.165.20.05.05	AREA OF POTENTIAL EFFECTS/STUDY AREA MAPS		X
2.165.20.05.10	NATIVE AMERICAN CONSULTATION		X
2.165.20.05.15	RECORDS AND LITERATURE SEARCH		X
2.165.20.05.20	FIELD SURVEY		X
2.165.20.05.25	ARCHAEOLOGICAL SURVEY REPORT [ASR]		X

2.165.20.05.99	OTHER ARCHAEOLOGICAL SURVEY PRODUCTS		X
2.165.20.10	EXTENDED PHASE I ARCHAEOLOGICAL STUDIES		X
2.165.20.10.05	NATIVE AMERICAN CONSULTATION		X
2.165.20.10.10	EXTENDED PHASE 1 PROPOSAL		X
2.165.20.10.15	EXTENDED PHASE I FIELD INVESTIGATION		X
2.165.20.10.20	EXTENDED PHASE I MATERIALS ANALYSIS		X
2.165.20.10.25	EXTENDED PHASE I REPORT		X
2.165.20.10.99	OTHER EXTENDED PHASE I ARCHAEOLOGICAL STUDY PRODUCTS		X
2.165.20.15	PHASE II ARCHAEOLOGICAL STUDIES		X
2.165.20.15.05	NATIVE AMERICAN CONSULTATION		X
2.165.20.15.10	PHASE II PROPOSAL		X
2.165.20.15.15	PHASE II FIELD INVESTIGATION		X
2.165.20.15.20	PHASE II MATERIALS ANALYSIS		X
2.165.20.15.25	PHASE II REPORT		X
2.165.20.15.99	OTHER EXTENDED PHASE II ARCHAEOLOGICAL STUDY PRODUCTS		X
2.165.20.20	HISTORICAL AND ARCHITECTURAL RESOURCE STUDIES		X
2.165.20.20.05	PRELIMINARY AREA OF POTENTIAL EFFECTS/STUDY AREA MAPS FOR ARCHITECTURE		X
2.165.20.20.10	HISTORIC RESOURCE EVALUATION REPORTS - ARCHAEOLOGY		X
2.165.20.20.15	HISTORIC RESOURCE EVALUATION REPORTS - ARCHITECTURE		X
2.165.20.20.20	BRIDGE EVALUATION		X
2.165.20.20.99	OTHER HISTORICAL AND ARCHITECTURAL RESOURCE STUDY PRODUCTS		X
2.165.20.25	CULTURAL RESOURCE COMPLIANCE CONSULTATION DOCUMENTS		X
2.165.20.25.05	FINAL AREA OF POTENTIAL EFFECTS/STUDY AREA MAPS		X
2.165.20.25.10	PRC 5024.5 CONSULTATION		X
2.165.20.25.15	HISTORIC PROPERTY SURVEY REPORTS / HISTORIC RESOURCE COMPLIANCE REPORTS		X
2.165.20.25.20	FINDING OF EFFECT [FOE]		X
2.165.20.25.25	ARCHAEOLOGICAL DATA RECOVERY PLAN/TREATMENT PLAN		X
2.165.20.25.30	MEMORANDUM OF AGREEMENT [MOA]		X
2.165.20.25.99	OTHER CULTURAL RESOURCE COMPLIANCE CONSULTATION PRODUCTS		X
2.165.25	DRAFT ENVIRONMENTAL DOCUMENT		X
2.165.25.05	DRAFT ENVIRONMENTAL DOCUMENT ANALYSIS		X
2.165.25.10	SECTION 4[F] EVALUATION		X
2.165.25.15	CATEGORICAL EXEMPTION / CATEGORICAL EXCLUSION [CE] DETERMINATION		X
2.165.25.20	ENVIRONMENTAL QUALITY CONTROL & OTHER REVIEWS		X
2.165.25.25	APPROVAL TO CIRCULATE RESOLUTION	X	
2.165.25.30	ENVIRONMENTAL COORDINATION		X
2.165.25.99	OTHER DRAFT ENVIRONMENTAL DOCUMENT PRODUCTS		X
2.165.30	NEPA DELEGATION	X	
2.170	PERMITS AGREEMENTS AND ROUTE ADOPTIONS DURING PA&ED COMPONENT		X
2.170.05	REQUIRED PERMITS		X
2.170.10	PERMITS		X
2.170.10.05	U.S. ARMY CORPS OF ENGINEERS PERMIT [404]		X
2.170.10.10	U.S. FOREST SERVICE PERMIT[S]		X
2.170.10.15	U.S. COAST GUARD PERMIT		X
2.170.10.20	DEPARTMENT OF FISH AND GAME 1600 AGREEMENT[S]		X
2.170.10.25	COASTAL ZONE DEVELOPMENT PERMIT		X
2.170.10.30	LOCAL AGENCY CONCURRENCE/PERMIT		X

2.170.10.40	WASTE DISCHARGE [NPDES] PERMIT[S]		X
2.170.10.45	U.S. FISH AND WILDLIFE SERVICE APPROVAL		X
2.170.10.50	REGIONAL WATER QUALITY CONTROL BOARD 401 PERMIT		X
2.170.10.60	UPDATED ECR		X
2.170.10.95	OTHER PERMITS		X
2.170.15	RAILROAD AGREEMENTS		X
2.170.15.05	PLAN APPROVAL		X
2.170.15.10	SPECIAL PROVISIONS AND INSURANCE CLAUSES		X
2.170.15.15	SERVICE CONTRACT FOR RAILROAD SERVICES		X
2.170.15.20	CONSTRUCTION AND MAINTENANCE AGREEMENT		X
2.170.15.25	PUC EXHIBITS AND APPLICATION		X
2.170.15.99	OTHER RAILROAD AGREEMENT PRODUCTS		X
2.170.20	FREEWAY AGREEMENTS		X
2.170.20.05	DRAFT FREEWAY AGREEMENT		X
2.170.20.10	DRAFT FREEWAY AGREEMENT REVIEW		X
2.170.20.15	FINAL FREEWAY AGREEMENT		X
2.170.20.20	EXECUTED FREEWAY AGREEMENT		X
2.170.20.99	OTHER FREEWAY AGREEMENT PRODUCTS		X
2.170.25	AGREEMENT FOR MATERIAL SITES		X
2.170.30	EXECUTED MAINTENANCE AGREEMENT		X
2.170.40	ROUTE ADOPTIONS		X
2.170.40.05	ROUTE ADOPTION MAP		X
2.170.40.10	NEW CONNECTION REQUEST AND ROUTE ADOPTION CTC SUBMITTAL		X
2.170.40.15	ROUTE ADOPTION AND PUBLIC ROAD CONNECTION PLACED ON CTC AGENDA	X	
2.170.40.99	OTHER ROUTE ADOPTION PRODUCTS		X
2.170.45	MOU FROM TRIBAL EMPLOYMENT RIGHTS OFFICE [TERO]		X
2.170.55	NEPA DELEGATION	X	
2.175	CIRCULATE DRAFT ENVIRONMENTAL DOCUMENT AND SELECT PREFERRED PROJECT ALTERNATIVE		X
2.175.05	DED CIRCULATION		X
2.175.05.05	MASTER DISTRIBUTION AND INVITATION LISTS		X
2.175.05.10	NOTICES REGARDING PUBLIC HEARING & AVAILABILITY OF DRAFT ENVIRONMENTAL DOCUMENT		X
2.175.05.15	DED PUBLICATION AND CIRCULATION		X
2.175.05.20	FEDERAL CONSISTENCY DETERMINATION [COASTAL ZONE]		X
2.175.05.99	OTHER DED CIRCULATION PRODUCTS		X
2.175.10	PUBLIC HEARING		X
2.175.10.05	NEED FOR PUBLIC HEARING DETERMINATION		X
2.175.10.10	PUBLIC HEARING LOGISTICS		X
2.175.10.15	DISPLAYS FOR PUBLIC HEARING		X
2.175.10.20	SECOND NOTICES OF PUBLIC HEARING AND AVAILABILITY OF DED		X
2.175.10.25	MAP DISPLAY AND PUBLIC HEARING PLAN		X
2.175.10.30	DISPLAY PUBLIC HEARING MAPS		X
2.175.10.35	PUBLIC HEARING		X
2.175.10.40	RECORD OF PUBLIC HEARING		X
2.175.10.99	OTHER PUBLIC HEARING PRODUCTS		X
2.175.15	PUBLIC COMMENT RESPONSES AND CORRESPONDENCE		X
2.175.20	PROJECT PREFERRED ALTERNATIVE		X
2.175.25	NEPA DELEGATION	X	

2.180	PREPARE AND APPROVE PROJECT REPORT AND FINAL ENVIRONMENTAL DOCUMENT	X	X
2.180.05	FINAL PROJECT REPORT		X
2.180.05.05	UPDATED DRAFT PROJECT REPORT		X
2.180.05.10	APPROVED PROJECT REPORT		X
2.180.05.15	UPDATED STORM WATER DATA REPORT		X
2.180.05.99	OTHER FINAL PROJECT REPORT PRODUCTS		X
2.180.10	FINAL ENVIRONMENTAL DOCUMENT		X
2.180.10.05	APPROVED FINAL ENVIRONMENTAL DOCUMENT		X
2.180.10.05.05	DRAFT FINAL ENVIRONMENTAL DOCUMENT REVIEW		X
2.180.10.05.10	REVISED DRAFT FINAL ENVIRONMENTAL DOCUMENT		X
2.180.10.05.15	SECTION 4[F] EVALUATION		X
2.180.10.05.20	FINDINGS		X
2.180.10.05.25	STATEMENT OF OVERRIDING CONSIDERATIONS		X
2.180.10.05.30	CEQA CERTIFICATION	X	
2.180.10.05.35	FHWA APPROVAL	X	
2.180.10.05.40	SECTION 106 CONSULTATION AND MOA		X
2.180.10.05.45	SECTION 7 CONSULTATION		X
2.180.10.05.50	FINAL SECTION 4[F] STATEMENT		X
2.180.10.05.55	FLOODPLAIN ONLY PRACTICABLE ALTERNATIVE FINDING		X
2.180.10.05.60	WETLANDS ONLY PRACTICABLE ALTERNATIVE FINDING		X
2.180.10.05.65	SECTION 404 COMPLIANCE		X
2.180.10.05.70	MITIGATION MEASURES		X
2.180.10.10	PUBLIC DISTRIBUTION OF FED AND RESPOND TO COMMENTS		X
2.180.10.15	FINAL RIGHT OF WAY RELOCATION IMPACT DOCUMENT		X
2.180.10.99	OTHER FED PRODUCTS		X
2.180.15	COMPLETED ENVIRONMENTAL DOCUMENT		X
2.180.15.05	RECORD OF DECISION [NEPA]	X	
2.180.15.10	NOTICE OF DETERMINATION [CEQA]	X	
2.180.15.20	ENVIRONMENTAL COMMITMENTS RECORD		X
2.180.15.99	OTHER COMPLETED ENVIRONMENTAL DOCUMENT PRODUCTS		X
2.180.20	NEPA DELEGATION	X	