

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017 PROJECT
BASELINE AGREEMENT
I-80 WB CORDELIA COMMERCIAL VEHICLE ENFORCEMENT FACILITY
Resolution TCEP-P-2021-07B
(will be completed by CTC)

1. FUNDING PROGRAM

- ☐ Active Transportation Program
- ☐ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☐ State Highway Operation and Protection Program
- ☒ Trade Corridor Enhancement Program

2. PARTIES AND DATE

- 2.1 This Project Baseline Agreement (Agreement) for the *I-80 WB CORDELIA COMMERCIAL VEHICLE ENFORCEMENT FACILITY*, effective on, June 23, 2021 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *Caltrans, Solano Transportation Authority (STA)*, and the Implementing Agency, *Caltrans*, sometimes collectively referred to as the "Parties".

3. RECITAL

- 3.2 Whereas at its *Commission Programmed Project Date* meeting the Commission approved the Trade Corridor Enhancement Program, and included in this program of projects the *I-80 WB CORDELIA COMMERCIAL VEHICLE ENFORCEMENT FACILITY*, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as Exhibit A and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.
- 3.3 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

- 4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.
- 4.2 To adhere, as applicable, to the provisions of the Commission:
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Active Transportation Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Local Partnership Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated
- ☒ Resolution G-20-77, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated December 2, 2020

- 4.3 All signatories agree to adhere to the Commission's Trade Corridor Enhancement Program, Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.
- 4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.
- 4.5 The STA agrees to secure funds for any additional costs of the project.
- 4.6 The Caltrans agrees to report on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.
- 4.7 STA agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.
- 4.8 The Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.9 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.10 The Transportation Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for four years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost

See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope

See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Other Project Specific Provisions and Conditions

- a) In the event of a cost overrun the state will cover a share proportionate to the state contribution of the TCEP funding identified in the Project Programming Request (PPR) submitted with this baseline agreement. (For example, if the state/regional TCEP funding share was a 40/60 ratio, the state may fund no more than 40% of the cost overrun.)
- b) The following changes are being made to the original SB1 TCEP nomination:
 1. STIP funds are being used to match TCEP Regional dollars in lieu of RM3 funds that are not available due to on-going litigation.
 - a) Replace \$5.3M in RM 3 funding for PS&E with \$5.3M in STIP Funding for PS&E.
 - b) Schedule revised to secure STIP fund.

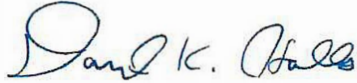
Attachments:

- Exhibit A: Project Programming Request Form
Exhibit B: Project Report

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

I-80 WB CORDELIA COMMERCIAL VEHICLE ENFORCEMENT FACILITY

Resolution TCEP-P-2021-078B



Daryl Halls
Executive Director
Solano Transportation Authority
Project Applicant

May 3, 2021

Date



for Dina El-Tawansy
District Director
California Department of Transportation
Project Applicant
Implementing Agency

May 3, 2021

Date



Toks Omishakin
Director
California Department of Transportation

6.3.21

Date



Mitchell Weiss
Executive Director
California Transportation Commission

07/16/21

Date

Amendment (Existing Project) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					Date	05/10/2021 12:25:30
Programs <input type="checkbox"/> LPP-C <input type="checkbox"/> LPP-F <input type="checkbox"/> SCCC <input checked="" type="checkbox"/> TCEP <input type="checkbox"/> STIP <input type="checkbox"/> Other						
District	EA	Project ID	PPNO	Nominating Agency		
04	0A53T	0421000155	8273C	Caltrans District 4		
County	Route	PM Back	PM Ahead	Co-Nominating Agency		
Solano	12	1.800	2.200	Solano Transportation Authority		
Solano	80	14.800	16.500	MPO	Element	
				MTC	Capital Outlay	
Project Manager/Contact			Phone	Email Address		
Jason Mac			510-622-8891	jason.mac@dot.ca.gov		

Project Title

Westbound I-80 Cordelia Commercial Vehicle Enforcement Facility

Location (Project Limits), Description (Scope of Work)

Near the city of Fairfield. The proposed project will replace the existing Westbound (WB) I-80 Cordelia Commercial Vehicle Enforcement Facility (CCVEF). The new facility will be relocated 0.7 mile east from its current location and will provide a new braided off-ramp connection and new entrance ramp connection to/from Westbound I-80. Direct access to the facility will also be provided from westbound State Route 12 . The new facility will have the capacity to inspect all westbound I-80 trucks passing the facility 24 hours per day, seven days a week.

Component	Implementing Agency
PA&ED	Solano Transportation Authority
PS&E	Caltrans District 4
Right of Way	Solano Transportation Authority
Construction	Caltrans District 4

Legislative Districts

Assembly:	8	Senate:	5	Congressional:	3
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Project Milestone	Existing	Proposed
Project Study Report Approved		
Begin Environmental (PA&ED) Phase	05/01/2003	05/01/2003
Circulate Draft Environmental Document Document Type EIR/EIS	08/10/2010	08/10/2010
Draft Project Report	12/07/2012	12/07/2012
End Environmental Phase (PA&ED Milestone)	12/10/2012	12/10/2012
Begin Design (PS&E) Phase	05/14/2021	06/01/2021
End Design Phase (Ready to List for Advertisement Milestone)	05/14/2024	06/01/2024
Begin Right of Way Phase	12/30/2022	01/01/2023
End Right of Way Phase (Right of Way Certification Milestone)	05/07/2024	06/01/2024
Begin Construction Phase (Contract Award Milestone)	12/03/2024	01/03/2025
End Construction Phase (Construction Contract Acceptance Milestone)	12/03/2027	01/03/2028
Begin Closeout Phase	12/03/2029	01/03/2030
End Closeout Phase (Closeout Report)	12/03/2031	01/05/2032

Date 05/10/2021 12:25:30

Purpose and Need

The existing truck scales facility was constructed in 1958 to inspect trucks entering the San Francisco Bay Area from locations nationwide, and accommodates between 500 and 700 trucks per day. It consists of two dynamic and one static scale, four inspection bays, and limited parking. The existing facility is outdated, under capacity, and does not include state of the art technology required for truck inspections today. Existing access from I-80 consists of short on and off ramps, resulting in truck traffic backing up onto I-80 and increasing the potential for rear-end accidents. During peak traffic periods experienced several times per week, the facility is closed to incoming trucks to prevent this queuing.

NHS Improvements ☐ YES ☒ NO

Roadway Class NA

Reversible Lane Analysis ☐ YES ☒ NO

Inc. Sustainable Communities Strategy Goals ☒ YES ☐ NO

Reduce Greenhouse Gas Emissions ☒ YES ☐ NO

Project Outputs

Category	Outputs	Unit	Total
Rail/ Multi-Modal	Station improvements	EA	1

Date 05/10/2021 12:25:30

Additional Information

STA requests moving \$5M of currently programmed STIP from Fairgrounds to the WB I-80 Cordelia Commercial Vehicle Enforcement Facility. STA is also requesting \$268,000 of future STIP advance shares. STA has requested the STIP amendment be noticed at the May 2021 CTC meeting for approval in June 2021 CTC Meeting. The schedule adjustment was made to accommodate funding changes.

Performance Indicators and Measures						
Measure	Required For	Indicator/Measure	Unit	Build	Future No Build	Change
Congestion Reduction	TCEP	Daily Vehicle Hours of Travel Time Reduction	Hours	509	637	-128
	TCEP	Daily Truck Trips	# of Trips	11,850	11,850	0
	TCEP	Daily Truck Miles Traveled	Miles	29,625	29,625	0
Throughput	TCEP	Change in Truck Volume That Can Be Accommodated	# of Trucks	8,760,000	255,500	8,504,500
	TCEP	Change in Rail Volume That Can Be Accommodated	# of Trailers	0	0	0
			# of Containers	0	0	0
	TCEP	Change in Cargo Volume That Can Be Accommodated	# of Tons	0	0	0
			# of Containers	0	0	0
System Reliability	TCEP	Truck Travel Time Reliability Index	Index	1.8	1.8	0
	TCEP	Daily Vehicle Hours of Travel Time Reduction	Hours	509	637	-128
Velocity	TCEP	Travel Time or Total Cargo Transport Time	Hours	0	0	0
Air Quality & GHG	LPPF, LPPC, SCCP, TCEP	Particulate Matter	PM 2.5 Tons	3.41	2.67	0.74
			PM 10 Tons	3.59	2.81	0.78
	LPPF, LPPC, SCCP, TCEP	Carbon Dioxide (CO2)	Tons	190,339.24	188,783.99	1,555.25
	LPPF, LPPC, SCCP, TCEP	Volatile Organic Compounds (VOC)	Tons	10.38	11.4	-1.02
	LPPF, LPPC, SCCP, TCEP	Sulphur Dioxides (SOx)	Tons	1.82	1.82	0
	LPPF, LPPC, SCCP, TCEP	Carbon Monoxide (CO)	Tons	245.28	279.64	-34.36
	LPPF, LPPC, SCCP, TCEP	Nitrogen Oxides (NOx)	Tons	187.04	215.7	-28.66
Safety	LPPF, LPPC, SCCP, TCEP	Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	Number	40.8	55.8	-15
	LPPF, LPPC, SCCP, TCEP	Number of Fatalities	Number	0.29	0.43	-0.14
	LPPF, LPPC, SCCP, TCEP	Fatalities per 100 Million VMT	Number	149.8	220.3	-70.5
	LPPF, LPPC, SCCP, TCEP	Number of Serious Injuries	Number	0.88	1.29	-0.41
	LPPF, LPPC, SCCP, TCEP	Number of Serious Injuries per 100 Million VMT	Number	0	0	0
Economic Development	LPPF, LPPC, SCCP, TCEP	Jobs Created (Direct and Indirect)	Number	1,465.6	0	1,465.6
Cost Effectiveness	LPPF, LPPC, SCCP, TCEP	Cost Benefit Ratio	Ratio	1.16	0	1.16

District	County	Route	EA	Project ID	PPNO
04	Solano, Solano	12, 80	0A53T	0421000155	8273C
Project Title					

Westbound I-80 Cordelia Commercial Vehicle Enforcement Facility

Existing Total Project Cost (\$1,000s)									Implementing Agency
Component	Prior	21-22	22-23	23-24	24-25	25-26	26-27+	Total	
E&P (PA&ED)									Solano Transportation Authority
PS&E	29,270							29,270	Caltrans District 4
R/W SUP (CT)			750					750	Solano Transportation Authority
CON SUP (CT)					23,200			23,200	Caltrans District 4
R/W			42,750					42,750	Solano Transportation Authority
CON					154,800			154,800	Caltrans District 4
TOTAL	29,270		43,500		178,000			250,770	
Proposed Total Project Cost (\$1,000s)									Notes
E&P (PA&ED)									
PS&E	29,270							29,270	
R/W SUP (CT)			750					750	
CON SUP (CT)					23,200			23,200	
R/W			42,750					42,750	
CON					154,800			154,800	
TOTAL	29,270		43,500		178,000			250,770	

Fund #1:	State SB1 TCEP - Trade Corridors Enhancement Account (Committed)								Program Code
	Existing Funding (\$1,000s)								20.XX.723.100
Component	Prior	21-22	22-23	23-24	24-25	25-26	26-27+	Total	Funding Agency
E&P (PA&ED)									Caltrans HQ
PS&E	11,708							11,708	SB1 - TCEP State Share
R/W SUP (CT)									TCEP funds are programmed in FY 20/21
CON SUP (CT)									
R/W									
CON									
TOTAL	11,708							11,708	
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E	11,708							11,708	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	11,708							11,708	

Fund #2:	State SB1 TCEP - Trade Corridors Enhancement Account (Committed)								Program Code
Existing Funding (\$1,000s)									20.XX.723.200
Component	Prior	21-22	22-23	23-24	24-25	25-26	26-27+	Total	Funding Agency
E&P (PA&ED)									Caltrans HQ
PS&E	12,294							12,294	SB1 - TCEP Regional Share
R/W SUP (CT)									TCEP funds are programmed in FY 20/21
CON SUP (CT)									
R/W									
CON									
TOTAL	12,294							12,294	
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E	12,294							12,294	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	12,294							12,294	
Fund #3:	Local Funds - Local Transportation Funds (Committed)								Program Code
Existing Funding (\$1,000s)									20.10.400.100
Component	Prior	21-22	22-23	23-24	24-25	25-26	26-27+	Total	Funding Agency
E&P (PA&ED)									Metropolitan Transportation Commiss
PS&E	5,268							5,268	RM3 Bridge Toll Funds
R/W SUP (CT)			750					750	
CON SUP (CT)									
R/W			42,750					42,750	
CON					51,232			51,232	
TOTAL	5,268		43,500		51,232			100,000	
Proposed Funding (\$1,000s)									
E&P (PA&ED)									
PS&E									
R/W SUP (CT)			750					750	
CON SUP (CT)									
R/W			42,750					42,750	
CON					51,232			51,232	
TOTAL			43,500		51,232			94,732	

Fund #4:	Future Need - Future Funds (Uncommitted)								Program Code
Existing Funding (\$1,000s)									FUTURE
Component	Prior	21-22	22-23	23-24	24-25	25-26	26-27+	Total	Funding Agency
E&P (PA&ED)									SB1 - TCEP Future Funds
PS&E									
R/W SUP (CT)									
CON SUP (CT)					23,200			23,200	
R/W									
CON					103,568			103,568	
TOTAL					126,768			126,768	
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)					23,200			23,200	
R/W									
CON					103,568			103,568	
TOTAL					126,768			126,768	
Fund #5:	RIP - State Cash (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	21-22	22-23	23-24	24-25	25-26	26-27+	Total	Funding Agency
E&P (PA&ED)									Solano Transportation Authority
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									Requesting moving \$5M in STIP shares from Fairgrounds Dr and advancing \$300k in future STIP shares
PS&E	5,268							5,268	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	5,268							5,268	

Complete this page for amendments only					Date 05/10/2021 12:25:30
District	County	Route	EA	Project ID	PPNO
04	Solano, Solano	12, 80	0A53T	0421000155	8273C

SECTION 1 - All Projects

Project Background

For Baseline Agreement

Programming Change Requested

Reason for Proposed Change

For Baseline Agreement

If proposed change will delay one or more components, clearly explain 1) reason for the delay, 2) cost increase related to the delay, and 3) how cost increase will be funded

Other Significant Information

SECTION 2 - For SB1 Project Only

Project Amendment Request (Please follow the individual SB1 program guidelines for specific criteria)

For Baseline Agreement

Approvals

I hereby certify that the above information is complete and accurate and all approvals have been obtained for the processing of this amendment request.

Name (Print or Type)	Signature	Title	Date

SECTION 3 - All Projects

Attachments

- 1) Concurrence from Implementing Agency and/or Regional Transportation Planning Agency
- 2) Project Location Map

Westbound I-80 Cordelia Commercial Vehicle Enforcement Facility Project (Design)

Caltrans | MTC | STA

Contact: Jean Finney, Deputy District Director | Jean.Finney@dot.ca.gov | 510.286.6196

Project Location

Solano County | Fairfield, Cordelia | I-80, SR 12

Project Scope

The proposed Project will replace the existing Westbound I-80 Cordelia Commercial Vehicle Enforcement Facility (CCVEF) in Solano County. The new facility will be relocated 0.7 miles east from its current location and will provide new braided on- and off-ramp connections to/from westbound I-80. Direct access to the facility will also be provided from westbound State Route 12. The new facility will have the capacity to inspect existing and forecast westbound trucks passing through the area 24 hours per day, seven days a week.

Project Cost

Total Phase Cost:	\$ 29,270,000	Total TCEP Request:	\$ 24,002,000
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Project Schedule

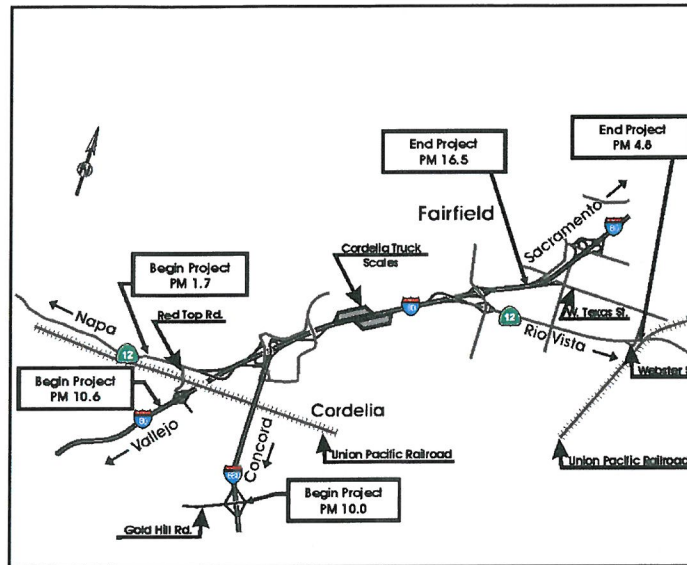
PA&ED: 12/10/2012 (A)	PS&E: 05/14/2024 (T)	R/W: 05/07/2024 (T)	RTL: 05/15/2024 (T)	CON: 12/03/2027 (T)
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Project Benefits

The existing westbound CCVEF was constructed in 1958 and accommodates between 500 and 700 trucks per day. It consists of two dynamic and one static scale, four inspection bays, and limited parking. The existing facility is dated, under capacity, and does not include technology required for truck inspections today.

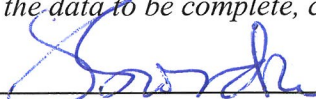
The proposed facility will be a Class B facility, defined as an independent command facility of the California Highway Patrol. Key aspects of the facility consist of seven covered inspection areas with configurations to accommodate long-vehicle combinations; inspection areas with the capability to check the underside of low-clearance vehicles; elevated structures to enable inspectors to check domes and top portions of trucks; "weigh-in-motion" scales with the capability to sort truck traffic into separate lanes along the approach roadway; minimum of four sets of scales to accommodate two lines of empty and loaded trucks; increased processing capacity of the truck scales up to 1000 trucks per hour; increased queue capacity and a reduction in congestion and rear-end accidents; fully-modernized and state-of-the-art truck scales facility for westbound I-80; auxiliary inspection areas for potentially hazardous trucks; and improved corridor operations by increasing weaving distances between adjacent interchanges.

PROJECT REPORT

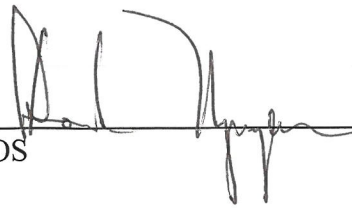


In Solano County on Interstate 80 from 0.7 mile west of Red Top Road Undercrossing to 0.8 mile east of Abernathy Road Overcrossing, on Interstate 680 from end of northerly ramp at Gold Hill Road Interchange to Interstate 80, on State Route 12 (West) from 0.7 mile west of the Red Top Road Intersection to Interstate 80, and on State Route 12 (East) from Interstate 80 to the UPRR Overhead between Fairfield and Suisun City.


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

Ading
for 
MARK L. WEAVER
DEPUTY DISTRICT DIRECTOR-RIGHT OF WAY AND LAND SURVEYS

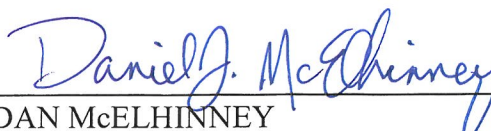
APPROVAL RECOMMENDED:

for 
NICOLAS ENDRAWOS
PROJECT MANAGER

APPROVAL RECOMMENDED:


ZIAD ABUBEKCR
DISTRICT OFFICE CHIEF, DESIGN NORTH

APPROVED:


DAN McELHINNEY
CHIEF DEPUTY DISTRICT DIRECTOR

10-25-2012
DATE

04-SOL-80/680/12 Interchange

PM I-80 10.6-16.5

PM I-680 10.0-13.1

PM SR12 (West) R1.7-R2.8

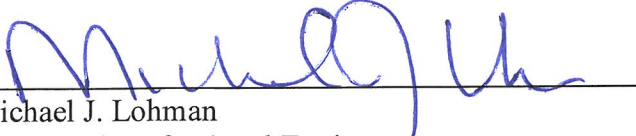
PM SR 12 (East) L1.8-R4.8

October 2012

EA/Project Number 04-0A5300/04-0000-0150

Program Code HE11

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


Michael J. Lohman
Registered Professional Engineer
Mark Thomas & Company, Inc.

10-23-2012

Date



PROJECT REPORT

1. INTRODUCTION

The Interstate 80/Interstate 680/State Route 12 (I-80/I-680/SR12) interchange is a confluence of interregional significance as it connects the San Francisco Bay Area and the Napa Valley with the Central Valley. Not only is this interchange at the convergence of several key interregional routes, but it also supports a developing Solano County community served by a series of local roadways that are interwoven with the interregional routes. The growth in interregional travel, combined with the local area growth, has resulted in extreme congestion, delays, substantial traffic diversion, and unacceptable operations throughout the area. It is vital that improvements be made to both local and interregional systems in concert to ensure safe and efficient travel for all users. The proposed project improvements are designed to reduce congestion, accommodate anticipated increases in traffic, and address safety concerns, while at the same time preserving the existing network of interchanges, serving the local land uses.

In 2004 the Solano Transportation Authority (STA) completed the I-80/I-680/SR12 Major Investment and Corridor Study which identified the need for a series of major improvements to the I-80/I-680/SR12 interchange area. As a result of that study STA initiated the development of this project.

The overall I-80/I-680/SR12 interchange project entails reconstruction or modification of up to nine separate interchanges; conversion of up to three at-grade intersections to grade-separated interchanges; construction of one new interchange; and reconstruction of the westbound Cordelia Truck Scales, as well as widening of the I-80, I-680, and SR12 main lines.

Two viable full build alternatives (Alternatives B and C) each with a corresponding fundable first phase (Alternative B, Phase 1 and Alternative C, Phase 1) were evaluated in the Draft Environmental Impact Report/Environmental Impact Study (EIR/EIS). The preferred Alternative C, and its fundable first phase realigns I-680 to the west to connect with the I-80/SR12 (West) interchange. Alternative B would rebuild the interchange between I-680 and I-80 in its existing location. See Section 5 for a complete description of Alternatives C and C, Phase 1.

These two full build alternatives were sculpted to be sensitive to the context provided by their location on important statewide highways, regional planning, county planning, City of Fairfield planning, Suisun City planning and transit operator planning. They were the two alternatives that best meet the needs of all of these various agencies.

After receiving input during the public review of the Draft EIR/EIS, California Department of Transportation (Caltrans) has identified Alternative C as the preferred corridor under California Environmental Quality Act (CEQA) and its fundable first phase, Alternative C, Phase 1, as the preferred alternative under National Environmental Policy Act (NEPA). Rationale for the selection of Alternative C is provided in Section 5.

The total length of the overall project is approximately 13.1 miles on all three highways combined [including 9.9 miles on the National Highway System (I-80, I-680, part of SR12 East)]. Attachment A shows the project location within Northern California and the approximate project limits within the project vicinity.

The project is funded from bridge tolls, TCRP, STIP, federal, local and Proposition 1B funding.

Cost was estimated at \$2.2 billion for Preferred Alternative C and \$664 million for Alternative C, Phase 1. These estimates include cost of right of way, utility relocation, construction. Cost for the other alternative (Alternative B) was estimated at \$2.1 billion, and its fundable Phase 1 at \$550 million. The amounts also include escalation for right of way and construction. Phase 1 construction for Alternative C is expected to be completed by 2018. Escalation for the remainder of the full build project was calculated to 2036.

Below is a table summarizing the current cost estimates for the project and total escalated cost.

Table 1. Cost Estimate Summary (Rounded)

	Preferred Project Alternatives			
	ALTERNATIVE C1 (Fundable First Phase of Alternative C)	ALTERNATIVE C (Full Build Alternative, including Phase 1)	ALTERNATIVE B1 (Fundable First Phase of Alternative B)	ALTERNATIVE B (Full Build Alternative, including Phase 1)
Total Construction and Soft Costs:	\$ 520,300,000	\$ 1,178,400,000	\$ 436,000,000	\$ 1,076,000,000
Total Right of Way Costs:	\$ 120,000,000	\$ 170,000,000	\$ 80,000,000	\$ 180,000,000
Total Current (2012) Costs:	\$ 640,300,000	\$ 1,348,400,000	\$ 516,000,000	\$ 1,256,000,000
Escalated Total Alternative Cost:	\$ 664,000,000	\$ 2,166,000,000	\$ 550,000,000	\$ 2,090,000,000

The Project Location and Vicinity Maps are presented in Attachment A.

The project limits are listed in Table 2:

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

Table 2. Project Limits by Route

Route	From		To		Length (Miles)
	Post Mile	Description	Post Mile	Description	
I-80	10.6	0.8 mile west of Red Top Road undercrossing	16.5	0.4 mile east of Abernathy Road overcrossing	5.9
I-680	10.0	Gold Hill Road Overcrossing	13.1	Junction with I-80	3.1
SR12 West	R1.7	0.7 mile west of Red Top Road intersection	R2.8	Junction with I-80	1.1
SR12 East	L1.8	Junction with I-80	R4.8	UPRR overhead between Fairfield and Suisun City	3.0
TOTAL					13.1

The project limits along I-80 include modification or replacement of interchanges or access at Red Top Road, SR12 (West), Green Valley Road, I-680, Suisun Valley Road, the westbound Cordelia Truck Scales, SR12 (East) and Abernathy Road.

The project limits along I-680 include a proposed new interchange with Red Top Road and replacement of the ramp connection to Central Way.

The project limits along SR12 (West) include a proposed new grade-separated interchange west of the existing Red Top Road intersection. The Red Top Road intersection would be eliminated.

The project limits along SR12 (East) include proposed new grade-separations at the existing Beck Avenue and Pennsylvania Avenue intersections. Only the portion of SR12 (East) west of Chadbourne Road is considered to be within the federal highway system jurisdiction. The balance of SR12 (East) is solely on the State highway system.

See Attachment B, Sheets B3-4 through B3-6 for right of way requirements as well as right of way parcel acquisition lists.

2. RECOMMENDATION

It is recommended that approval of the Project Report be granted, that the project be approved using the preferred Alternative C for planning purposes only and to identify properties needed so the general plans can be amended to reflect Alternative C property needs (Attachment A). No federal or state funding will be used to purchase right of way to protect Caltrans from potential inverse condemnation as Alternative C is not funded and included in the current 2035 Regional Transportation Plan (RTP) which is a financially constrained document. Only the fundable first phase Alternative C, Phase 1 is authorized to proceed to the design and right of way acquisition phase (Attachment B). The affected local agencies have been consulted with respect to the recommended plan, their views have been considered, and the local agencies are in general accord with the plan as presented.

The PDT's decision to identify Alternative C as the preferred alternative was made with the following intended results:

- To establish the ultimate Alternative C as a vision and goal to preserve right of way and meet identified transportation needs.
- To acknowledge that Alternative C must be implemented in phases due to funding limitations and constraints, and may not be completed until beyond the twenty year planning horizon.
- To recognize that each phase of Alternative C will have independent utility.
- To extend identification of the preferred alternative to Alternative C, Phase 1, upon which additional decisions—LEDPA, a Record of Decision under NEPA, the Project Report, permits, final design, and right-of-way work—may be taken.
- To plan for future phases through updating, amending, or adopting new general plans, zoning, transportation plans, and transportation improvement programs.
- To help identify and secure right of way within the corridor necessary to construct the ultimate right of way with local funding only.

3. BACKGROUND

A. PROJECT HISTORY

The I-80/I-680/SR12 interchange is located in Solano County, California, primarily within the City of Fairfield. The existing I-80/I-680/SR12 interchange complex is the result of the connection of 3 separate highways: Interstate 80 western and eastern segments of State Route 12; and Interstate 680. I-680 begins at I-80 between the two interchange points of SR12 and extends south. The segment of SR12 extending to the west of I-80 (also known as Jameson Canyon Road) is termed “SR12 (West)” in this report, and the segment of SR12 extending to the east of I-80 is termed “SR12 (East).”

Over the last 40 years, this interchange has evolved into a confluence of interregional significance. The growth in interregional travel, combined with the local area growth, has resulted in extreme congestion, delays, substantial traffic diversion, and unacceptable operations throughout the area. It is vital that improvements be made to both local and interregional systems in concert to ensure safe and efficient travel for all users.

Caltrans, in cooperation with the STA and the Federal Highway Administration (FHWA) proposes to improve the interchanges between I-80, I-680 and SR12 in the vicinity of City of Fairfield, Solano County, California. The proposed improvements are designed to reduce congestion, accommodate anticipated increases in traffic demand, and address safety concerns, while at the same time preserving the existing network of interchanges serving the local land uses.

Construction of the fundable first phase (Phase 1) of the Preferred Alternative is proposed to take place in a series of construction packages beginning in 2012. Phase 1 of this project is included in the Metropolitan Transportation Commission's (MTC) 2009 Regional Transportation Plan (RTP)(Transportation 2035) as project number 230326.

Planning efforts that have led to the development of the project began in the late 1980s. The following is a summary of those planning efforts as well as projects developed through those planning efforts:

1989: MTC and the Sacramento Area Council of Governments (SACOG) completed the Strategic Transportation Planning Study. The Strategic Planning Study was a joint study of the regional I-80 corridor that forecasted long-term congestion on I-80 in Solano County.

1996: MTC completed the Interstate 80 Corridor Study, which advanced a long term multi-modal strategy and investment plan for improving mobility in the I-80 corridor.

2001: STA completed the I-80/I-680/I-780 Major Investment Study (MIS), Segment 1 – I-80/I-680/SR12 Tier 2 Evaluation Report. The I-80/I-680/I-780 MIS provided a set of projects to improve traffic flow on all of the major Solano County freeways.

2001: The California Highway Patrol (CHP) in cooperation with Caltrans prepared the Weigh Station Inventory of Needs report. This report identified the Cordelia Truck Scales as a candidate scale facility needing major improvements.

2002: Caltrans, in cooperation with STA submitted a Transportation Congestion Relief Program (TCRP) application. The application also served as the Project Initiation Document (PID) for the I-80/I-680/SR12 Interchange Project.

2003: FHWA, Caltrans and the STA began scoping for the EIS/EIR for improvements to the I-80/I-680/SR-12 interchange.

2004: STA completed the I-80/I-680/I-780 Major Investments and Corridor Study, Final Report, which developed a long-range, multimodal transportation plan for the I-80, I-680 and Interstate 780 (I-780) corridors in Solano County. The study made recommendations for near-term (funded), mid-term, and long-term improvements, including the relocation of the Cordelia Truck Scales, along the I-80/I-680/I-780 corridors.

2004: STA completed the I-80/I-680/I-780 Transit Corridor Study, Final Report, which provides an analysis of existing transit service and demand, implementation plans for the County's intercity express bus services and auxiliary facility improvements, such as direct access ramps to center median HOV lanes, park and ride and transit center site planning.

2005: STA completed the Cordelia Truck Scale Relocation Study in cooperation with the CHP and Caltrans to identify potential sites along the I-80, Interstate 505 (I-505) and SR 12 (East) corridors that could satisfactorily accommodate the relocation of the existing truck scales located in the I-80/I-680/SR-12 interchange. The study documented the screening of the various options and recommended that the truck scales be relocated within the I-80 / I-680 / SR-12 interchange approximately 0.5 miles east of the existing scale location.

2007: STA and Caltrans adopted a Project Report for the I-80 HOV Project: Red Top Road to Air Base Parkway. The HOV project adds an HOV lane in both directions on I-80 through the entire length of the proposed interchange project and to the east to Air Base Parkway. Construction of the HOV lanes started in 2008 and was completed in late 2009. The related I-80 ramp metering project started construction in 2011 and upon completion installed equipment at the following interchanges: eastbound on ramps at: Red Top Road, SR12 (Jameson Canyon Road) Connector, NB I-680 Connector, Suisun Valley Road, Abernathy Road, Auto Mall Parkway, Beck Avenue/West Texas Street, Travis Boulevard and Air Base Parkway and westbound on ramps at: Waterman Boulevard, Travis Boulevard (diagonal and loop on ramps), Rockville Road/West Texas Street, Abernathy Road, and SR 12 Connector.

2008: In 2008 the I-80 Eastbound Cordelia Truck Scales Project was identified as a separate project with independent utility and logical termini. The EIR/EA for this project was completed in October 2009. RTL was completed in May 2011. Construction is anticipated to start in early 2012.

2008: Caltrans adopted a Project Report for the SR12 Jameson Canyon Road Widening and Median Barrier project. The project has two parts. Phase 1 will widen SR12 (West) between Kelly Road in Napa County and Red Top Road to a four lane highway with median barrier. Subsequent phases will construct the SR12/State Route 29 (SR29) Interchange. Phase 1 is fully funded and is expected to be constructed between 2013 and 2015.

2009: The Solano Highways Operations Study was developed cooperatively under the direction of the Solano Highways Partnership (SoHIP) consisting of representatives from Caltrans (Districts 3 and 4), MTC, STA, and the Cities of Benicia, Dixon, Fairfield, Vacaville and Vallejo. Under this study, operational improvements and recommendations for long range Intelligent Transportation System (ITS) including ramp metering, closed circuit television cameras (CCTV), vehicle detection and highway advisory radios are presented. A draft was circulated in July 2009, with open houses held July 28 and 29, 2009. It identifies a series of prioritized operational improvements to the I-80, I-680, and I-780 corridors by 2015 and 2030. On February 10, 2010, the STA Board adopted the Solano Highways Operations Study.

2010: Caltrans, with support provided by the STA, prepared a Draft EIR/EIS for the project. It was publically circulated on August 9, 2010. A public meeting was held September 23, 2010. Comments received through October 11, 2010. On July 14, 2010, the STA Board unanimously identified Alternative C, including Phase 1, as the Locally Preferred Alternative.

B. COMMUNITY INTERACTION

There have been several public meetings and open houses providing information on the project including the following:

- March 2003 – Informational Open House to update the community on the status of various projects in the I-80/I-680/SR12 interchange area. This meeting also provided details from the MIS and the transit corridor studies for the I-80/I-680/I-780 freeway corridors.
- May 2003 – Scoping meeting to receive input on the scope of the environmental studies.
- April 2007 – Property owner meeting for owners and tenants of properties and businesses in the vicinity of Alternative C (Cordelia Industrial Park).
- April 2007 – Information Open House to provide an update on the alternatives development and screening process and plan to carry two alternatives forward into detailed technical studies (Alternatives B and C).
- March 2009 - Caltrans and STA, in coordination with FHWA, hosted an Information Open House on the I-80/I-680/SR12 interchange project on the evening of Tuesday, March 17, 2009. The meeting was held at Nelda Mundy Elementary School in Fairfield, and approximately 16 people attended the meeting. The purpose of the March 2009 Open House was to present information about the fundable Phase 1 alternatives for full build Alternatives B and C. The Phase 1 alternatives represent the fundable first phase of each of the full build Alternatives during the RTP timeframe through 2035. Information for proposed improvements on SR12 (East) was also presented at the meeting. Caltrans and STA staff were on hand to answer questions from the public.
- September 23, 2010 - Caltrans and STA hosted an Informal Open House. All attendees were encouraged to submit written and/or verbal comments. A court reporter was provided at the open house to accept verbal comments. Caltrans considered all comments received in preparing the Final EIR/EIS. A total of eight comments were submitted during the open house. Written and verbal comments are as follows:

Alternative Considerations/Property Impacts

- Support was expressed for Alternative C as the more viable solution to current noise and congestion issues and for meeting anticipated future traffic demands.
- Support was expressed for Alternative C as having less of an impact on local businesses in the project area.
- Concern was expressed regarding timing of the final decision on which alternative would be constructed and overall impact on the marketing and sale of property in the project area.
- Concern was expressed regarding the potential property impacts involved regardless of which Alternative is chosen.

- Concern was expressed regarding specific property impacts like dust and water contamination.

Traffic/Safety

- Support was expressed for a wider overpass at Green Valley Road and an off ramp at Suisun Valley Road.
- Safety improvements for pedestrian access were also suggested.
- Concern was expressed regarding the traffic flow on Lopes Road at the intersection of Fulton Drive and whether the proposed u-turn was satisfactory to meet existing traffic demand.

Additional meetings where information about the I-80/I-680/SR12 interchange project was provided include the following:

- December 2006 – North Connector Project Public Meeting
- October 2007 – North Connector Project Public Hearing
- February 2008 – North Connector Project Public Hearing
- May 2008 – I-80 Eastbound Cordelia Truck Scales Relocation Project Scoping Meeting
- July 2009 - I-80/I-680/I-780 Corridor Highway Operations Implementation Study, two Open Houses

The I-80/I-680/SR12 interchange project has also distributed a 4-page newsletter with project information, updates, milestones, meeting opportunities and how to learn more about the project. The newsletter has been timed to coincide with meetings or other related project milestones and as an additional means for the public to stay informed about the project's progress. To date, seven newsletters have been distributed at the following times:

- February 2004
- October 2004
- April 2006
- June 2007
- May 2008
- March 2009
- August 2010

C. EXISTING FACILITY

US 40 highway was improved to become Interstate 80 between Cordelia and Fairfield in the early 1960's; widening the highway to 4 lanes in each direction, and constructing the truck scales and interchanges at I-680, Green Valley Road, Suisun Valley Road and Abernathy Road. I-680 was completed between Benicia and Cordelia in 1966. The interchange between SR12 (West) and I-80 was rebuilt in 1968; at the same time I-80 was widened to 4 lanes in each direction between American Canyon Road and I-680.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
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PM SR12 (East) L1.8 – R4.8
Program Code HE11

SR12 (East) was rebuilt as a four lane expressway on its current alignment bypassing central Fairfield between 1984 and 1988. Auxiliary lanes were added in each direction of I-80 between I-680 and SR12 (East) in 2004 along with repaving of the entire freeway. In 2008 a truck climbing lane was added to westbound SR12 (West) from I-80 to west of Red Top Road. In 2009 HOV lanes were constructed on I-80 in each direction between Red Top Road and east of Air Base Parkway (EA 04-0A5314).

Because of the geographical extent of the project, the project area is divided into three segments: western, central, and eastern (Attachment B, Figures B1-1 through B1-3). The western segment begins just west of the I-80/Red Top Road interchange and ends at the I-80/Suisun Valley Road interchange and includes I-680 north of the Gold Hill Road interchange and just over 1 mile of SR12 (West) (Jameson Canyon Road) west of I-80. The central segment begins at the I-80/Suisun Valley Road interchange and ends at the I-80/Abernathy Road interchange and the SR12 (East)/Chadbourne Road interchange. The eastern segment begins at the SR12 (East)/Chadbourne Road interchange and ends at the Fairfield Overhead where SR12 (East) crosses over the Union Pacific Railroad (UPRR) and Main Street in Suisun City.

1. WESTERN SEGMENT

I-80 West of the Project

I-80 west of Red Top Road is an eight lane freeway, with each direction of traffic on separate roadbeds and independent profiles as it passes through the hills between Vallejo and Fairfield. The freeway includes 12 foot wide lanes with 10 foot outside shoulders and 8 foot inside shoulders. The separate profiles end at the western project limits where there is a 36 foot wide median, including inside shoulders. The roadway was repaved in 2008/9 from American Canyon Road to Green Valley Road (04-SOL-80 PM 8.1/12.9 EA 2409U).

I-80 within the Western Segment

Existing I-80 through the western segment is a ten lane freeway plus auxiliary lanes east of the I-680 connectors, including eight mixed flow lanes and two High Occupancy Vehicle (HOV) lanes.

I-80 typically has five lanes in each direction (11.8 foot HOV lane, three 10.8 foot mixed flow lanes and one 11.8 foot lane) west of I-680. East of I-680 there is an additional 11.8 foot wide auxiliary lane in both directions. Adjacent to the HOV lanes, the median varies in width from 5.3 feet to 22 feet (with a typical concrete barrier and inside shoulders in certain areas as small as 1 foot). West of Red Top Road, there is a 36 foot wide median. The outside shoulders are typically 10 feet.

The HOV lanes in both directions are contiguous with the through mixed flow lanes. Monday through Friday, HOV lane traffic is restricted to vehicles with two or more persons and motorcycles and permitted fuel efficient vehicles between

5:00 am to 10:00 am and 3:00 pm to 7:00 pm. Outside of these periods the HOV lanes are open to mixed flow traffic.

The existing interchanges on I-80 within the western segment are as listed below. (the type code in italics and parenthesis after each interchange type description is the Caltrans Interchange Type code from the Caltrans Highway Design Manual).

- **I-80/Red Top Road Interchange:** The existing I-80/Red Top Road interchange is a tight diamond configuration (*Type L-1*) with one lane on and off ramps in both the eastbound and westbound directions of I-80. This is the westernmost local road connection in the project limits.
- **I-80/SR12 (West) interchange (Jameson Canyon Road):** The existing I-80/SR12 (West) interchange is a two leg directional configuration (*Type F-8*) terminal junction for SR12 (West) into I-80 with one lane direct ramp connections from eastbound SR12 to eastbound I-80 and from westbound I-80 to westbound SR12 only. Traffic connection from SR12 (West) to I-80 west is made via a local road connection (Red Top Road) to the I-80/Red Top Road interchange.
- **I-80/Green Valley Road interchange:** The existing I-80/Green Valley Road interchange is a modified one quadrant interchange connecting to eastbound I-80 with one lane off ramp and an oblong loop on ramp via a collector-distributor road (*partial Type L-7*). In the westbound direction there is a one lane diagonal on ramp to westbound I-80 (*partial Type L-2*) but no direct off ramp from I-80. Access to this interchange from westbound I-80 is made via the Suisun Valley Road off ramp and then a local road connection (Neitzel Road). The Green Valley Road interchange also provides access to I-680. There is a one lane diagonal ramp providing direct access from the eastbound collector-distributor road to southbound I-680. There is a one lane hook off ramp from northbound I-680 to Central Way providing access to Green Valley Road via Cordelia Road.
- **I-80/I-680 interchange:** The existing I-80/I-680 interchange is a standard trumpet configuration (*reverse Type F-6*) freeway terminal junction for I-680 into I-80 with connection emphasis on the northbound I-680 to eastbound I-80 (and reverse) traffic movement which is the primary commute route. Northbound I-680 connects to eastbound I-80 with a two lane diagonal direct connector which merges with the eastbound Green Valley Road collector-distributor road just prior to merging onto eastbound I-80. The eastbound I-80 to southbound I-680 connection is made from the Green Valley Road collector-distributor road via a one lane diagonal ramp to southbound I-680. In the westbound direction, the westbound I-80 to southbound I-680 connector is a two lane “flyover” ramp. Northbound I-680 connects to westbound I-80 via a one lane, tight loop on ramp.
- **I-80/Suisun Valley Road interchange:** The existing I-80/Suisun Valley Road interchange is a modified, partial diamond interchange (*Type L-2 eastbound, partial Type L-8 westbound*) with a two lane diagonal off ramp from eastbound I-80 and a one lane diagonal on ramp to eastbound I-80. In

the westbound direction, there is a one lane modified loop off ramp from westbound I-80 to Suisun Valley Road and Neitzel Road. Access from Suisun Valley Road to westbound I-80 is made via local road connection (Neitzel Road) to the Green Valley Road interchange on ramp.

I-680 South of the Project

Existing I-680 south of the project limits is a four lane freeway. It has 12 foot wide lanes with 10 foot outside shoulders, 5 foot inside shoulders and a 46 foot wide median (including shoulders).

The existing I-680/Gold Hill Road interchange is a full diamond interchange (*Type L-2*) with one lane on and off ramps in both the northbound and southbound directions of I-680. The project limits are at the southbound off ramp diverge and northbound on ramp merge areas.

I-680 within the Project Limits

Existing I-680 through the project limits is a four lane freeway with 12 foot wide lanes with 10 foot outside shoulders, 5 foot inside shoulders and a 46 foot wide median (including shoulders).

There are no interchanges within the project limits, other than the one with I-80 (see discussion of I-80 for description of that interchange).

I-680 crosses over the UPRR and Cordelia Road. The Cordelia Overhead has separate structures for each direction of I-680, each with a 37 foot wide roadway (5 foot inside shoulders, two 12 foot lanes and an 8 foot outside shoulder).

SR12 (West) West of the Project

Existing SR12 (West) west of the project consists of a two lane conventional highway with a 12 foot wide lane in each direction and shoulders varying between 2 and 8 feet wide.

SR12 (West) within the Project Limits

Within the project limits existing SR12 (West) is a conventional highway in mountainous terrain with two 12 foot westbound lanes and a single eastbound 12 foot lane. A second westbound lane was opened in late 2008 as a truck climbing lane. It ends near the western limit of the project. It will be extended to the west as part of the Jameson Canyon widening project. The truck climbing lane starts on the connector from westbound I-80.

There is an at grade “T” intersection with Red Top Road. It has:

- Two westbound through lanes;

- A westbound left turn pocket;
- One through eastbound lane; and
- A single northbound lane on Red Top Road, with stop control.

The profile includes a 430 foot crest vertical curve with nonstandard stopping sight distance at the western limits of the interchange project. There is also a nonstandard 200 foot long sag vertical curve and a second nonstandard crest vertical curve (320 feet long) within the project limits. Profile grades for SR12 (West) are as great as 6.6% within the interchange project limits.

An existing paved bike path along the north side of the westbound connector from I-80 to the Red Top Road intersection provides bicycle access between Jameson Canyon Road and the portion of Fairfield north of I-80 in the Cordelia area. It does not meet Class I bikeway standards.

2. CENTRAL SEGMENT

I-80 in the Central Segment

Existing I-80 in the central segment is a twelve lane freeway including auxiliary lanes between the I-680 connectors and the SR12 (East) connectors. This includes an HOV lane in each direction.

In 2009 I-80 had six lanes in each direction (11.8 foot HOV lane, three 10.8 foot mixed flow lanes and two 11.8 foot lanes). East of SR12 (East) there is one less 11.8 foot wide mixed flow lane. The median varies in width from 5.3 feet to 22 feet (with a typical concrete barrier and inside shoulders in certain areas as small as 1 foot). The outside shoulders are typically 10 feet, but at limited locations, such as adjacent to the westbound truck scales, as little as 3.3 feet.

The HOV lanes in both directions are contiguous with the through mixed flow lanes. Monday through Friday, HOV lane traffic is restricted to vehicles with two or more persons and motorcycles and permitted fuel efficient vehicles between 5:00 am and 10:00 am and 3:00 pm to 7:00 pm. Outside of these periods the HOV lanes are open to mixed flow traffic.

The median concrete barrier is replaced with a double thrie beam barrier where the freeway crosses floodplains.

I-80/Cordelia Truck Scales

The existing truck scales on I-80 serve both the eastbound and westbound directions of I-80. Existing truck scales on each side of the freeway are accessed by one lane off and on ramps in each direction (*Type L-1 with no overcrossing*).

Eastbound Cordelia Truck Scales: The existing eastbound Cordelia Truck Scales were constructed in 1958. They are being replaced by a separate project

04-SOL-80/680/12 Interchange
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and are technically outside the scope of the 80/680/12 Interchange project. See the discussion about related projects in this document.

Westbound Cordelia Truck Scales: The existing westbound Cordelia Truck Scales were constructed in 1958. The westbound facility consists of two dynamic and one static scale, four inspection bays and provides limited parking. There is a single lane off ramp to the westbound Cordelia Truck Scales. There is a single lane on ramp with a 700 foot acceleration lane.

I-80/SR12 (East) Interchange

The existing I-80/SR12 (East) interchange is a two leg directional (*Type F-8*) terminal junction for SR12 (East) into I-80 with two lane ramp direct connections from eastbound I-80 to eastbound SR12 and from westbound SR12 to westbound I-80 only. SR12 (East) traffic connections to I-80 (East) are made via Chadbourne Road and the I-80/Abernathy Road interchange. There is an existing eastbound auxiliary lane on I-80 between the I-680 on ramp and the SR12 off ramp. There is also an existing westbound auxiliary lane on I-80 between the SR12 on ramp and the I-680 off ramp.

I-80/Abernathy Road (Suisun Parkway) interchange

The existing I-80/Abernathy Road interchange is a full diamond interchange (*Type L-2*) with one lane on and off ramps in both the eastbound and westbound directions of I-80.

I-80 East of the Project

I-80 east of Abernathy Road (Future Suisun Parkway) is a 10 lane freeway with four mixed flow lanes and a contiguous HOV lane in each direction. There are 12 foot mixed flow and HOV lanes, a 12 foot wide median (including 5 foot inside shoulders and concrete barrier) and 10 foot outside shoulders. Current weekday peak hour traffic volumes reach 6800 pcph (AM westbound) and 7100 pcph (PM eastbound).

The HOV lanes in both directions are contiguous with the through mixed flow lanes. Monday through Friday, HOV lane traffic is restricted to vehicles with two or more persons and motorcycles and permitted fuel efficient vehicles between 5:00 am and 10:00 am and 3:00 pm and 7:00 pm. Outside of these periods HOV lanes are open to mixed flow traffic.

3. EASTERN SEGMENT

SR12 (East) within the Project Limits

Existing SR-12 (East) through the project limits is a four lane freeway from I-80 to east of Chadbourne Road. East of there it continues as a four lane expressway.

It typically has two 12 foot wide lanes, 8 foot outside shoulders, and a 30 foot paved median (with concrete barrier or metal beam guardrail and 14 foot paved shoulders). East of Pennsylvania Avenue the median is 12 foot wide (with concrete barrier and 5 foot shoulders). There is also an auxiliary lane in each direction between the Jackson Street/Webster Street ramps and the Civic Center Boulevard ramps.

The existing interchanges and intersections on SR12 (East) within the project limits are as listed below.

- **SR12 (East)/Chadbourne Road Interchange:** The existing SR12 (East)/Chadbourne Road is a tight diamond interchange (*Type L-I*) with one lane on and off ramps in both the eastbound and westbound directions of SR12. Chadbourne Road becomes Abernathy Road just north of SR12 (East).
- **SR12 (East)/Beck Avenue Intersection:** The existing intersection at SR12 (East) and Beck Avenue is signalized and has two through lanes and single lane left turn pockets on each approach. There are also free right turn lanes in each direction. Some queuing is experienced during both peak periods, in the peak directions (westbound in the AM and eastbound in the PM). It does not extend back to I-80 in the PM peak.
- **SR12 (East)/Pennsylvania Avenue Intersection:** The existing intersection at SR12 (East) and Pennsylvania Avenue is signalized and it has two through lanes and a left turn pocket on each approach from SR12 (East). Southbound Pennsylvania Avenue has a left, through-left and a right turn lane. Northbound Pennsylvania Avenue has one lane plus a left turn pocket. Free right turns are provided from each approach from SR12 (East). Some queuing is experienced during both peak periods, in the peak directions (westbound in the AM and eastbound in the PM).
- **SR12 (East)/Webster Street/Jackson Street Interchange:** The existing SR12 (East)/Webster Street/Jackson Street interchange is a modified trumpet interchange (*Type L-II*) with single lane on and off ramps. The eastbound ramps pass under SR12 (East) and connect to Webster Street north of the expressway. The westbound ramps connect to Jackson Street, one block west of Webster Street. The Webster Street undercrossing at SR12 (East) is 300 feet west of the SR12 (East) overhead over the UPRR.

SR12 (East) East of the Project

SR12 (East) immediately east of the project continues with the same basic cross section; two 12 foot wide lanes, 8 foot outside shoulders, and a 12 foot paved median (with concrete barrier and 5 foot paved shoulders.) The third eastbound lane, or auxiliary lane, ends at the Civic Center Boulevard off ramp at the eastern end of the UPRR overhead.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
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Program Code HE11

The UPRR overhead is immediately east of the project limits where SR 12 (East) crosses over the UPRR. Immediately east of the UPRR overhead is the Civic Center Boulevard/Main Street interchange in Suisun City.

4. NEED AND PURPOSE

A. PROBLEM, DEFICIENCIES, JUSTIFICATION

1. Project Purpose

The proposed project is intended to address numerous existing and future traffic-related problems while minimizing environmental impacts to sensitive habitat in the vicinity of the project, including the Suisun Marsh. Specifically, the purpose of the proposed project is to:

- Reduce congestion through the I-80/I-680/SR12 interchange complex.
- Reduce the amount of cut-through traffic on local roads.
- Accommodate current and future truck volumes on highways.
- Facilitate adequate inspection and enforcement at truck scales.
- Improve safety conditions.
- Encourage the use of high-occupancy vehicle lanes and ridesharing.

2. Need for Project

The current I-80/I-680/SR12 interchange complex was constructed approximately 40 years ago. Since the 1960s, the San Francisco Bay Area (Bay Area) and Northern California region have experienced rapid population growth, resulting in substantial increases in regional traffic and truck traffic passing through which results in congestion, delays, and unacceptable levels of service (LOS). The project will address these related deficiencies:

- **Traffic Congestion:** Current traffic volumes along segments of I-80 and I-680 in the project area create heavy traffic congestion with an average travel speed of 46 miles per hour (mph) during the morning peak period and 33 mph during the afternoon peak period. These average speeds are well below the threshold of 59.7 mph identified by the Highway Capacity Manual as the minimum operating speed associated with acceptable mainline freeway operations (Fehr & Peers 2009).
- **Traffic Diverting to Local Roads:** It is estimated that up to 1,450 vehicles (PM peak hour) currently divert from the northbound I-680 to eastbound I-80 connector to alternate routes to bypass the congestion and re-enter eastbound I-80 or eastbound SR12 at locations east of the bottleneck location (Fehr & Peers 2009). This cut-through traffic creates a series of problems along the local street system such as increase of congestion and delay on local roads; reduction of accessibility for local properties and increase of delay for transit and emergency service vehicles.

- **Truck-Related Congestion:** The truck scales are located on the most congested freeway segment in Solano County. Trucks slowing to enter the short (approximately 500 feet) off-ramp to the scales, and accelerating to enter I-80 on the short on-ramp from the scales, exacerbate the congestion problem, as do trucks queuing onto the mainline from the short off-ramp to the facility.
- **Unreliable Freight Transport:** Travel times for truck trips are unpredictable due to queues and congestion. This unpredictability will be exacerbated in the future by the general growth of traffic.
- **Traffic Safety:** High vehicle and truck volumes, short merge and diverge maneuvers, short distances between interchanges, and trucks queuing on the entrance ramp all contribute to safety concerns in the area.
- **Logical Termini and Independent Utility:** The project would meet the FHWA guidelines for Logical Termini and independent utility:
 - The project has logical termini and is of sufficient length to address environmental matters on a broad scope.
 - Other improvements would not be needed for the proposed project to improve traffic
 - The project does not need to be physically connected or otherwise related to another project to function. Rather, it can function as a separate and independent project.

B. REGIONAL AND SYSTEM PLANNING

1. Identify Systems

I-80 is a transcontinental Interstate facility that is critical to regional and interregional traffic in the San Francisco region. It is vital to commuting, freight, and recreational traffic and is one of the most congested freeway facilities in the region. I-80 serves as the single freeway connection between the San Francisco Bay Area and the Sacramento metropolitan region. It links the Bay Area with recreational destinations in the Sierra and points north via Interstate 505 (I-505) to Interstate 5 (I-5).

The 2009 Regional Transportation Plan 2035 (T-2035) (April 2009), identifies I-80 as a priority corridor and a major gateway Route. It identified the following projects which include components of this 80/680/12 Interchange Project:

- “Improve I-80/I-680/Route 12 interchange, including connecting I-680 northbound to Route 12 westbound (Jameson Canyon), adding connectors and reconstructing local interchanges (Phase 1)”, with reference number 230326.
- “Provide auxiliary lanes on I-80 in eastbound and westbound directions from I-680 to Air Base Parkway (includes a new eastbound mixed-flow lane from Route 12 east to Air Base Parkway)”, with reference number 230468.

- Regional High-Occupancy Toll (HOT) Network:
 - “I-80 in Solano County from Red Top Road to Air Base Parkway — convert HOV lanes to HOT lanes” with reference number 230660;
 - “I-680 in Solano County from Benicia-Martinez Bridge to I-80 — widen to add an HOT lane in each direction” with reference number 230686
 - “I-680/I-80 direct HOT connector in Solano County — widen to add an HOT lane” with reference number 230687; and
 - “With net HOT revenue, fund corridor improvements including transit operating and capital needs, freeway operations, interchanges, roadway maintenance and local access” with reference number 230703.

2. State Planning

The portion of I-80 is identified as a High Emphasis Focus Route within the Interregional Road System (IRRS) and a “Transportation Gateway of Major Statewide Significance” by the 1998 Interregional Transportation Strategic Plan (ITSP). The term Focus Route is phrase-specific to this plan, and represents a route that should be of the highest priority to completion to minimum facility standards in the 20-year period. Focus Routes will serve as a system of high volume primary arteries to which lower volume and facility standard state highway routes can connect for purposes of longer interregional trips and access into statewide gateways. In addition, all Focus Routes are on the National Highway System.

The Governor’s Strategic Growth Plan (2006) calls for an infrastructure improvement program that includes a major transportation component (GoCalifornia). The SGP is based on the premise that investments in mobility throughout the system will yield significant improvements in congestion relief. It calls for transportation infrastructure improvements that are designed to decrease congestion, improve travel times and safety, while accommodating growth in the economy and population.

The Strategic Growth Plan was supported by the passage of the transportation bond (Proposition 1B) in the November 2006 election. The Corridor Mobility Improvement Account (CMIA) was developed as part of Proposition 1B and includes funding for a project(s) in this corridor.

On March 15, 2007, the California Transportation Commission (CTC) adopted Resolution CMIA-P-0607-02. In Sections 2.12 and 2.13 of the resolution, the CTC resolved that “...the Commission expects Caltrans and regional agencies to preserve the mobility gains of urban corridor capacity improvements over time that will be described in Corridor System Management Plans (CSMPs)...” A CSMP is a transportation planning document that will study the facility based on comprehensive performance assessments and evaluations. The strategies are phased and include both operational and more traditional long-range capital

expansion strategies. The strategies take into account transit usage and projections and interactions with arterial network and connection to State Highways. Each CSMP presents an analysis of existing and future traffic conditions and proposes traffic management strategies and capital improvements to maintain and enhance mobility within each corridor. This project will be included in the analysis and development of the I-80 EAST CSMP.

The “I-80/I-680/SR 12 Interchange Improvements (Phase II, III & IV)” and reconstruction of the Cordelia Truck Inspection Facility were reflected in the 2007 - Business, Transportation and Housing (BT&H) Agency and California Environmental Protection Agency (CalEPA) sponsored Goods Movement Action Plan (GMAP).

The “Completion of improvements at the I-80/I-680/Route 12 interchange and relocation of the Cordelia truck scale” is reflected in the 2004 –MTC sponsored Regional Goods Movement Study for the San Francisco Bay Area.

3. Regional Planning

MTC functions as both the regional transportation planning agency - a state designation - and, for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The Commission also screens requests from local agencies for state and federal grants for transportation projects to determine their compatibility with the plan. MTC also has played a major role in building regional consensus among the region's transit systems. State and federal laws have also given MTC an important role in financing Bay Area transportation improvements.

MTC has listed the project in its Transportation 2035 (RTP) as Project 230326 Improve I-80/I-680/Route 12 interchange, including connecting I-680 northbound to SR12 (West) (Jameson Canyon), adding connectors and reconstructing local interchanges (Phase 1). Committed Funds: \$134.4 million (includes RM2 Toll Bridge Program Funds). Discretionary Funds: \$353.5 million. Total: \$487.9 million. Parts of the project would also be components of the HOT Lane program listed by MTC (see Funding discussion in this document).

MTC's Freeway Performance Initiative (FPI), which produced a corridor study in 2008 used as input to the Solano Highways Operations Study, includes a portion of the proposed project.

The relocation of the westbound Cordelia Truck Scales was addressed by STA, in coordination with Caltrans and the CHP, with the completion of the Cordelia Truck Scales Relocation Study (February 2005). This study identified the need to construct replacement scales and evaluated several alternative locations. It

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

was concluded from this study that the best location was within the existing I-80/I-680/SR 12 interchange complex. The relocation of the eastbound Cordelia Truck Scales is proceeding as a separate project; the relocation of the westbound Cordelia Truck Scales is included in the I-80/I-680/SR12 project.

Additionally, STA has addressed regional planning issues as part of their "I-80/I-680/I-780 MIS/Corridor Study." See the discussion below under Local Planning.

4. Local Planning

The I-80/I-680/SR12 interchange project is included as a series of mid-term and long-term projects listed in the STA's "I-80/I-680/I-780 MIS/Corridor Study" (July 14, 2004).

STA and the Solano Highways Partnership have recently drafted a "Solano Highways Operations Plan" (July 2009) which updates these priorities (<http://www.sta.dst.ca.us/studies.html#sohip>). The prioritized improvements are consistent with the proposed interchange project. The Solano Highways Partnership includes Caltrans, STA, MTC, SACOG, Benicia, Vacaville, Vallejo, Fairfield, Dixon and Solano County.

This project area is located within the City of Fairfield, unincorporated Solano County and Suisun City.

The western segment of the project is primarily within the Cordelia portion of Fairfield and unincorporated Solano County. SR12 (West) and the extension of Business Center Drive are in unincorporated areas.

The central segment of the project is primarily within unincorporated Solano County and is currently zoned agricultural. The western end of the central segment near Suisun Valley Road is in the Cordelia section of Fairfield; while the eastern end of the segment including the I-80/SR12 (East) interchange is also in Fairfield. The North Connector (Suisun Parkway) has been aligned with the widening of I-80 to the north and the relocated westbound Cordelia Truck Scales.

The eastern segment of the project is primarily within the City of Fairfield, with the far eastern end in Suisun City. The southerly right of way line of SR12 (East) is the boundary with Solano County between Ledgewood Creek and Jackson Street.

The proposed project alternatives will all be consistent with the Solano County General Plan, once the County issues a Marsh Development Permit for the project. The project encroaches into the Suisun Marsh Secondary Management Area at the proposed new interchange on I-680 for Red Top Road. The project is generally consistent with the goals and objectives included in the Land Use Element of the Solano County General Plan. The project is fully consistent with

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

the land use development patterns and circulation and transportation systems objectives of the Land Use Element.

The project alternatives are consistent with applicable City of Fairfield General Plan land use policies and programs.

The project alternatives are generally consistent with the City of Suisun City General Plan and Downtown/Waterfront Specific Plan. The full build project includes improvements that will improve access to the transit center west of Main Street, as discussed in the City of Suisun City General Plan Downtown/Waterfront Specific Plan.

At its July 14, 2010 meeting, the STA Board unanimously identified Alternative C as the locally preferred alternative and Alternative C, Phase 1 as the locally preferred fundable first phase.

5. Transit Operator Planning

This project will enhance transit operations by adding direct HOV connectors between I-680 and I-80 and improving the HOV lanes to have standard lane and shoulder widths throughout the project limits on I-80. The existing HOV lanes on I-80 are 11.8 feet wide with left shoulders as narrow as 1 foot and other lanes and shoulders narrower than standard. The eastbound truck scales project will improve the section of eastbound I-80 adjacent to that project to have standard shoulders and lanes. Ramp metering with HOV bypasses will typically be provided at the local road on-ramps. In 2011 the City of Fairfield began construction of Phase 1 of a Park and Ride lot along Red Top Road between I-80 and SR12 (West). This facility will replace the existing small Park and Ride lot at Green Valley Road.

6. Other Relevant Planned and Programmed Highway Projects

There are several transportation projects being planned or recently completed in the general project area that are compatible with the proposed I-80/I-680/SR12 interchange project. Projects expected to be completed before construction starts on the I-80/I-680/SR12 interchange project include:

- **North Connector / Suisun Parkway:** The North Connector project is a parallel route to the north of I-80 between Abernathy Road at I-80 on the east to Green Valley Road on the west. The project provides increased east-west capacity and provides an alternative to I-80 for local traffic. Construction of the first phase of the North Connector project from the end of Business Center Drive at Suisun Creek to Abernathy Road (i.e. the new “Suisun Parkway”) was completed in October 2010. The EA for this project was 04 0A5200. Private developers also constructed Business Center Drive from just south of Mangels Boulevard to Suisun Creek in 2010. The overall approved North Connector project includes an extension of Business Center

Drive to the existing intersection of Red Top Road and SR12 (West). That segment is expected to be replaced by the extension of Business Center Drive to the new SR12/Red Top Road interchange proposed by this project. With completion of STA's North Connector-Suisun Parkway project in 2010, the Abernathy Road interchange on I-80 has become the Suisun Parkway interchange. The new Suisun Parkway will conform to what is currently Abernathy Road 75 feet north of the State right of way.

- **I-80 Ramp Metering:** Ramp metering equipment is expected to be added to I-80 on ramps from Red Top Road to Air Base Parkway in 2011 (EA 04-0A5321). This is a child project to the I-80 HOV project and will construct various ramp metering improvements to interchanges within the limits of the HOV project (EA 04-0A5314) (not including the Truck Scales). These ramp metering features are comprised of hardware improvements only. Activation of the ramp metering improvements will require a separate, subsequent Caltrans approval process. Specific ramp metering improvements will be included as part of this related project:
 - **I-80/Red Top Road Interchange:** The eastbound on ramp will be metered, without HOV bypass. Metering is not being added by this related project to the westbound on ramp.
 - **I-80/SR12 (West) Interchange (Jameson Canyon Road):** The eastbound SR12 to eastbound I-80 connector will include two Single Occupancy Vehicle (SOV) metered lanes. There will be a second mixed flow lane 415 feet long in advance of the meter location.
 - **I-80/Green Valley Road Interchange:** The end of the eastbound collector-distributor road (where it joins the northbound I-680 to eastbound I-80 connector) will be metered.
 - **I-80/I-680 Interchange:** The two lane connector from northbound I-680 to eastbound I-80 will be metered without HOV bypass.
 - **I-80/Suisun Valley Road Interchange:** The existing two lane eastbound on ramp will be metered with a third lane for HOV bypass.
 - **I-80/SR12 (East) Interchange** The westbound SR12 (East) to I-80 ramp will have ramp metering features that will include equipment to meter three mixed flow, with no HOV Bypass.
 - **I-80/Abernathy Road Interchange:** The new ramp metering features will include equipment to meter the single mixed flow lane on the westbound on ramp and two lanes (1 SOV and 1 HOV bypass) on the eastbound on ramp.
 - **Other I-80 Interchanges in Fairfield:** The new ramp metering features will include equipment to meter on ramps in both directions at the West Texas Street/Beck Avenue/Rockville Road, Travis Boulevard and Air Base Parkway/Waterman Boulevard interchanges.
- **SR12 (West) Jameson Canyon Widening:** SR12 (West) is being widened to a four lane highway between SR29 in Napa County and Red Top Road (Jameson Canyon) (EA 04-264141). Construction is anticipated to start in

2011. It will widen SR12 (West) to a four lane highway through the rolling and mountainous terrain between SR29 in Napa County and Red Top Road. Construction started in 2012 with anticipated completion in 2013. It will have 12 foot lanes, 8 foot outside shoulders and a 12 foot median (with 5 foot inside shoulders and a concrete barrier). The second phase brings the existing highway to current standards by improving the horizontal alignment and vertical profile. The construction of SR12/SR29 Interchange will be done as a separate contract. The remaining second phase of the SR12 improvements and construction of the interchange at SR12/SR29 are funded through the environmental stage only. Within the scope of the I-80/I-680/SR12 Interchange project the Jameson Canyon project will make limited improvements:

- The second eastbound 12 foot lanes being constructed by the SR12 Jameson Canyon project will end before the Red Top Road intersection.
 - After completion of the Jameson Canyon Widening project it will have two westbound through lanes, a westbound left turn pocket, one through eastbound lane and a single northbound lane on Red Top Road, with stop control. The through eastbound lane being added by the widening project will end 1,400 feet west of Red Top Road. There will be a 500 foot long right turn only lane from eastbound SR12 (West) to Red Top Road.
 - The first phase of the widening project will widen the existing roadway without adjusting the profile. The existing nonstandard vertical curves and grades within the I-80/I-680/SR12 project limits are not being modified by the Jameson Canyon project.
 - The second phase of the Jameson Canyon project, which is funded through the environmental stage only, would bring this section (and some others west of the I-80/I-680/SR12 interchange project limits) to current standard.
-
- **Eastbound I-80 Cordelia Truck Scales Project:** The I-80 Eastbound Cordelia Truck Scales are expected to be relocated 0.5 mile east of its current location by 2013 (EA 04-0A5351). PA/ED was completed in October 2009. Construction started in 2011. The I-80 Eastbound Cordelia Truck Scales project will improve the through eastbound lanes adjacent to the new scales and through the SR12 (East) interchange to have 12 foot wide lanes and 10 foot inside and outside shoulders. That project will also add a 2000 foot long seventh lane to eastbound I-80 through its project limits that will drop at the two lane connector to SR12 (East). The I-80 Eastbound Cordelia Truck Scales Relocation Project includes the following features:
 - The new facility will be a Class B Commercial Vehicle Enforcement Facility (CVEF), which is defined as an independent command facility of the CHP located along a major highway route. The new truck inspection facility will have the capacity to inspect all eastbound I-80 trucks passing

the facility 24 hours per day, seven days a week with the primary focus on inspection of vehicle equipment and loads.

- The CVEF will be constructed utilizing a racetrack configuration layout. The covered inspection areas will have seven bays, which will be able to accommodate long vehicle combinations. The inspection areas will have the capabilities to access the underside of low-clearance vehicles. Elevated structures will be provided to enable inspectors to check the domes and top portions of cargo tanks. One bay can be designated for truck re-inspection.
- The CVEF facility features "Weigh-In-Motion" scales.
- The facility will contain a minimum of four sets of scales to accommodate two lines of empty and loaded trucks.
- There will be a one-lane off ramp providing access to the truck scale facility from eastbound I-80 and braided highway on ramps that provide direct access to I-80 and SR12 (East). The off ramp to the new truck scale facility would utilize the existing off ramp location and geometry, which consists of a single lane exit. The new off-ramp will widen to a two lane facility through the existing truck scale site, and widen to four lanes east of Suisun Creek. The new off ramp will cross over Suisun Creek on a new bridge before entering the new Truck Scale Facility. Truck traffic would be sorted along the approach roadway into the appropriate lane by means of weigh-in-motion scales and signal bridges. Trucks leaving the facility will utilize a new two lane eastbound roadway that splits approximately 1300 feet east of the facility with one lane merging onto eastbound I-80 and the other lane connecting to the eastbound I-80 to eastbound SR 12 (East) Connector.
- As part of the I-80 Eastbound Cordelia Truck Scales Relocation project, the eastbound I-80 to SR12 (East) ramps will be reconstructed and braided with (cross over) new on ramp to I-80 from the eastbound Cordelia Truck Scales.
- **Red Top Road Park and Ride Lot:** The City of Fairfield project will replace the existing Park and Ride Lot at I-80/Green Valley Road with a larger lot at Red Top Road. Construction was completed in 2012.

Other projects expected to be completed by 2035 include:

- **I-80 Improvements through Fairfield:** There is one project programmed in the RTP (T2035) between SR12 (East) and Air Base Parkway. It is auxiliary lanes in both directions between SR12 (East) and Air Base Parkway and an eastbound mixed flow lane (230468).

In a search of projects within the vicinity of the proposed I-80/I-680/SR12 Interchange project, a review of the RTP 2035, 10 Year SHOPP, STIP & Local Plans yields the following projects:

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

STIP PROJECTS:

1. Sol 80 interchange improvement (EA 0A5300)
2. Sol 80 widen existing freeway (EA 0A531)
3. Sol 80 highway planting (EA 0T1631)

SHOPP PROJECTS:

Various SHOPP overlay projects within the project limits on I-80 were completed in 2009:

Pavement Rehab:

- American Canyon Road to I-680 (EA 2409U)(SOL 80 PM 8.1 to 11.5)
- Replacement of eastbound Cordelia weight station scale platform (4A450)(SOL80 PM 14.3).
- Countywide bridge deck rehabilitation program (OE900).
- SR12 (East) to South Putah Canal (EA 4C15U) (SOL80 PM 15.4 to 20.1)

The 2010 SHOPP project list (February 29, 2010) includes one project within the proposed project limits:

- Eastbound Truck Scales Project (EA 0A535) (SOL80 PM 14.3 to 14.4)

The Close-Out list also includes one project adjacent to the proposed project limits:

- I-80, west of Lynch Road to west of Red Top Road, mitigation for EA25901 (25902) (SOL80 PM 9.6).

In addition to the projects listed above, the RTIP (MTC's T-2035) includes the following Bay Area Express Lane Network projects in the I-80/I-680/SR12 Interchange project area:

- I-680/I-80 interchange in Solano County - widen to add an express lane direct connector (portion of funding shown in RTP) (230687). This project is a funding source for the I-80/I-680/SR12 Interchange project.
- I-680 in Solano County from Benicia-Martinez Bridge to I-80 - widen to add an express lane in each direction (230686).
- I-80 in Solano County from Yolo County line to Route 37 - widen to add an express lane in each direction from Yolo County line to Air Base Parkway and from Red Top Road to Route 37 (230659).

C. TRAFFIC

1. Current and Forecasted Traffic

Baseline existing conditions were performed using 2004 conditions. An updated validation of the traffic forecasting and traffic modeling tools was performed in 2008.

Table 3 presents the existing (2004), No Project 2015 and No Project 2035 Measures of Effectiveness.

Table 3. System Wide Measure of Effectiveness

MOE	Existing (2004)	No Project (2015)	No Project (2035)
Vehicle Miles of Travel (Vehicle Miles/Hour)	316,220 AM	449,870 AM	539,445 AM
	334,755 PM	480,410 PM	413,160 PM
Vehicle Hours of Delay (Hours of Delay/Hour)	1,140 AM	1,075 AM	3,695 AM
	1,885 PM	5,100 PM	19,065 PM
Average Network Travel Speed	46 mph AM	51.2 mph AM	41.8 mph AM
	33 mph PM	36.2 mph PM	15.9 mph PM

Note: The study area extends on I-80 from west of Red Top Road to east of Air Base Parkway/Waterman Boulevard and on I-680 south of Gold Hill Road to I-80. The study area also includes SR12 east of Pennsylvania Avenue and west of Red Top Road and all local arterials within the project study area.

Source: "Final Traffic Operations Report t for the I-80/I-680/SR12 Interchange Project Report," Fehr & Peers, June, 2009.

Operational Analysis results are summarized in DEIR/EIS in Section 3.1.6.

Trucks constitute about 5% of the total daily traffic volume.

2. Collision Analysis

Accident data from Caltrans was evaluated within the project limits beginning April 1, 2007 and ending March 31, 2010. Table 4 summarizes the accident data and highlights locations where the actual accident rate exceeds the statewide average.

Table 4. Accident History April 1, 2007 through March 31, 2010

Location	Post Mile	Number of Accidents			Actual Accident Rate (acc/million veh miles)			Average Accident Rate (acc/million veh miles)		
		Total	Fatal	F + I	Total	Fatal	F + I	Total	Fatal	F + I
I-80 – Westerly Project Limit to West Texas Undercrossing	R 10.60 to 17.1	1152	4	375	0.94	0.0003	0.31	0.97	0.010	0.30
I-680 – ½ Mile South of Gold Hill Overcrossing to I-80/I-680 Connector	R9.9 to 13.1	71	0	27	0.43	0.000	0.16	0.96	0.010	0.31
SR12W – ½ Mile West of Red Top Road to SR 12W/I-80 Connector	1.6 to R2.8	47	0	23	1.15	0.000	0.56	1.29	0.029	0.58
SR12E – SR 12E/I-80 Connector to Civic Center Blvd	L1.80 to R4.7	173	0	85	1.37	0.000	0.67	1.14	0.012	0.41
I-80 - Westbound on ramp from Red Top Road	R11.19	2	0	0	0.52	0.000	0.00	0.75	0.002	0.26
I-80 - Westbound off ramp to Red Top Road	R11.49	8	0	2	2.30	0.000	0.57	1.20	0.004	0.42
I-80 - Eastbound off ramp to Red Top Road	R11.17	2	0	1	0.66	0.000	0.33	1.20	0.004	0.42
I-80 - Eastbound on ramp from Red Top Road	R11.51	0	0	0	0.00	0.000	0.00	0.75	0.002	0.26
I-80 - Eastbound Connector from SR12W to Eastbound I-80	R12.26	2	0	1	0.11	0.0000	0.05	0.45	0.004	0.15
I-80 - Eastbound off ramp to Green Valley Road	R12.56	7	0	3	2.01	0.000	0.86	1.20	0.004	0.42
I-80 - Eastbound on ramp from Green Valley Road	R12.92	4	0	2	0.52	0.000	0.35	0.80	0.002	0.26
I-80 - Eastbound Connector from Northbound I-680	R12.92	14	0	5	0.48	0.000	0.17	0.35	0.003	0.11
I-80 - Westbound Connector from Northbound I-680	R12.98	6	0	0	2.56	0.000	0.00	0.65	0.003	0.19

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

Table 4. Accident History April 1, 2007 through March 31, 2010

Location	Post Mile	Number of Accidents			Actual Accident Rate (acc/million veh miles)			Average Accident Rate (acc/million veh miles)		
		Total	Fatal	F + I	Total	Fatal	F + I	Total	Fatal	F + I
I-80 - Westbound on ramp from Green Valley Road	R12.60	6	2	3	0.67	0.000	0.22	0.75	0.002	0.26
I-80 Connector from Westbound I-80 to SR12W	R12.12	1	0	1	0.05	0.000	0.05	0.45	0.005	0.15
I-80 Westbound Connector to Southbound I-680	R13.4	22	0	7	0.75	0.000	0.24	0.60	0.005	0.20

Notes: Shading denotes locations that exceed the statewide average accident rate.

Source: Caltrans TASAS data, 2006 - 2009

As indicated in Table 4, the total accident rates along I-80 between Red Top Road and West Texas Street Undercrossing slightly exceeds the total average rate for similar facilities. The total and fatal+injury accident rates also exceed the statewide average for similar facilities on SR12 (East).

In reviewing the individual accident records the majority of these types of accidents along I-80, I-680 and SR12 (East) were rear-end collisions and approximately 50-60% of the accidents occurred during the peak commute periods, which could be indicative of the congestion observed in these sections. Approximately 45% of the accidents were rear-end type along SR12 (West). As the proposed project is expected to reduce congestion, the rear-end accidents in this section of I-80, I-680 and SR12 would also be expected to be less with the project than without the project.

Table 4 indicates that several ramps experienced actual accident rates higher than the average rates (total and fatality+injury) for similar facilities. In particular, the total and fatality+injury actual accident rates are 1.9 and 1.4 times higher, respectively, for the westbound off ramp to Red Top Road; the total actual accident and fatality+injury actual accident rates are 1.7 and 2.0 times higher, respectively, for the eastbound off ramp to Green Valley Road; the actual fatality+injury accident rate is 34% higher than the average accident rate (fatality+injury) for the eastbound on ramp from Green Valley Road; the total actual accident rate is 3.9 times higher, for the westbound connector ramp from northbound I-680; and the total actual accident and fatality+injury actual accident rates are 37% and 55% times higher than the average accident rate (fatality+injury), respectively, for the eastbound connector ramp from northbound I-680 than average rates.

The proposed improvements will reduce current and projected congestion as well as braid several congested weave movements. Therefore, it is anticipated that construction of the proposed improvements will result in accident rates dropping to, or below, the statewide average for similar facilities.

Currently the westbound Cordelia Truck Scale facility can handle approximately 500 trucks per hour, but the peak can reach as much as 700 trucks per hour based on discussion with the CHP. The trucks back up on the off ramp from I-80. In the past the CHP has then closed the facility to incoming trucks to prevent the queuing from extending back into the I-80 traveled way. This would occur several times a week, sometimes twice a day. Regardless, trucks still need to decelerate in the mainline lanes to get into the truck scale queue, resulting in increased congestion on I-80. The proposed project is expected to increase the processing capacity of the truck scales up to 1,000 trucks per hour and increase the queue capacity, thereby reducing congestion. As a result, the rear-end accidents in this section of I-80 would also be less with the project than without the project.

5. ALTERNATIVES

Two alternatives (Alternatives B and C) each with a corresponding fundable first phase (Alternative B, Phase 1 and Alternative C, Phase 1) were evaluated in the Draft EIR/EIS. Alternatives B and C are full build alternatives addressing comprehensive improvements to the I-80/I-680/SR12 interchange complex; the widening of I-680 and I-80; and the relocation, upgrade and expansion of the westbound truck scales on I-80.

Alternatives B and C differ primarily in the location of the I-80/I-680/SR12 (West) interchange improvements and the new interchanges on SR12 (East). Under Alternative B, the I-80/I-680 and I-80/SR12 (West) interchanges would be improved in place and a single interchange would be constructed on SR12 (East) to serve Beck Avenue and Pennsylvania Avenue. Under Alternative C, I-680 would be realigned to the west to connect with the I-80/SR12 (West) interchange, and two interchanges would be constructed on SR12 (East), one to serve Beck Avenue and one to serve Pennsylvania Avenue.

Both alternatives and both fundable first phases (Phase 1) meet the logical termini criteria and have independent utility. While the fundable first phases (Phase 1) for both alternatives would not address all project needs, they would reduce congestion and cut through traffic on local roads, and improve safety conditions. The fundable first phases (Phase 1) for both alternatives would be usable and function even if the full build project were not constructed.

Identification of the Preferred Alternative

After receiving input and considering all comments provided during the public review period of the Draft EIR/EIS, the Department has identified Alternative C as the preferred alternative under CEQA and its fundable first phase, Alternative C, Phase 1, as the preferred alternative under NEPA.

Alternative C was selected by the project development team (PDT) as their preferred alternative based upon the following reasons:

- Traffic operations of Alternative C would be superior to Alternative B. Alternative C would include all freeway to freeway movements between I-80 and I-680 via direct connectors, whereas Alternative B would not have a direct connector between I-680 (North) and I-80 (West).
- Alternative C would encourage regional traffic to stay off local roads by providing a high-capacity connection from I-680 to SR12 (West)/I-80 (West) that would carry an acceptable level of traffic during peak hours (500 vehicles per hour in 2035). Without this connection, traffic making the same movement using Alternative B would need to use local roads, either Red Top Road (which would pass by Rodriguez High School) or Lopes Road to the Green Valley Road Interchange.
- Alternative C would provide drivers on I-680 with standard, outside-lane entrances/exits to I-80. Alternative B would provide these entrances/exits in the median, potentially increasing driver confusion.
- Alternative C would create relatively less traffic friction (less merging on and off the freeway) in the area between Green Valley and Suisun Valley Roads. Alternative B would leave two partial interchanges [I-80/SR12 (West) and I-80/I-680] that, together with the median-lane I-680 to I-80 merge and the outer lane braided traffic, could lead to greater traffic friction and driver confusion.
- Alternative C would move I-680 away from the residential areas in Cordelia, reducing noise impacts on an existing community and potential impacts to the Village of Cordelia Historic District.
- The environmental impacts of Alternatives B and C would be similar, including impacts to biology, farmland and other areas of environmental concern.
- Alternative C offers more favorable construction phasing and staging opportunities, as it will be constructed on a new alignment. Staging and construction for Alternative B would be more complicated because the improvements would be constructed essentially in the same alignment and existing traffic would need to be accommodated.
- The Alternative C alignment would impact light industrial areas that are relatively less difficult to relocate, whereas the Alternative B alignment would impact freeway commercial areas that are relatively more difficult to relocate.

In addition, construction and operation of Alternative C would affect fewer acres of jurisdictional wetlands than Alternative B. Though the first phase of Alternative C would impact more acres (7.89 acres for Alternative C as opposed to 5.38 for Alternative B), the full build out of Alternative C would impact a total of 22.42 acres of jurisdictional waters, while Alternative B would impact a total of 25.72 acres. Impacts to other biological resources including natural habitats, plant and animal species are similar between both Build Alternatives. The Department consulted with state and Federal resource agencies (including California Department of Fish and Game, US Army Corps of Engineers, US Environmental Protection Agency, US Fish and Wildlife Service, and National Marine Fisheries Service) under the NEPA/404 integration process. In addition to the Department's determination of Alternative C as the Preferred Alternative, the resource agencies concurred that Alternative C would be the least environmentally damaging practical alternative (LEDPA).

No substantial changes were made to Alternative C or Alternative C, Phase 1 resulting from circulating the draft environmental document or from the public hearing process.

A. VIABLE ALTERNATIVES

NO BUILD ALTERNATIVE

The No-Build or No-Project alternative proposes no action at this time. No cost is incurred with this alternative. However, this alternative does not provide a viable solution to the existing congestion caused by the general lack of capacity within the project area. Traffic congestion in the project vicinity would worsen substantially, causing delays of up to six hours and gridlock conditions would force regional traffic onto local roads. Fatal/injury accidents in the project limits, which already exceed the statewide average for similar facilities, are likely to worsen from the increased congestion.

During the AM peak period in 2035 a queue is expected to form at the two lane connector to southbound I-680 from westbound I-80, which would affect all lanes of I-80.

During the PM peak hour in 2035 for the No Project condition, a bottleneck would occur westbound on I-80 between the truck scales and Suisun Valley Road. As a result, a queue would extend back to east of Waterman Boulevard/Air Base Parkway on I-80 and east of Main Street on SR12 (East). More importantly, a bottleneck would develop on eastbound SR12 (East) at the Beck Avenue intersection, constraining the amount of traffic that can exit the project study area and thereby resulting in traffic backing up onto eastbound I-80. This queue would also cause gridlock conditions along Chadbourne and Abernathy Roads, as vehicles are unable to enter SR12 (East) heading eastbound. The queue would extend from Beck Avenue, back onto I-80 and outside the study area to the west and south on I-80, I-680, and SR12 (West). This bottleneck would constrain the amount of traffic exiting the project on eastbound I-80 and thus the freeway downstream of SR12 (East) would operate at Level of Service (LOS) D, as the number of vehicles served is considerably less than the demand (only 40 to 60 percent of the demand).

BUILD ALTERNATIVES

- **Proposed Engineering Features**

- 1. Full Build Alternative**

The following discussion describes the general engineering features of Alternative C and is broken down by western, central and eastern segments discussed in the Existing Facility Discussion above.

Attachment B, Figures B3-1 through B3-3 portray Alternative C, the preferred Project Alternative.

General

I-80 through the project limits will be, at minimum, a ten lane freeway including four mixed-flow lanes and one HOV lane in each direction near the eastern and western ends of the project. Additional auxiliary lanes will be added at various locations. Between I-680 and SR12 (East) the freeway will reach a maximum of 19 lanes.

The cross section for all freeway mainline sections on I-80, I-680, SR12 (West) and SR12 (East), will include 12 feet wide mixed flow, HOV and auxiliary lanes plus 10 feet wide inside and outside shoulders. Freeway to freeway connector ramps will have 12 foot wide lanes, with 10 foot wide right shoulder and 5 foot wide left shoulders. One and two lane local street ramps will have 12 foot wide lanes, with 8 foot wide right shoulders and 4 foot wide left shoulders.

Alternative C would realign I-680 to the west to connect directly with the I 80/SR12 (West) interchange and would braid all of the I-80, I-680, and SR12 freeway-to-freeway connections with the adjacent local interchanges and truck scale access ramps to reduce weaving and merging movements. Separate HOV direct connectors would be provided from I-680 to the median of I-80 east to serve HOV traffic. The abandoned portion of the original alignment of I-680 would be converted to a local street and relinquished to the City of Fairfield.

Freeway and ramp cut and embankment side slopes will typically have 4:1 slopes with 10 feet between the toe of slope and right of way where there is not conflicting existing development or major utilities. Access control will extend at least 100 feet along the local roads from the end of curve returns at the ramp intersections.

Local roads within the state right of way will typically have 12 foot wide lanes with 8 foot wide outside shoulders. These features area also proposed for the new local roadway segments.

Ramp termini intersection signals will be coordinated with nearby local intersections.

Access control will be maintained along the new freeway right of way lines of I-80 and I-680. Access control will be established for the full length of SR12 (West) and SR12 (East) within the project limits.

With the number of contiguous lanes exceeding five on I-80 and the resulting deeper flow depth for rainwater, it is proposed to have the left lanes have standard 2% cross slope and then increase the cross slope of the middle lanes to 2.5% and outer lanes to 3% on sections that have more than five lanes.

I-80 crosses flood plains in this area. Therefore the freeway profile will be set so that the outside shoulders will be above the predictable flood elevations, but no

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

lower than existing outside shoulder elevations. The existing creek bridges on I-80 will be reconstructed to meet the new roadway profile and cross slopes. The new bridges will be clear spans, i.e. they will not have columns in the stream beds. See the discussion in the "Creek and Flood Plain" section for more information.

I-80 east of Suisun Creek would have the same improvements under either alternative alignment, including the new west bound truck scales, with ramps braided with those from SR12 (East) and reconstructed ramps at the Abernathy Road interchange (future Suisun Parkway). The westbound truck scales would be reconstructed and enlarged to the east of the existing scales.

SR12 (East) between I-80 and the UPRR overhead in Suisun City would be widened and upgraded to a 6-lane, plus auxiliary lanes, freeway. A new local / frontage road would be built along the south side of SR12 (East) east of Pennsylvania Avenue, which passes over the UPRR and connects to an extended West Street in Suisun City.

SR12 (East) would have separate interchanges for Beck Avenue and Pennsylvania Avenue. The existing ramps at Jackson Street and Webster Street would be removed and replaced by ramps at the Pennsylvania Avenue interchange.

Western Segment – Mainline Improvements

I-80 would be widened to a minimum of 10 lanes [four mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction] and to a maximum of 19 lanes east of the interchange with I-680. I-680 would be widened to a minimum of six lanes (two mixed-flow lanes and one HOV lane in each direction) and a maximum of eight lanes (three mixed-flow lanes and one HOV lane in each direction).

I-680 would be realigned to the west to connect with SR12 (West). The former alignment of I-680 would be relinquished to the City of Fairfield and become Lopes Road.

The existing bridges over Green Valley Creek on eastbound and westbound I-80 would be replaced with single-span structures and a westbound diagonal off-ramp to Green Valley Road would be constructed (including a bridge crossing Green Valley Creek).

Western Segment – Freeway to Freeway Interchange Improvements

The I-80/I-680/SR12 (West) interchange would be consolidated in the location of the existing I-80/SR12 (West) interchange. Both I-680/sR12 (West) movements would be via direct connectors. These direct connectors would cross over I-80,

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

the UPRR tracks and Fulton Drive before margining/diverging with the connectors between I-680 and the eastern leg of I-80.

The connectors between SR12 (West) (Jameson Canyon) and I-80 to the east would be reconstructed as two lane connectors on the new alignments. These connectors would also be braided with the new ramps for the Green Valley Road/I-80 interchange.

Eastbound I-80 to westbound SR12 (West) and eastbound SR12 (West) to westbound I-80 will use realigned Red Top Road to make those connections, similar to existing.

The existing UPRR underpass at I-80 would be replaced 45 feet west of the existing structure.

I-80/I-680 movements would be via freeway-to-freeway connectors. Motorists' access from northbound I-680 to westbound I-80 would be served by a loop ramp off of the I-680 to SR12 (West) connector. A separate direct connector structure would be provided for HOV traffic between the median of I-680 and the median of the eastern leg of I-80; the two directions would be separated by a barrier. A two-lane mixed-flow connector ramp would cross over the UPRR tracks and local roads and would allow traffic to transfer from northbound I-680 to eastbound I-80. Traffic from eastbound I-80 to southbound I-680 would use a new ramp. A connector would carry traffic from westbound I-80 to southbound I-680 over I-80, the UPRR tracks, Fulton Drive and Lopes Road.

Western Segment – Local Interchange Improvements

There would be a new diamond interchange where the relocated Red Top Road and the extension of Business Center Drive meet at SR12 (West). The existing Red Top Road undercrossing at I-80 would be widened to accommodate additional HOV lanes on I-80 and an additional lane, shoulders, median and sidewalks on Red Top Road. The westbound on- and off-ramps would be realigned.

A new interchange would be constructed at I-680/Red Top Road, which would consist of an extension of Red Top Road, from Lopes Road, to an overcrossing over I-680 connecting to on- and off-ramps. Southbound I-680 on- and off-ramps would be located within the existing curve at Lopes Road. Ramsey Road would be realigned to accommodate the northbound on- and off-ramps, but would not be connected to the interchange. There would be a loop on-ramp to northbound I-680. Access between the interchange and Ramsey Road would not be provided.

Green Valley Road would be realigned and connected with the former location of I-680 south of I-80 to provide access for local residents as well as a north-south arterial. The I-80/Green Valley Road interchange would be reconstructed with a seven lane overcrossing. The westbound on ramp to I-80 and eastbound off ramp

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

from I-80 would be braided with the ramps between I-80 and SR12 (West). Traffic between Green Valley Road and SR12 (West) will use the extension of Business Center Drive instead of the short stretch of I-80 between those two roads.

Western Segment – Local Road Improvements

A new road would be constructed to connect the I-80 Red Top Road interchange with Business Center Drive. Between I-80 and SR12 (West), Red Top Road would be realigned to cross over the UPRR and SR12 (West) approximately 0.25 mile west of the existing SR12 (West)/Red Top Road intersection. From SR12 (West) to Business Center Drive the new road would be an extension of Business Center Drive, originally proposed as part of the overall North Connector project. Construction of the new road would necessitate considerable excavation which would be used as fill in the construction of embankment associated with the project.

Neitzel Road would be removed, when a new off-ramp direct from westbound I-80 to Green Valley Road is constructed.

An undercrossing would be constructed at Lopes Road and I-680. Lopes Road would be realigned westerly between Jameson Creek and Red Top Road. Fermi Drive would be realigned to intersect Lopes Road west of I-680. Between the UPRR overhead and the Green Valley Road overcrossing of I-80, Auto Plaza Court would be extended to provide access to Old Lopes Road/Green Valley Road and Central Way. There would be new at grade intersections on Auto Plaza Court with Old Green Valley Road. Lopes Road (formerly I-680 embankment) and Central Way. Old Lopes Road would have a cul-de-sac between Fulton Drive and Jameson Creek.

Western Segment – Bicycle and Pedestrian Improvements

A Class 1 bike path is included with the extension of Business Center Drive to replace the existing non-standard bike path along the north side of I-80. The I-80/Red Top Road interchange and the I-80/Green Valley Road interchange will include shoulders and sidewalks through the respective interchanges to accommodate bicycle and pedestrian traffic. The I-680/Red Top Road interchange will include shoulders but not sidewalk because it does not connect to local facilities on the east side of I-680 (bicyclists and pedestrians will be prohibited). The SR12 (West)/Red Top Road interchange will include shoulders but not sidewalks, due to lack of pedestrian activity in the area.

Central Segment – Mainline Improvements

There will be 19 lanes on I-80 in the central segment, dropping to 12 lanes at the SR12 (East) interchange. Single span bridges would replace existing bridges over Dan Wilson and Suisun Creeks. Additionally, one new single span bridge would

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

be constructed over Suisun Creek to accommodate traffic from the westbound truck scales.

The westbound truck scales would be relocated to the east of the existing truck scales east of Suisun Creek, and upgraded and expanded. The truck scales' connectivity from SR12 (East) would be improved by a new direct connection from westbound SR12 (East) to the westbound truck scales. The westbound ramp from I-80 to the truck scales would be braided (pass under) the connector from SR12 (East) to westbound I-80.

Central Segment – Freeway to Freeway Interchange Improvements

The I-80/SR (East) interchange would be improved by grade separating the I-80/SR12 (East) connector to westbound I-80 from the off ramp from I-80 into the westbound truck scales. Westbound SR12 (East) would be widened to three lanes and a separate exit into the westbound truck scales facility would be added.

Access from westbound I-80 to eastbound SR12 (East) and from westbound SR12 (East) to eastbound I-80 would continue to be provided by the I-80/Abernathy Road (Suisun Parkway) and SR12 (East)/Chadbourne Road interchanges.

Central Segment – Local Interchange Improvements

The I-80 Suisun Valley Road overcrossing will be rebuilt with four lanes. The Suisun Valley Road interchange on I-80 would be improved, incorporating a loop off-ramp and diagonal on ramp in the westbound direction. Suisun Valley Road would be realigned, and the overcrossing at I-80 would be reconstructed. The eastbound on and off ramps would be reconstructed in a tight diamond configuration.

The Abernathy Road/I-80 interchange would be improved. The existing westbound on ramps would be replaced with a loop on ramp. The existing westbound off ramp would be reconstructed to accommodate the new loop on ramp. This interchange will become the Suisun Parkway/I-80 interchange with completion of the eastern segment of STA's North Connector project.

Central Segment – Bicycle and Pedestrian Improvements

As part of the proposed project, existing Fairfield Linear Park would be reconstructed north of the proposed project prior to construction so that there would be no interruption of use. It would be realigned along the north side of the roadway in the vicinity of the Abernathy Road/I-80 interchange.

The I-80/Suisun Valley Road interchange will include shoulders and sidewalks to accommodate bicycle and pedestrian traffic. The existing I-80/Abernathy Road

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

interchange includes standard shoulders, but no sidewalk. No changes are proposed to the existing bridge.

Eastern Segment – Mainline Improvements

SR12 (East) would be widened from four to six mixed flow lanes (three in each direction), and the at-grade intersection of SR12 (East) with Beck Avenue and Pennsylvania Avenue would be replaced with overcrossing.

To accommodate additional lanes on SR12 (East), two box culverts containing Ledgewood Creek and a drainage canal (Alonzo Drain) west of Ledgewood Creek would be lengthened.

Eastern Segment – Local Interchange Improvements

The Chadbourne Road undercrossing at SR12 (East) would be widened on each side to accommodate additional SR12 (East) lanes.

Alternative C would construct separate interchanges at Beck Avenue and Pennsylvania Avenue. The existing SR12 (East) ramps between Jackson Street and Webster Street (both in Fairfield) would be removed. Jackson Street would terminate at Illinois Street. Webster Street would continue south under SR12 (East) connecting to the proposed south side frontage road west of the proposed UPRR crossing.

A tight diamond interchange, including an overcrossing, would be constructed at Beck Avenue. Elevated two-lane on- and off-ramps would interest the overcrossing of SR12 (East). The Ledgewood Creek box culvert would be lengthened to accommodate the westbound off ramp and eastbound on ramp, as well as additional lanes on SR12 (East).

The interchange at Pennsylvania Avenue would include an overcrossing and loop on ramps in both directions. The westbound off ramp would provide access to northbound and southbound Pennsylvania Avenue.

Eastern Segment – Local Road Improvements

Beck Avenue would be reconstructed on a retaining wall supported embankment between Meyer Way and Diamond Way. Beck Avenue (between Meyer Way and SR12 (East)) would be widened by one through lane northbound.

Pennsylvania Avenue would be reconstructed on fill from 100 feet south of SR12 (East) to Illinois Street. Between Illinois Street and SR12 (East), Pennsylvania Avenue would be widened by one through lane southbound. On the south side of SR12 (East), Pennsylvania Avenue would be widened from one through lane in each direction to two through lanes in each direction.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

Jackson Street would terminate at Illinois Street. Webster Street would continue south under SR12 (East) connecting to the proposed south side frontage road west of the proposed UPRR crossing.

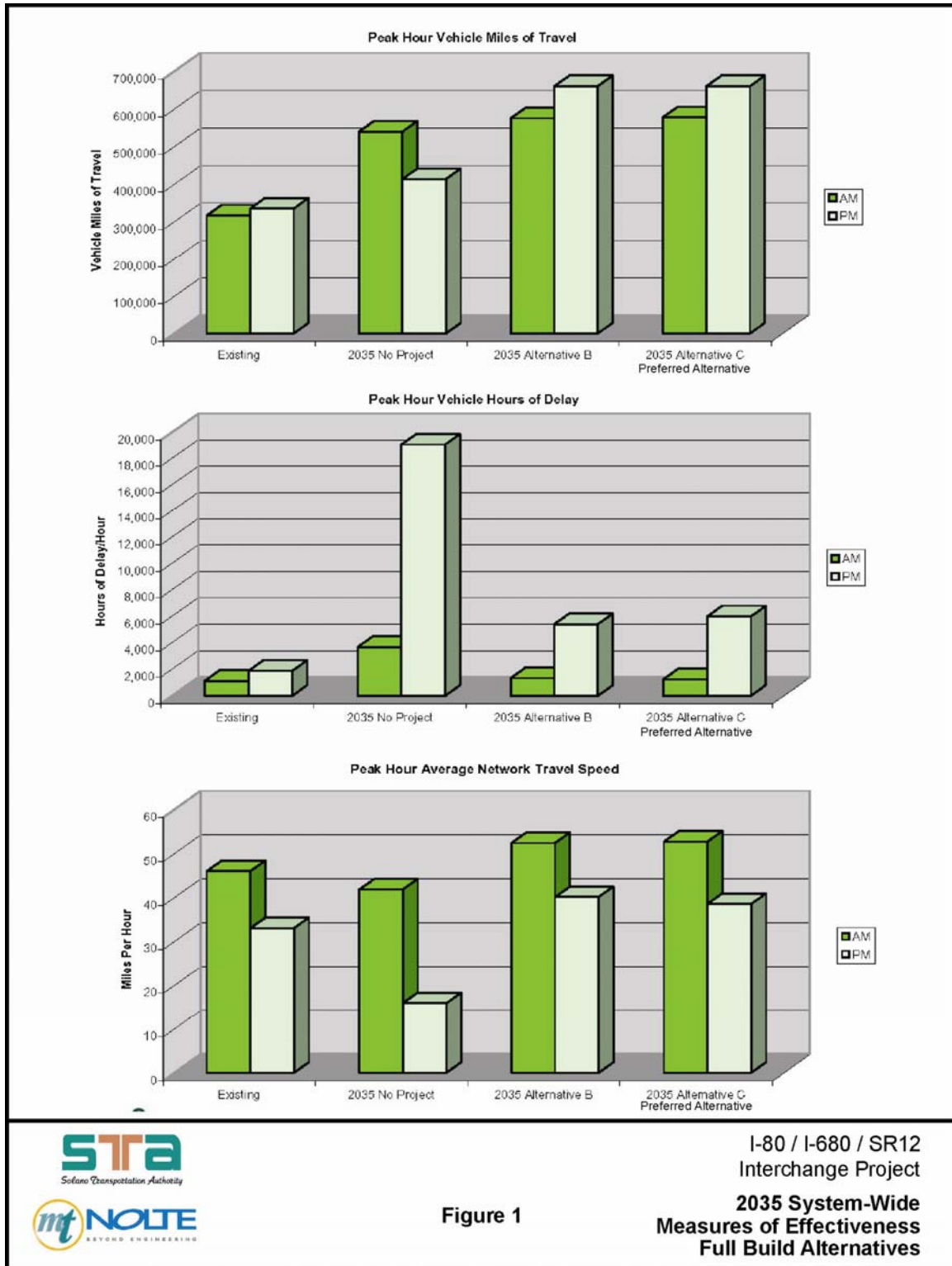
A road located south of SR12 (East) (the eastbound off ramp to Pennsylvania Avenue) would intersect with Pennsylvania Avenue and then cross above the UPRR, connecting to an extended West Street in Suisun City. West Street in Suisun City would be extended from Solano Street north to Spring Street. It would be on an embankment supported by retaining walls to intersect the roadway crossing over the UPRR tracks.

It is FHWA's preference that interstate freeway to interstate freeway interchanges include all movements (connections). Full build Alternative B did not include the NB I-680 to WB I-80 movement (see Section 5. B. Rejected Alternatives for the reasons the movement was not included in Alternative B).

Alternative C will increase capacity over no-build conditions. Figure 1 summarizes the Measure of Effectiveness (MOEs) for the overall project limits for 2035 conditions for the Full Build alternatives in comparison with No-Build. Refer to the "Traffic Operations Report for the I-80/I-680/SR12 Interchange Project Report," (Fehr & Peers, June 2009) for a detailed discussion of the expected traffic volumes, capacities and resulting operations.

Eastern Segment – Bicycle and Pedestrian Improvements

The SR12 (East)/Beck Avenue and SR12 (East)/Pennsylvania Avenue interchanges will include shoulders and sidewalks through the interchange. There will be no bicycle or pedestrian improvements included along SR12 (East). The proposed roadway connecting Pennsylvania Avenue across the UPRR right of way to West Street in downtown Suisun City will include shoulders and sidewalks.



2. Fundable First Phase

The following discussion describes the general engineering features of Alternative C, Phase 1 and is broken down by western, central and eastern segments discussed in the Existing Facilities discussion above.

General

This alternative would improve the connections from westbound I-80 to I-680 and SR12 (West); directly connect northbound I-680 and SR12 (West); connect the I-80/Red Top Road interchange with Business Center Drive; and construct or improve interchanges at SR12 (West)/Red Top Road, I-80/Red Top Road, I-80/Green Valley Road, and I-680/Red Top Road. A third eastbound lane would be added to SR12 (East) from the Chadbourne Road on ramp to the Webster Street off ramp.

Western Segment – Mainline Improvements

Westbound I-80 would be realigned between a point west of Suisun Valley Road to just west of the new combined SR12 (West)/I-680 interchange by constructing a new highway alignment north of the existing highway alignment. The realignment would create space in the median for direct HOV connector ramps to be built between I-80 and I-680 as well as future widening of the eastbound lanes. The realigned westbound I-80 would have six lanes, including an HOV lane and an auxiliary lane matching the existing cross section at the existing Suisun Valley Road overcrossing. Immediately to the west of the Suisun Valley Road overcrossing a seventh lane would be added and an eighth lane added with the on ramp from Suisun Valley Road. A ninth lane would be added immediately west of the Green Valley Road off ramp. The four right lanes would exit from I-80 to connect to SR12 (West) and I-680. There would be a left exit from the HOV lane to an HOV connector to I-680. A wider, single-span bridge would replace the existing bridge over Green Valley Creek. The existing loop on ramp from northbound I-680 to westbound I-80 would be removed. The connector from northbound I-680 to SR12 (West) would be constructed to replace this movement.

The portion of I-680 north of Red Top Road would be realigned.

Western Segment – Freeway to Freeway Interchange Improvements

The I-80/I-680/ SR12 (West) interchange would be consolidated in the location of the existing I-80/ SR12 (West) interchange. The northbound I-680 to SR12 (West) movement would be via a direct connector. This direct connector would cross over I-80, the UPRR tracks and Fulton Drive before merging/diverging with the connectors between I-680 and the eastern leg of I-80.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

I-80/I-680 movements would be via freeway-to-freeway ramps. Motorists' access from northbound I-680 to westbound I-80 would be served by a loop ramp off of the I-680 to SR12 (West) connector. A separate direct connector structure would be provided for HOV traffic between the median of I-680 and the median of the eastern leg of I-80; the two directions would be separated by a barrier. A two-lane mixed-flow connector would cross over the UPRR tracks and local roads and would allow traffic to transfer from northbound I-680 to eastbound I-80. Traffic from eastbound I-80 to southbound I-680 would use a new connector that would run along the west side of the railroad and then over local roads before joining southbound I-680. A connector would carry traffic from westbound I-80 to southbound I-680 over I-80, the UPRR tracks, Fulton Drive and Lopes Road.

The direct connection from SR12 (West) to southbound I-680 would not be built as part of Phase 1. Motorists traveling eastbound on SR12 (West) wishing to go to southbound I-680 would exit SR12 (West) at the proposed SR12 (West)/Red Top Road interchange and continue along Red Top Road to an on-ramp at the new I-680/Red Top Road interchange.

Western Segment – Local Interchange Improvements

The Green Valley Road overcrossing at I-80 would be replaced to accommodate the proposed realignment and widening of I-80 east of the existing overcrossing and to connect to the former location of I-680 south of I-80. The overcrossing would consist of the westerly four lanes of the ultimate seven lane structure. The Green Valley Road/I-80 interchange would have a tight diamond configuration westbound and a partial cloverleaf (loop on ramp) configuration in the eastbound direction. The same interchange and overcrossing would provide access to the existing alignment of I-680 (which will be relinquished as a local arterial, consistent with Alternative C).

A new on-ramp at Green Valley Road would provide access to the new westbound I-80 alignment.

A new westbound on ramp would be added at the existing Suisun Valley Road interchange, along with the removal of Neitzel Road.

An interchange would be built on SR12 (West) with a realigned Red Top Road and an extension of Business Center Drive.

The I-80/Red Top Road interchange would be partially reconstructed to have a westbound exit loop to Red Top Road and SR12 (West), as under the full build alternative.

The I-680/Red Top Road interchange would be constructed as in the full build alternative.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

Western Segment – Local Road Improvements

A new road would be constructed to connect the I-80/Red Top Road interchange with Business Center Drive. Between I-80 and SR12 (West), Red Top Road would be realigned to cross over the UPRR and SR12 (West) approximately 0.25 mile west of the existing SR12 (West)/Red Top Road intersection. From SR12 (West) to Business Center Drive the new road would be an extension of Business Center Drive, originally proposed as part of the overall North Connector project. A Class I bike lane is included with the extension of Business Center Drive to replace the existing one along the north side of I-80. Construction of the new road would necessitate considerable excavation which would be used as fill in the construction of embankment associated with the Project.\

Western Segment - Bicycle and Pedestrian Improvements

An interim bicycle path would be built along the western boundary of the business park at the west end of the existing Business Center Drive parking lot and along the north side of the new connector from westbound I-80 to westbound SR12 (West) to replace the existing bike path from Green Valley Road and I-80 to SR12 (West) (Jameson Canyon) and Red Top Road. This path would be removed when the North Connector roadway (Business Center Drive) including a bike path, is extended to the SR12 (West)/Red Top Road interchange. Caltrans will maintain that portion of the interim bicycle path within State right of way. The City of Fairfield will maintain the portion of the interim path within their jurisdiction.

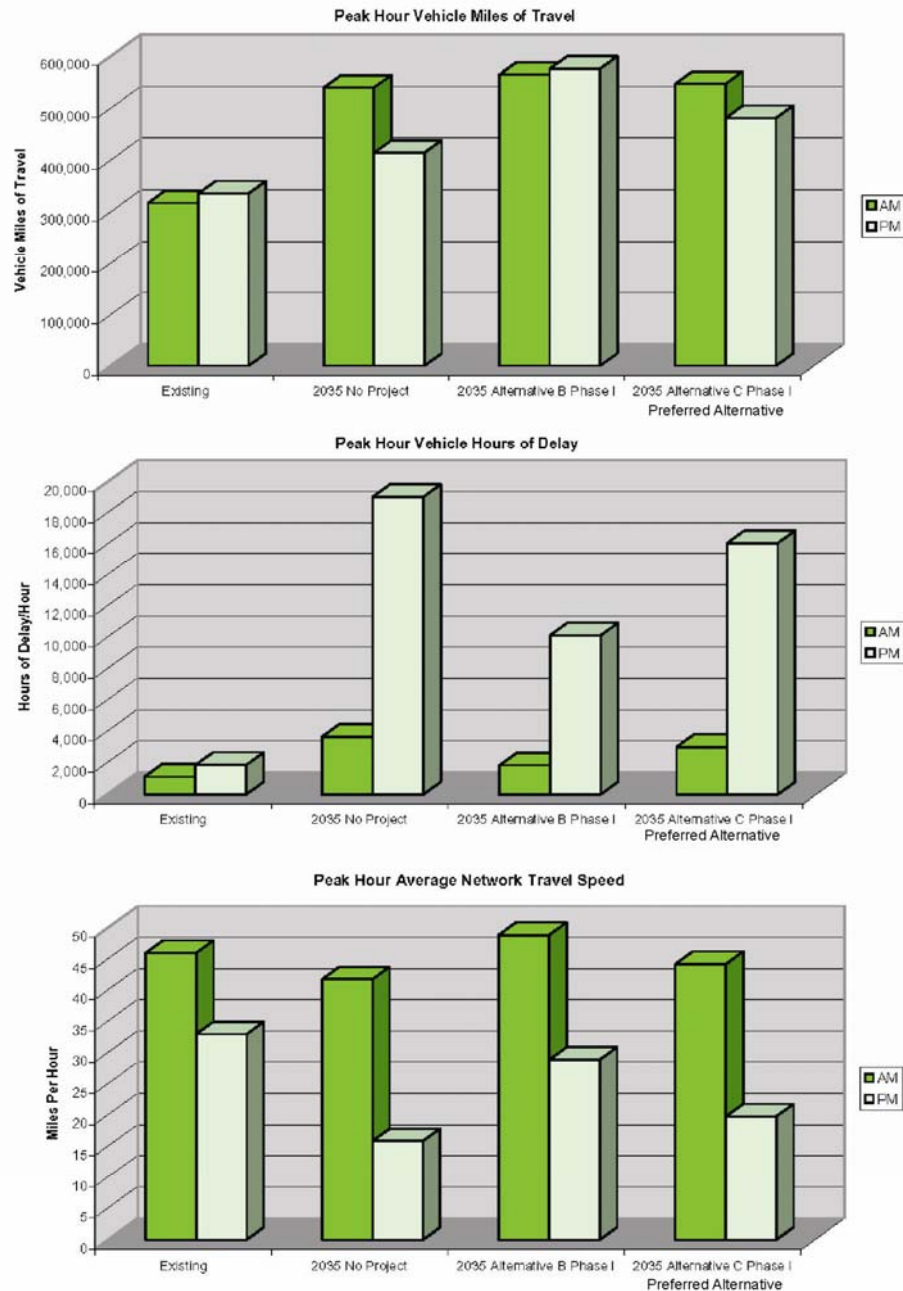
Central – Mainline Improvements

No work in Central Segment for Alternative C, Phase 1.

Eastern Segment – Mainline Improvements

A third lane would be added to eastbound SR12 (East). This lane would connect (start) at the eastbound SR12 (East)/Chadbourne Road Interchange and would extend east connecting and ending at the eastbound SR12 (East)/Webster Street exit.

Alternative C, Phase 1 will increase capacity over no-build conditions, primarily in the PM peak hour. Figure 2 summarizes the MOEs for the overall project limits for 2035 conditions for the Phase 1 alternatives in comparison with No Build. Refer to the "Traffic Operations Report for the I-80/I-680/SR12 Interchange Project Report," (Fehr & Peers, June 2009) for a detailed discussion of the expected traffic volumes, capacities and resulting operations.



04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

- **Nonstandard Mandatory and Advisory Design Features**

Table 5 is a list of proposed exceptions to Mandatory Design Features, indicating which alternatives each applies to. These exceptions were discussed with Mike Thomas, Design Coordinator for the Division of Design.

Caltrans has reviewed and approved the Mandatory Design Standards Exception Fact Sheet for Alternative C, Phase 1 on August 6, 2010. FHWA approved the Mandatory Design Exception Fact Sheet for Alternative C, Phase 1 on March 17, 2011. Caltrans subsequently reviewed and approved a Supplemental Mandatory Design Standards Exception Fact Sheet for Alternative C, Phase 1 on September 14, 2012, 2012. FHWA approved the Supplemental Fact Sheet on October 25, 2012. Caltrans reviewed and approved the Advisory Design Standards Exception Fact Sheets for Alternative C, Phase 1 on October 4, 2012.

FHWA provided a preliminary or conditional approval of the modified access request for Alternative C, Phase 1 on September 20, 2011.

Table 5. Mandatory Design Exception List

Standard for Which Exception is Requested	Affected Alternative	
	Alt C	Alt C, Phase 1
<p>Sight Distance - General (HDM Index 201.1 and Table 201.1): The standard stopping sight distance for a freeway branch connection with a design speed of 50 mph is 430 feet.</p> <p><i>Nonstandard Features</i> Nonstandard sight distances occur at branch connections shown below with our corresponding design speed. Nonstandard sight distances occur adjacent to bridge railings or concrete barrier.</p> <p>a. Along the 1150' radius curve, on the inside lane of the elevated freeway to freeway connector from westbound I-80 to southbound I-680 ("C-680CON3" 158+47 to 180+23; stopping sight distance 320'; design speed 42 mph)</p>	Y	Y
<p>b. Along the 1150' radius curve, on the elevated HOV connector ramp in the southbound direction from westbound I-80 to southbound I-680 ("C-680" 158+94 to 180+45; stopping sight distance 320'; design speed 42 mph)</p>	Y	Y
<p>c. Along the 1150' radius curve, on the elevated HOV connector ramp in the northbound direction from northbound I-680 to eastbound I-80 ("C-680" 158+94 to 180+45; stopping sight distance 380'; design speed 46 mph)</p>	Y	Y
<p>Superelevation - Standards for Superelevation (HDM Index 202.2, Table 202.2, and Figure 202.2): Based on an e_{max} selected by the designer for one of the conditions, superelevation rates from Table 202.2 shall be used within the given range of curve radii. If less than standard superelevation rates are approved (see Index 82.1), Figure 202.2 shall be used to determine superelevation based on the curve radius and maximum comfortable speed.</p> <p>According to Table 202.2 the required superelevation rate along a 400 feet horizontal curve at a ramp is 12%.</p> <p><i>Nonstandard Feature</i></p> <p>a. The proposed superelevation along the 400 foot radius horizontal curve on the westbound I-80 ramp at Suisun Valley Road between Stations 235+43 and 241+77 varies from 5 to 1.5% as the ramp conforms to existing roadway. The radius of the curve is 400 feet and the existing superelevation rate is 1.5%.</p>		Y
<p>b. At Red Top Road/I-80 interchange, the westbound on-ramp from Old Red Top Road ("CP1-RTH1" Line), the proposed maximum superelevation rate is 8%. The maximum superelevation rate should be 12%</p>	Y	Y
<p>Traveled Way Standards - Traveled Way (HDM 301.1): The basic lane width for new construction on two lane and multilane highways, ramps, collector roads, and other appurtenant roadways shall be 12 feet.</p> <p><i>Nonstandard Feature</i> The proposed lane widths for the #2 and #4 lanes along eastbound I-80 between Stations 156+77 and 241+77 [between SR12 (West) to Suisun Valley Road Interchange] are 10.8 feet which matches existing lane widths for these lanes along this stretch of eastbound I-80 which is not being rebuilt in Phase 1.</p>		Y

Table 5. Mandatory Design Exception List

Standard for Which Exception is Requested	Affected Alternative	
	Alt C	Alt C, Phase 1
<p>Traveled Way Cross Slopes (HDM Index 301.2(2)(a)): The standard cross slope to be used for new construction on the traveled way for all types of surfaces shall be 2 percent.</p> <p><i>Nonstandard Features</i> Along westbound I-80 the cross slope along normal crown sections between lanes 6 and 8 from stations "C-80W" 190+00 to 230+00, and between lanes 6 and 7 from stations 230+00 and 239+00 is 2.5%. The cross slope along normal crown sections between lanes 8 and 9/10 along westbound I-80 between stations 190+00 and 215+00 is 3%.</p>	Y	Y
<p>Median Width - Facilities under Restrictive Conditions - Freeways and Expressways (HDM Index 305.1(3)(a): Freeways and Expressways. In areas where restrictive conditions prevail the minimum width shall be 22 feet.</p> <p><i>Nonstandard Features</i> Along SR12 (West) within the project limits, the proposed median width is 12 feet.</p>	Y	Y
<p>Traffic Interchanges – Spacing (HDM Index 501.3): The minimum interchange spacing shall be one mile in urban areas, two miles in rural areas, and two miles between freeway-to-freeway interchanges and local street interchanges.</p> <p><i>Nonstandard Features</i></p>		
a. The spacing between proposed Red Top Road/SR12 (West) interchange and the SR12 (West)/I-80 interchange is 0.6 mile.	Y	Y
b. The spacing between the existing Red Top Road/I-80 interchange and the proposed west SR12 (West)/I-80 interchange is 0.6 mile.	Y	Y
c. The spacing between the proposed Green Valley Road/I-80 interchange and I-680/I-80 interchange is 0.6 mile.	Y	Y
d. The spacing between the proposed Green Valley Road/I-80 interchange and the Suisun Valley Road/I-80 interchange is 0.7 mile.	Y	Y
e. The spacing between Red Top Road/I-680 interchange and I-680/I-80 interchange is 1.2 miles.	Y	Y
f. The spacing between Suisun Valley Road/I-80 interchange and the I-80/I-680/SR12 (West) interchange is 1.3 miles.	Y	Y
<p>Weaving Sections (HDM Index 504.7): <u>The minimum weaving length, measured as shown on Figures 504.2A and 504.2B shall be 2,000 feet in urban areas, and 5,000 feet between freeway to freeway interchanges and other interchanges.</u></p> <p><i>Nonstandard Feature</i></p>		
a. The weaving distance along westbound I-80 between the Suisun Valley Road on ramp and the Green Valley Road exit ramp is approximately 1290 feet.	Y	Y
b. The weaving distance along eastbound I-80 between Red Top Road on ramp and the I-680 south exit ramp is approximately 750 feet.	Y	Y

Table 5. Mandatory Design Exception List

Standard for Which Exception is Requested	Affected Alternative	
	Alt C	Alt C, Phase 1
Access Control (HDM Index 504.8): <u>For new construction or major reconstruction, access rights should be acquired on the opposite side of the local road from ramp terminals to preclude the construction of future driveways or local roads within the ramp intersection.</u>		
<i>Nonstandard Feature</i> a. The westbound ramps at SR12 (East) and Pennsylvania Avenue interchange intersect Pennsylvania Avenue across from the access point for proposed development.	Y	
b. The eastbound ramps at SR12 (East) and Pennsylvania Avenue interchange intersect Pennsylvania Avenue at the same location as the “C-PW CON” line connector road to Webster Street and West Street.	Y	

Table 6 is a list of proposed exceptions to Advisory Design Features, indicating which alternatives each applies to:

Table 6. Advisory Design Exception List

Standard for Which Exception is Requested	Affected Alternative	
	Alt C	Alt C, Phase 1
Selection of Design Speed – (HDM Index 101.1): Where the local facility connects to a freeway or expressway (such as ramp terminal intersections), the design speed of the local facility shall be a minimum of 35 miles per hour. However, the design speed should be 45 miles per hour when feasible:		
<i>Nonstandard Features</i> Nonstandard design speed occurs at various locations shown below with corresponding design speed.		
a. Pittman Road along the 417.30’ radius curve from Station “C-SVR” 10+00 to 12+37.79 with a design speed of 35 mph.	Y	
b. Proposed profile for Suisun Valley Road/Pittman Road at the conform/tie-in to existing Central Way intersection at Station “C-SVR” 10+00 with a design speed of 35 mph.	Y	
c. Abernathy Road where the I-80 ramps tie in at Stations “A D1” 180+41.82 and “A L1” 195+58.84 with a design speed of 40 mph.	Y	
d. At the extension of Old Red Top Road, on the northwest quadrant of the I-80/Red Top Road Interchange, and along the “C-NRT” Line, the design speed of the local roadway has been reduced to 40 mph.	Y	Y
e. SR12E: Pennsylvania Avenue along the 550’ radius curve from Station “C-P” 209+60.15 to 212+09.57 with a design speed of 40 mph.	Y	

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

Table 6. Advisory Design Exception List

Standard for Which Exception is Requested	Affected Alternative	
	Alt C	Alt C, Phase 1
<p>Decision Sight Distance - (HDM Index 201.7 and Table 201.7): <u>On freeways and expressways, the decision sight distance values in Table 201.7 should be used at lane drops and at off-ramp noses to interchanges, branch connections, roadside rests, vista points, and inspection stations.</u></p> <p><u>According to Table 201.7 the decision sight distance for a design speed of 50 mph shall be 750 feet.</u></p> <p><i>Nonstandard Feature</i> At the exit from the Northbound I-680 to SR12 (west) ("C-680 CON2") to I-80 westbound loop ramp ("C-80 CON1"), the decision sight distance is for a design speed of 44 mph, whereas the design speed on the connector ramp is 50 mph.</p>	Y	Y

Table 6. Advisory Design Exception List

Standard for Which Exception is Requested	Affected Alternative	
	Alt C	Alt C, Phase 1
Superelevation Transition (HDM Index 202.5 (1)(2) and Figure 202.5A):		
(1) <u>A superelevation transition should be designed in accordance with the diagram and tabular data shown in Figure 202.5A to satisfy the requirements of safety, comfort and pleasing appearance.</u>		
(2) <u>Runoff. Two-thirds of the superelevation runoff should be on the tangent and one-third within the curve.</u>		
<i>Nonstandard Features</i>		
a. At westbound Green Valley Road on ramp to I-80 ("C-GVR D1A") the combined superelevation runoff length between the R=1550' and R=1000' horizontal curve is 301'. The required length is 450'.	Y	Y
b. At the westbound slip ramp from Green Valley Road on ramp to SR12W ("C-GVR-D4"):	Y	Y
<ul style="list-style-type: none"> The superelevation runoff length between the R=2100' and R=3000' horizontal curves is 167' (runoff lengths of 100.2' and 66.8', respectively). The superelevation runoff length required is 300' (runoff lengths of 150' and 150' required, respectively). At the same location as above, the superelevation runoff occurs almost entirely within the R=2100' horizontal curve. At the same location as above, the superelevation runoff occurs almost entirely within the R=3000' horizontal curve. The superelevation runoff length between the R=1000' and R=1012' reverse curves is 394' (runoff lengths of 197.2' and 197.2', respectively). The required length is 420' (runoff length of 210' and 210' required, respectively). The superelevation transition for the R=1012' horizontal curve occurs entirely within the curve just prior to the diverge point from westbound on ramp from Green Valley Road. 		
c. The westbound I-80 Suisun Valley Road loop off ramp ("C-SVR L1") does not meet the runoff transition standard.	Y	
d. The Suisun Valley Road westbound I-80 on ramp ("C-SVR D1") does not meet the runoff transition standard.	Y	
e. The Pennsylvania Avenue loop ramp ("C-P L1") does not meet the standard superelevation transition rates.	Y	
f. The Pennsylvania Avenue loop ramp ("C-P L2") does not meet the standard superelevation transition rates.	Y	
g. At the westbound hook on-ramp from Red Top Road to I-80 ("CP1-RT H1" Line):	Y	Y
<ul style="list-style-type: none"> The superelevation runoff length between the local road intersection (Old Red Top Road) and the R=150' curve is 144'. The required length is 240'. The superelevation runoff occurs almost entirely within the R=150' horizontal curve. 		

Table 6. Advisory Design Exception List

Standard for Which Exception is Requested	Affected Alternative	
	Alt C	Alt C, Phase 1
Vertical Curves (HDM Index 204.4): <u>For algebraic grade differences of 2 percent and greater, and design speeds equal to or greater than 40 miles per hour, the minimum length of vertical curve in feet should be equal to 10V, where V= design speed. For algebraic grade differences of less than 2 percent, or design speeds less than 40 miles per hour, the vertical curve length should be a minimum of 200 feet.</u>		
<i>Nonstandard Features</i>		
a. The minimum vertical curve length is 360 feet for Beck Avenue.	Y	
b. The sag vertical curve length is 400 feet at the westbound slip on ramp from Green Valley Road to SR12 (West)	Y	Y
c. At the westbound entrance to I-80 from I-680 ("C-80 CON1"), the sag vertical curve is 400'.	Y	Y
Side Slope Standards (HDM Index 304.1): <u>For new construction, widening, or where slopes are otherwise being modified, embankment (fill) slopes should be 4:1 or flatter. In light grading where normal slopes catch in a distance less than 18 feet from the edge of the shoulder, a uniform catch point, at least 18 feet from the edge of the shoulder, should be used.</u>		
<i>Nonstandard Features</i>		
a. Between westbound I-80 to SR12 (West) Connector "C-12W CON1" and westbound on ramp from Green Valley Road "C-GVR D1A", from "C-12W CON1" Station 168+20 to 173+75 fill slopes range between 2:1 and 4:1.	Y	Y
b. Along eastbound I-80 right edge of shoulder, "CP1-80 W" station 224+00 to 241+80 fill slopes are 4:1 or flatter, but uniform catch point is less than 18' from edge of shoulder.	Y	Y
c. Along the eastbound I-80 to Green Valley Road "CP1-GVR D2" exit ramp, from station 193+00 to 203+00 fill slopes range between 2:1 and 4:1.	Y	Y
Median Width (HDM Index 305.1 (1)(a)):		
(1) <i>Freeways and Expressways</i>		
(a) <u>Urban Areas. ...the minimum median width for freeways and expressways in urban areas should be 36 feet.</u>		
<i>Nonstandard Features</i>		
a. The median width is 22 feet along I-80.	Y	
b. The median width is 30 feet along SR12 (East) west of Pennsylvania Avenue.	Y	
c. The median width of I-80 between station 130+00 and 159+00 varies between 22 and 34 feet.	Y	Y
d. The median width of I-80 between stations 224+50 and 226+40 varies between 36 and 22 feet.	Y	Y
Freeway to Freeway Connections Grades (HDM Index 504.4(3)):		
(3) <i>Ramp Grades.</i> <u>The maximum profile grade on freeway-to-freeway connections should not exceed 6 percent.</u>		
<i>Nonstandard Feature</i>		
The ramp from I-680 northbound to SR12 (West) connector "C-680 CON2" to I-80 westbound "C-80 CON1" has a grade of 8 percent.	Y	Y

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

Table 6. Advisory Design Exception List

Standard for Which Exception is Requested	Affected Alternative	
	Alt C	Alt C, Phase 1
Mainline Lane Reduction at Interchanges (HDM Index 504.6): <u>The basic number of lanes should not be dropped through a local service interchange.</u>		
<i>Nonstandard Feature</i> Eastbound I-80 drops one lane within the Suisun Valley Road interchange		Y

- **Interim Features**

There are no interim features proposed for this project.

- **High Occupancy Vehicle (HOV) (Bus and Carpool) Lanes**

HOV lanes will be added to I-680 from just north of Gold Hill Road, in the full build alternative along with direct connectors from I-80 to I-680.

In the full build alternative, the HOV lanes on I-680 will be from just north of Gold Hill Road to I-80. For Alternative C, Phase 1 the northbound HOV lane will start at the new Red Top Road interchange on I-680 and the southbound HOV lane will end immediately after the off ramp to Red Top Road.

Both Alternative C and C, Phase 1 include the direct HOV connectors between the HOV lanes on I-680 and the HOV lanes on I-80 east of I-680.

The HOV lanes will typically be contiguous with the mixed flow lanes, the HOV connectors will merge/diverge independently of the mixed flow merges/diverges. Monday through Friday, HOV lane traffic will be initially restricted to vehicles with two or more persons and motorcycles and permitted fuel efficient vehicles during the AM and PM peak traffic periods. Outside of these periods HOV lanes will be open to mixed flow traffic.

The project will construct HOV improvements, including direct connectors between I-680 and I-80 and full shoulders and standard lane widths where they do not currently exist. Proposed bridge abutments and/or slopes can be adjusted within the currently proposed rights of way so that additional width for HOT lane buffers can be added. The I-80/I-680/SR12 Interchange Project will accommodate the eventual conversion of the HOV lanes to HOT lanes.

- **Ramp Metering**

Table 7 lists all on ramps within the project area, whether that ramp is listed in the District 4 Ramp Meter Development Plan, and whether or not ramp metering equipment is being provided as part of this project. The table includes codes to indicate whether or not ramp metering equipment is included at each specific

ramp, and in the event that ramp metering equipment is not included, the basis for not including it. Those codes are listed below:

N = Not provided plus code from below

P = Provided (with HOV Bypass unless otherwise noted)

NA = Not Applicable (ramp does not exist or is not with the scope of the Alternative C)

G: Where there are geometric constraints

AUX: Where existing ramps are being modified from merges to lane additions for auxiliary lanes

FW: Where the change in the ramp is strictly related to single lane widening of the freeway, where the on ramp will continue to merge with through traffic.

T: From the truck scales, which act as a meter.

L: Low volume ramps with major expense to provide metering.

RW: Significant additional Right of Way needed

w/o H: without HOV Bypass

Table 7. Ramp Metering at Proposed On Ramps

Route	Interchange	On-Ramp	Listed in Dist 4 Ramp Meter Development Plan?	Exception Required?	Alt C	Alt C, Phase 1
80	Red Top Road	Westbound	Y		P	P
80	Red Top Road	Eastbound	Y	Y	P w/o H	P, w/o H
80	680	Westbound	Y	Y	P w/o H (35 vph)	P w/o H (35 vph)
80	Green Valley Road	Westbound	Y		P	P
80	12W	Eastbound	Y		P	P
80	680	Eastbound (Alt C) (Right Side)	Y		P w/o H (separate HOV)	P w/o H (separate HOV)
80	Green Valley Road	Eastbound	Y		P	P
80	680	Eastbound (Left Side)	Y		NA	NA
80	680	Eastbound (Right Side)	Y		NA	NA
80	Suisun Valley Road	Westbound	Y	Y	P	P w/o H
80	Suisun Valley Road	Eastbound	Y		P	P
80	WB Truck Scales	Westbound	Y		N-T	NA
80	EB Truck Scales	Eastbound	Y		N-T (See EB Scales project)	NA
80	12E	Westbound	Y		P	NA
80	Suisun Parkway (Current Abernathy Road)	Westbound	Y		P	NA
680	Gold Hill Road	Northbound	Y		N FW	NA
680	Red Top Road	Northbound	N		P	P
680	Red Top Road	Southbound	N		P	P
680	12W	Southbound	N		P	NA

Table 7. Ramp Metering at Proposed On Ramps

Route	Interchange	On-Ramp	Listed in Dist 4 Ramp Meter Development Plan?	Exception Required?	Alt C	Alt C, Phase 1
680	EB 80	Southbound	N	Y	P w/o H (90 vph)	P w/o H (90 vph)
12E	Chadbourne Avenue	Westbound	N		N-FW (Exist is 2 lane at Intersect dropping to 1 on ramp)	NA
12E	Chadbourne Avenue	Eastbound	N		N-AUX (Exist is 2 lane at Intersect dropping to 1 on ramp)	NA
12E	Beck Avenue	Westbound	N		P	NA
12E	Beck Avenue	Eastbound	N		P	NA
12E	Pennsylvania Avenue	Westbound	N		P	NA
12E	Pennsylvania Avenue	Eastbound	N		P	NA
12E	Jackson Street	Westbound	N		NA	NA

SR12 (West) will be a conventional highway immediately west of Red Top Road and is therefore not included.

Caltrans reviewed and approved a "Fact Sheet Exception to Ramp Metering Policy for Alternative C, Phase 1 on May 20, 2010 for:

- Suisun Valley Road on ramp to westbound I-80: This single on ramp will include a meter, without HOV Bypass. The volume is expected to be very low (162 vph AM and 135 PM in 2035).

Caltrans has reviewed and approved a "Fact Sheet Exception to Ramp Metering Policy" for Alternative C, Phase 1 on January 18, 2012 for:

- I-80 westbound on ramp from I-680: Alternative C, Phase 1 will add a single lane connector ramp from northbound I-680 to westbound I-80 for connectivity reasons. The projected peak hour traffic demand volumes are 30 (AM) and 40 (PM). The ramp volumes are below the 240 vph practical lower output limit.
- I-680 southbound on ramp from eastbound I-80: Alternative C, Phase 1 will add a single connector ramp from eastbound I-680 to I-680 for connectivity reasons. The projected peak hour traffic demand volumes are 90 (AM) and 50 (PM). The ramp volumes are below the 240 vph practical lower output limit. Additionally, this ramp will be combined with the eastbound SR12 (West) and southbound I-680 connector, which will have an HOV preferential lane, as part of Alternative C.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

- I-80 eastbound on ramp from Red Top Road: Alternative C, Phase 1 will maintained the single lane ramp from Red Top Road to eastbound I-80. For Alternative C, Phase 1, the projected 2035 peak hour demand volumes for the eastbound on ramp are 150 (AM) and 289 (PM). The ramp volumes are low and very close to the 240 vph practical lower output limit.

- **CHP Enforcement Areas**

Enforcement areas will be provided. Exact locations have not been determined, but there will be typical 22 foot wide medians on both I-80 and I-680 in the full build alternatives, which allows for the standard enforcement areas as shown in Chapter 6 of the High Occupancy Vehicle Guidelines. There will also be typical standard right side of shoulders of 10 feet on the main lanes and the various interchanges that can be used for enforcement actions.

Ramp meter enforcement areas will be provided at each local ramp meter location.

- **Park and Ride Facilities**

The City of Fairfield constructed a new Park and Ride facility at I-80 and Red Top Road in 2011. Fairfield expects that this facility will replace the existing Park and Ride facility at Green Valley Road.

- **Utility and Other Owner Involvement**

Record maps have been received from the various utility owners and reviewed. The utility owners are listed in table 8. Table 8 also lists which alternative affects which utilities and in which general segment of the project.

Table 8. Utility Owner List

Facility		Owner	Affected by Alternative	
			C	C, Phase 1
A.	Water	City of Fairfield	W,E	W
		City of Vallejo	W	W
		City of Benicia	W	W
		Dept of Water Resources (North Bay Aqueduct)	C	
		Suisun Solano Water Authority	E	
	Irrigation & Non Potable Water and Agricultural Drains	Solano Irrigation District (SID)	W,C	W,C
B.	Electrical	PG&E	W,C,E	W,E
C.	Gas	PG&E	W,C,E	W,E
D.	Cable & Fiber	Comcast	W,E	W
		Level 3	W,E	W
		Qwest	W,E	W
		MCI	E	N
E.	Telephone (Local)	The New AT&T	W,C,E	W,E
F.	Sanitary Sewers	Fairfield-Suisun Sanitary District	W,E	W
		City of Fairfield	W,E	W
		City of Suisun City	E	
G.	Liquid Fuels	Kinder Morgan	E	

W = West Segment

C = Central Segment

E = East Segment

Table 9 lists the utilities that are proposed to be non-conforming with the Caltrans Encroachment Policy. The following discussion summarizes the conflicts expected for each of the utilities.

The Alternative C-1 utility encroachments have been conceptually concurred with by Headquarters Office of Encroachment Exceptions, Division of Design. Formal review and approval will be provided with each construction package, under each EA. Each package will be submitted separately under each package's EA, and the decision, based on the final design, will be made by Headquarters Office of Encroachment Exceptions, Division of Design at the time of submittal.

All utilities will be potholed and positively identified on the utility plans that will be generated during the design phase. See the attachments for Right of Way Data Sheets that summarize the costs of the utility relocations.

Table 9. Utilities in Proposed Right of Way, that are Proposed to be Non-Conforming Utilities

			Facility			Existing Location				Present in State Right of Way and/or within limits for:		Alt C (or Alt C, Phase 1) Location Info			Alt C, Phase 1		Alt C		Note
Conflict no.	Utility Type	Utility Owner	Size / Description	Type	DIR	RTE/RD	Location Comment	Private R/W, Freeway Permit or Other (incl Franchise)	Existing Exception To Encroachment Policy	Alt C	Alt C, Phase 1	Line	From	To	Proposed Exception to Encroachment Policy	Alt C, Phase 1 Action	Proposed Exception to Encroachment Policy	Alt C Action	
C016.1	Water	City of Benicia	30" NBA Transmission Line	UG	TR	80	⊥ to C/L		No	Y	Y	C-80-E/W	199+06	201+11	Y	150" sleeve, 750' pipe	Y	same as C, Phase 1	Under EB loop on ramp
C017.1	Water	City of Fairfield	16"Water	UG	TR	80	1° fm ⊥		No	Y	Y	C-80-E/W	199+30	203+51	Y-Access	Relocating to OC	Y-Access	See Phase 1	Access to from MVP to Green Valley Road (within State R/W)
C015.1	Water	City of Vallejo	39" NBA Transmission Line	UG	TR	80	⊥ to C/L		No	Y	Y	C-80-E/W	199+00	201+02	Y	150" sleeve, 750' pipe	Y	See Phase 1	Under EB loop on ramp
C020.1	Water	City of Vallejo	8" HDPE Water Line (Old Cordelia)	UG	TR	80	23° fm ⊥		No	Y	Y	C-80-E/W	201+60	204+43	Y-Access	Reloc to OC	Y - Access	See Phase 1	Access is from MVP on Green Valley Road (within State R/W)
C084.1	Water	SSWA	20" Suisun Water Main	UG	TR	12E	20° fm ⊥ Under west shoulder of Webster under 12		No	Y	N	12E	205+45	205+45			N	No Action	Exist Angle point would be outside new State R/W
C176.1	Irrigation Water	Solano Irrigation District	42" RCP Chadbourne Lateral	UG	TR	80	9° fm ⊥ and angles	F	Y	Y	N	C-80-2	382+00	382+00			Y	Protect Angle Point when wall constructed over for new loop on ramp	No sleeve and angle points in R/W
C176.2	Irrigation Water	Solano Irrigation District	36" RCP Chadbourne Lateral	UG	TR	Ramps between Chadbourne Road and 12E to the west	9° fm ⊥	F	Y	Y	N	C-12E CON1	85+08	85+85			Y	Replace 2x50 ft Class III RCP with Class IV under widened embankments	No Sleeve
C024.1	Electric Distribution	PG&E	2 - 6" Electrical Lines (25 KV)	UG	TR	80	19° fm ⊥		No	Y	Y	C-80-E/W	202+79	204+16	Y-Access	1100' pipe (2 ducts) Reloc to OC Joint Trench	Y-Access	See Phase 1	Access to box in sidewalk is from MVP on Green Valley Road (within State R/W)
C001.1	Electric Transmission	PG&E	Electrical Line (230 KV) & Tower Vaca-Dixon Moraga 1 & 2	OH	TR	80	62° to ⊥ Over Red Top / 80	P: CCUA 1970	Yes	Y	Y	C-80-1	124+86	134+29	Y		Y		
C005.1	Electric Transmission	PG&E	Vaca-Vacaville-Jameson CKT.1, Ignacio-Mare Island CKT.2 (prev Vaca Dixon Ignacio 1&2 line 7 (115kv))	OH	TR	80	43° fm ⊥ Btwn Red Top & UPRR		Yes	Y	Y	C-80-W/E	143+98	146+82	Y	No relocation	Y	No relocation	Note the freeway profile is to be raised less than 5 feet
C005.3	Electric Transmission	PG&E	Vaca-Vacaville-Jameson CKT.1, Ignacio-Mare Islaand CKT.2 (prev Vaca Dixon Ignacio 1&2 line 7 (115kv))			680 Between Fulton and Fermi	1° fm ⊥ (for AltB) and 47° fm ⊥ (for Alt C)		No	Y	Y	C-680	147+00	149+00	Y	4 new towers, raise by 40 feet	conflict	See Phase 1	New Grade 40 feet above exist, 1 tower direct conflict
C036.2	Electric Transmission	PG&E	115KV Vaca-Suisun Jameson Line	OH	TR	680 and GVR	43 ° to ⊥ (680)		Y	Y	Y	C-GVR	65+00	66+34	Y	Raise 2 towers across existing 680 by 45 feet	Y	See Phase 1	45 degrees to ramps and Green Valley Road at intersection

Table 9. Utilities in Proposed Right of Way, that are Proposed to be Non-Conforming Utilities

			Facility			Existing Location				Present in State Right of Way and/or within limits for:		Alt C (or Alt C, Phase 1) Location Info			Alt C, Phase 1		Alt C		Note
Conflict no.	Utility Type	Utility Owner	Size / Description	Type	DIR	RTE/RD	Location Comment	Private R/W, Freeway Permit or Other (incl Franchise)	Existing Exception To Encroachment Policy	Alt C	Alt C, Phase 1	Line	From	To	Proposed Exception to Encroachment Policy	Alt C, Phase 1 Action	Proposed Exception to Encroachment Policy	Alt C Action	
C036.4	Electric Trans-mission	PG&E	Vaca-Suisun-Jameson 115kv	OH	PA	80/ Suisun Valley Rd (over existing EB ramp intersection)	// to CL		Yes	Y	N	C-80-E	240+20	244+19			N	No action	Alt B Geo will resolve
C058.1	Electric Trans-mission	PG&E	115kV Vaca-Dixon Ignacio 1&2 Line 1	OH	TR	80	55° fm ⊥ at Busch and Hale Ranch Rds	P 1912	Y	Y	N	C-80-2	353+18	361+21			Y	relocate 1 tower with cell	
C058.2	Electric Trans-mission	PG&E	115kV Vaca-Dixon North Tower 1&2 Line 2	OH	TR	80	55° fm ⊥ at Busch and Hale Ranch Rds	P 1913	Y	Y	N	C-80-2	353+99	361+80			Y	relocate 1 tower with cell	
C058.3	Electric Trans-mission	PG&E	115kV Vaca-Dixon North Tower 1&2 Line 2	OH	TR	680	45° fm ⊥ South of Red Top		Y	N	Y	C-680	95+00	97+00	Y	No action	Y	No action	
C107	Electric Trans-mission	PG&E	Vaca-Dixon Moraga No 1 Ignacio Loop	OH	TR	80	43° fm ⊥	F	Y	Y	Y	C-80-1	115+00	118+00	Y	Remain in place	Y	Remain in place	
C012.3	Gas Trans-mission	PG&E	Proposed 16" main	UG		Lopes Rd / Green Valley Rd/ Eastbound I-80 ramps			N	Y	Y	GVR	67+53		Y	Y	N	No action	
C019.1	Phone	AT&T	12-4" Telephone	UG	TR	80	⊥ to C/L	F	No	Y	Y	C-80-W/E	200+10	202+34	N	Remain in place	Y - Access	See Phase 1	Access outside of State R/W
C082.1	Sanitary Sewer	FSSD	36" Sanitary Sewer Force Main	UG	TR	12E	70° fm ⊥		N	Y	N	12E	195+98	202+06			N	920' pipe 220' sleeve	
C083.1	Sanitary Sewer	FSSD	30" Sanitary Sewer Main	UG	TR	12E (and Webster St)	70° fm ⊥		N	Y	N	12E	195+98	202+06			N	920' pipe 220' sleeve	
C102.1	Gas Trans-mission	PG&E	Proposed 24" main	UG		Lopes Rd / Green Valley Rd/ Eastbound I-80 ramps			N	Y	N				Y				

Note: See Table 12 for a full list of utilities that would conflict with the proposed project.

Water: City of Fairfield

Water facilities of the City of Fairfield that will be impacted by the project include:

- Distribution lines in the local streets affected by all alternatives.
- A 16 inch line crosses I-80 just west of Green Valley Road. It will be relocated to the new Green Valley Road overcrossing. The realignment will extend from south of the eastbound I-80 ramps intersection with Lopes Road/Green Valley Road to north of the westbound I-80 ramps intersection with Green Valley Road. It would not be in conformance with Caltrans Encroachment Access Policy. Access to an air relief valve would be needed from Maintenance Vehicle Pull Out on Green Valley Road within the State Right of Way.
- A 24 inch line crosses I-80 west of Dan Wilson Creek. For the full build alternative, it will need to have its sleeve extended further northwest for freeway widening, along with a realignment of its approach from the existing end of Mangels Boulevard.
- A 12 inch water main in Beck Avenue at SR12 (East) would be relocated to the new overcrossing for Beck Avenue or a new sleeve will be provided for it for the full build alternative.
- A 30 inch water line under Ramsey Road, that connects to a reservoir in the hills south of Gold Hill Road. It will need to be relocated into the realigned Ramsey Road in both full build alternatives and Alternative C, Phase 1 to facilitate the construction of the new I-680/Red Top Road interchange.
- The City of Fairfield is constructing a 36 inch water line to cross SR12 (East), immediately east of Pennsylvania Avenue. It is not expected to conflict with the abutments for the proposed overcrossing at that location. The Alternative C right of way would encompass angle points in the 36 inch water line making the addition of sleeves along the proposed water alignment impractical. Also the westbound loop on ramp would pass directly over the line. There are other constraints to the water line in the proposed interchange right of way including drainage channels, major sewer pipes, storm drains and gas transmission utilities. As a result of all of the above, a straight through sleeve across the entire right of way becomes impractical within the proposed interchange. Under Alternative C the 36 inch water line would have to be relocated around the interchange to the west, or possibly the east.

Unaffected mains within the project limits include:

- 16 inch water line in existing Red Top Road through the I-80 undercrossing. This facility is expected to remain in place within areas of the State and City right of way that will not be changed; it complies with the Caltrans Utility Encroachment Policy.
- The City of Fairfield is proposing an extension of the 16 inch water line in Red Top Road, listed above, to a proposed water tank on a hill top north of

SR12 Jameson Canyon and about 0.5 mile west of the existing Red Top Road intersection with SR12. It will provide a “Zone 2” water system (development elevations between 100 feet and 200 feet) for the area between I-680 and SR12 (West). The water tank will not conflict with proposed interchange project features, however the extension of the water line to it will cross both SR12 (West) and the extension of Business Center Drive proposed in Alternative C and Alternative C, Phase 1. The City of Fairfield is working with STA to identify various alignments for the waterline to minimize relocations. The final alignment will be influenced by the sequence of construction of both the I-80/I-680/SR12 Interchange Project and the waterline, neither of which is completely defined at this preliminary phase.

- The City of Fairfield constructed a 30 inch water line in a 40 inch sleeve crossing I-80 and the proposed truck scales ramps; it conforms to the Caltrans Utility Encroachment Policy. The City has coordinated the design such that the North Bay Aqueduct (NBA) and SID’s Raines Drain, both of which it will pass over, can subsequently be relocated adjacent to the Suisun Parkway when this project widens the freeway. Construction activity within the State right of way was completed in 2011.

Water: City of Vallejo

The City of Vallejo has several water mains traversing the project area that will be affected by the project. They include the following water mains, with expected impact:

Gordon Line: A 24 inch potable water line runs parallel and north of I-80 east of Green Valley Road and along Suisun Valley Road north of I-80.

- Conflicts with Suisun Valley Road interchange. The proposed Suisun Valley Road interchange in Alternative C would require relocating the Gordon line to keep it from crossing through the center of the proposed westbound loop off ramp.
- Conflicts with Green Valley Road interchange. The connection between the Gordon Line and the "Old Cordelia" and Green Valley Road line will be relocated.

Monticello Line: A 24 inch raw water line runs from the south end of the Putah Canal (i.e. water from Monticello Dam/Lake Berryessa) across SR12 (West) near Red Top Road, across I-80 east of Red Top Road to the Cordelia reservoir.

- The extension of Business Center Drive proposed as part of both full build alternatives, and Alternative C, Phase 1, will require a relocation of a section of this line where a 35 foot deep cut for the roadway is proposed (a parallel section of Benicia’s 24 inch Cordelia Transmission line will also be relocated).
- The widened roadway and interchange with Red Top Road at SR12 (West) proposed as part of both full build alternatives and Alternative C, Phase 1

will require placement of this line in a sleeve across the widened SR12 (West) right of way.

- Modification of the existing crossing of this line under I-80 east of Red Top Road is not expected as the existing freeway right of way is not proposed to be changed.

Cache Slough Line: A 36 inch raw water line runs from Cache Slough in the Delta, through Suisun City just south of SR12 (East) then along the north edge of Suisun Marsh direct to the Cordelia Reservoir. This line continues along McGary Road to Vallejo.

- The realignment of I-680 in Alternative C and Alternative C, Phase 1 will require relocation of this line in the vicinity of Lopes Road and Fermi Drive. The relocation will be under the relocated Lopes Road where it will pass under the new I-680 alignment.
- The eastbound ramps intersection at the proposed interchange on SR12 (East) at Pennsylvania Avenue in both full build alternatives will be above this line, requiring its relocation.
- In both full build alternatives, the new local roadway from Pennsylvania Avenue to the new overhead connecting to West Street in Suisun City roughly parallels this line. Relocation will be required where roadway embankments would be placed at the approach to the new overhead.

Vallejo's "NBA" Line: A 39 inch raw water line runs from the North Bay Aqueduct on Mangels Boulevard, under Green Valley Road, across I-80 west of the Green Valley Road overcrossing, and under Green Valley Road/Lopes Road to near Fermi Drive where it connects to the Cache Slough line. This line was originally constructed jointly with Benicia's parallel 30 inch water line.

- The widening of I-80 at Green Valley Road in both full build alternatives and Alternative C, Phase 1 would require the extension of the sleeve on the north side of the freeway by 150 feet. The proposed off ramp and loop on ramp between eastbound I-80 and Green Valley Road in both full build alternatives and Alternative C, Phase 1 will require the extension of the sleeve across the proposed ramps. It would not be in conformance with the Caltrans Policy on Longitudinal Encroachment where the proposed loop ramp would pass over the extended sleeve.
- The realignment of I-680 in Alternative C and Alternative C, Phase 1 will require relocation of this line in the vicinity of Lopes Road and Fermi Drive, along with a portion of the connecting Cache Slough line.

Old Cordelia Water Main: A 6 inch potable water main runs from the Gordon Line near the I-80/Green Valley Road interchange, across I-80 east of the Green Valley Road overcrossing, across I-680 just south of I-80. This line then provides service to about 40 customers in the unincorporated Old Cordelia area. There is also a portion of this line extending northwest under Green Valley Road

from the Gordon Line. This line is inactive but is needed for emergency connections with the Green Valley Road mains further northwest on Green Valley Road.

- The widening of I-80 at Green Valley Road in both alternatives and their respective fundable first phases will require that the existing line be relocated into the new overcrossing. During construction of the new overcrossing it is expected that water for these City of Vallejo customers could come from an existing backup connection with the City of Fairfield's water system, if needed. It would not be in conformance with Caltrans Encroachment Access Policy. Access to an air relief valve would be needed from a Maintenance Vehicle Pull Out on Green Valley Road within the State Right of Way.
- This line also connects via a pressure reducing station to the Gordon Line, near the westbound ramps intersection on Green Valley Road. That pressure reducing station would also be relocated.

Jameson Main: A 30 inch water main runs from the Cordelia Reservoir, crossing I-80 near Red Top Road and then along the south side of SR12 to beyond the interchange project limits on SR12 (West). A section was relocated as a 36 inch line for the truck climbing lane project (EA-0A0404), which was completed in 2008.

- The eastbound ramps at the proposed SR12 (West)/Red Top Road Interchange will cross obliquely over this line and the fills for the widened highway will extend over this line for both full build alternatives and Alternative C, Phase 1. Hence the line will be relocated to just north of the parallel creek bank of Jameson Creek within the project limits, but outside the access control line of the freeway.

Water: City of Benicia

The City of Benicia has two water mains traversing the project area that will be affected by the project as follows:

Cordelia Transmission Main: A 24 inch raw water line runs parallel to Vallejo's Monticello line from the south end of the Putah Canal (i.e. from Monticello Dam/Lake Berryessa) across SR12 (West) near Red Top Road. On the south side of SR12 (West) at Red Top Road, Benicia's Cordelia Transmission line heads east following first the north side then the south side of the UPRR, crosses under I-80 and continues east to Lopes Road. At Lopes Road the Cordelia Transmission line connects with Benicia's NBA line, which becomes a 36 inch line. The 36 inch Cordelia Transmission Main then runs parallel to I-680 to Benicia.

- The extension of Business Center Drive proposed as part of both full build Alternatives and Alternative C, Phase 1, will require a relocation of a section

of this line where a 35 foot deep cut for the roadway is proposed (a parallel section of Vallejo's 24 inch Monticello Line will also be relocated).

- The new Red Top Road interchange on SR12 (West) will require rerouting of this line so that it crosses the entire future freeway right of way in a single sleeve. This is for both full build alternatives and Alternative C, Phase 1.
- The widening of I-80 between the UPRR and Red Top Road for both full build alternatives will require replacing the crossing for this line. The existing line crosses at 45 degrees from perpendicular and therefore does not comply with Caltrans' Utility Encroachment Policy. The new crossing would be west of the current crossing and will cross perpendicular to the freeway.
- The eastbound I-80 to southbound I-680 connector proposed as part of Alternative C and Alternative C, Phase 1 would also require relocation of this line.
- The realignment of I-680 in Alternative C and Alternative C, Phase 1 will require relocation of this line in the vicinity of Lopes Road and Fermi Drive along with the realignment of Lopes Road.
- The new Red Top Road interchange on I-680 (both full build alternatives and Alternative C, Phase 1) will require relocation of this line to under relocated Lopes Road.

Benicia's "NBA" Line: A 30 inch raw water connection from the North Bay Aqueduct on Mangels Boulevard, under Green Valley Road, across I-80 west of the Green Valley Road overcrossing, and under Green Valley Road/Lopes Road to a connection with Benicia's Cordelia Transmission Main (see above). This line was originally constructed jointly with Vallejo's parallel 39 inch main.

- The widening of I-80 at Green Valley Road in both full build alternatives and Alternative C, Phase 1 would require the extension of the sleeve on the north side of the freeway by 150 feet. The proposed off ramp and loop on ramp between eastbound I-80 and Green Valley Road in both full build alternatives and Alternative C, Phase 1 will require the extension of the sleeve across the proposed ramps and realignment under Lopes Road. It would not be in conformance with Caltrans Policy on Longitudinal Encroachment where the new loop ramp would be over the extended sleeve.

Water: Department of Water Resources (North Bay Aqueduct)

The California Department of Water Resources (DWR) North Bay Aqueduct (NBA) parallels the north side of I-80 from east of Abernathy Road to west of Dan Wilson Creek. It generally follows Mangels Boulevard from there to the westerly Fairfield City limits, where it climbs the hill to provide water to Napa County.

For both full build alternatives the 63 inch NBA between Chadbourne Road and west of Dan Wilson Creek would need to be relocated to the north to avoid

conflicts with the widened I-80 and the new westbound truck scales. Typically it would be parallel and adjacent to the south side of the North Connector/Suisun Parkway. Where Solano Irrigation District's Raines Drain parallels the NBA, the relationship between the Raines Drain and the NBA would be preserved with the Raines Drain relocated to between the NBA and Suisun Parkway. Siphons will be required under both Suisun Creek and Dan Wilson Creek. The NBA would also be relocated adjacent to the I-80/Abernathy Road interchange to provide room for the proposed westbound loop on ramp and relocated off ramp.

Both full build alternatives and Alternative C, Phase 1 will require special design of a cut slope along the proposed extension of Business Center Drive to avoid relocating the NBA in that area. Those design features could include steeper than 4:1 cut slopes, slope paving and/or retaining walls.

Water: Suisun Solano Water Authority

Water service in Suisun City is provided by the Suisun Solano Water Authority (SSWA). The SSWA is a joint venture of Suisun City and the Solano Irrigation District (SID), with the SID managing and maintaining the systems. The SSWA facilities would be affected by both full build alternatives. A 20 inch main crossing the UPRR will need to be protected (sleeved) where the embankment for the proposed West Street extension would be placed. In the same area the Benton Court Pumping and Pressure Reducing Station would need to be relocated. An existing 2 inch line under Pennsylvania Avenue provides service to a single user near Cordelia Road on Pennsylvania Avenue and would be relocated to the new overcrossing.

Irrigation and Non Potable Water and Agricultural Drains: Solano Irrigation District

SID provides agricultural water (gravity fed) to areas outside the City of Fairfield within the project area.

SID has an 18 inch line (the "Young lateral") which crosses I-80 immediately west of Suisun Creek. Both full build alternatives will require the extension of this sleeved pipeline to the north.

SID has a 42 inch RCP line (the "Chadbourne lateral") that crosses under I-80 immediately west of the Abernathy overcrossing of I-80. The merge for the new westbound loop on ramp from Abernathy Road (both full build Alternatives) will be constructed over it. Relocation of the Chadbourne lateral at I-80 should not be required. It does have angle points and is not sleeved. It is currently an exception to the Caltrans Utility Encroachment Policy and is proposed to remain so.

The Chadbourne lateral continues south as a 36 inch RCP line crossing under SR12 (East) just west of the Chadbourne overcrossing. It was built with Class IV

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

RCP under the existing freeway embankment and Class III RCP under the ramps. For both full build alternatives, the freeway embankment between the through lanes and the ramps would be widened over the section of the Chadbourne lateral with Class III RCP. Those sections of the Chadbourne lateral will either need to be replaced with Class IV RCP or covered with protective slabs.

SID also has two agricultural drains that cross I-80.

The Raines Drain crosses I-80 in the vicinity of the proposed westbound truck scales. The Raines Drain would be relocated adjacent to and south of the Suisun Parkway and immediately north of the relocated North Bay Aqueduct, discussed above.

SID also has the Alonzo Drain which crosses I-80 just east of the Abernathy Road interchange. Within the state right of way it is a 48 inch RCP (Reinforced Concrete Pipe). Immediately to the north of the freeway right of way it is a 48 inch CMP (Corrugate Metal Pipe) where it cross the former Sacramento Northern Right of Way and the current DWR NBA right of way. The NBA passes underneath it just north of I-80. In both full build Alternatives, the diverge for a relocated westbound I-80 off ramp to Abernathy Road will be built over the Alonzo Drain within the existing freeway right of way. The Alonzo Drain should not need to be relocated or replaced for this work.

The Alonzo Drain also crosses SR12 as an open channel. Existing bridges will be widened for both full build alternatives where SR12 crosses it.

SID has an irrigation water system in the portion of Fairfield's Cordelia area north of I-80. Impacts to SID's Irrigation system are expected to be minimal, with only one potential conflict identified in Green Valley Road between Business Center Drive and the new westbound ramps intersection and outside of the State right of way. It is expected to remain in place with an adjustment of one valve box. This system might be used to provide irrigation water to parts of the project.

Electrical: PG&E

PG&E has several 115 kv and 230 kv tower transmission lines in the project area in addition to smaller transmission and distribution facilities.

Line 1 Vaca-Dixon Ignacio (115kv) and Line 2 Vaca-Dixon North Tower (115kv) cross I-80 at the SR12 (East) interchange. The existing crossing is an exception to the Caltrans Longitudinal Encroachment Policy. The exception for this line was approved again recently for the I-80 Eastbound Cordelia Truck Scales Relocation Project in the same area. The full build alternatives for the interchange project will need to relocate one pair of towers on the south side of the freeway within the existing easement.

Line 1 Vaca-Dixon Ignacio (115kv) also crosses the existing I-680 between Fermi Drive and Fulton drive and I-80 between the UPRR and Red Top Road. The existing line across I-80 should not be affected by any of the proposed highway improvements; however it is not in conformance with the Caltrans Utility Encroachment Policy. The new I-680 alignment for Alternative C and Alternative C, Phase 1 will require the relocation of one tower and the likely raising of the power line by 40 feet. The cut for the new Red Top Road between I-80 and SR12 (West) in either full build alternative or Alternative C, Phase 1 will require the relocation of at least one tower.

The Vaca Suisun Jameson (115kv) tower line crosses I-680 and Green Valley Road/Lopes Road near the eastbound I-80 ramps intersection. The existing crossing is an exception to the Caltrans Longitudinal Encroachment Policy. The line will need to be raised where it crosses existing I-680 (by at least 45 feet for Alternative C and Alternative C, Phase 1). For both Alternatives C and C, Phase 1 it would not be in conformance with the Caltrans Longitudinal Encroachment Policy as it will be at a 45 degree skew to the new eastbound ramps/Green Valley Road intersection below it. The proposed connectors between I-680 and SR12 (West) and I-80 for both Alternative C and Alternative C, Phase 1 would require one tower to be relocated and the line height raised by 90 feet between Dittmer Road and the Jameson Substation on Watt Court.

The Vaca Dixon North Tower (115 kv) transmission line crosses I-680 between Gold Hill Road and Red Top Road. It already spans both frontage roads and will not be affected by the proposed interchange improvements. However, it is not in conformance with the Caltrans Longitudinal Encroachment Policy.

The Vaca Dixon Moraga 230kv transmission line crosses I-80 directly over the Red Top Road interchange and SR12 (West). The existing span across I-80 should not be affected by any of the proposed highway improvements; however it is not in conformance with the Caltrans Longitudinal Encroachment Policy. For Alternative C and Alternative C, Phase 1, it may have to be raised where it crosses SR12 (West): the proposed connector from northbound I-680 to westbound SR12 (West) will be about 14 feet above existing grade. The cut for the extension of Business Center Drive will be adjacent to a tower on this line; the roadway cut will include retaining walls or slope paving to protect it.

The Suisun Tap 115kv line crosses SR12 (East) at Pennsylvania Avenue, along with a parallel 12kv line. These lines will directly conflict with the new overcrossing proposed at this location in both full build alternatives. The lines would be relocated perpendicular across the freeway west of Pennsylvania Avenue and then parallel an existing gas transmission main.

There are several overhead distribution or transmission lines on single wood pole lines that cross the freeways within the project area. In all cases these lines are expected to be replaced with new longer spans, roughly perpendicular to the freeway.

There is a pair of 6 inch conduits with 12kv underground lines that cross I-80 just east of the existing Green Valley Road overcrossing. These will conflict with the widened freeway and westbound on ramp in all alternatives. They will be relocated to the new overcrossing structure. It would not be in conformance with Caltrans Encroachment Access Policy. Access to a splice box would be needed from a Maintenance Vehicle Pull Out on Green Valley Road.

Gas: PG&E

PG&E has significant Gas Transmission facilities that will be impacted by the project, especially in the areas around the I-80/Green Valley Road and SR12 (East)/Pennsylvania Avenue interchange areas. There are also key nodes in their gas distribution system at the I-80/Green Valley Road interchange area, in addition to their gas distribution network on local roads throughout the project area.

Gas Transmission Facilities in the Green Valley Road/I-80 interchange area:

PG&E owns in fee the parcel defined by Green Valley Road, I-80 and I-680. They have a valve lot there where 5 high pressure (i.e. 300 psi) gas transmission lines are connected. They have recently added a “pig” launcher/receiver to one of the lines and will need to add them to the other lines in the future. The five lines are:

- 32 inch line crossing I-680 in a sleeve from Central Way directly into the valve lot.
- 16 inch line crossing I-680 in a sleeve from Central Way directly into the valve lot.
- 24 inch line running south from the valve lot under the shoulder of Green Valley Road/Lopes Road to south of the proposed Red Top Road interchange on I-680.
- 10 inch line crossing I-80 in a sleeve west of the Green Valley Road interchange. This crossing has been modified at least twice on both sides of the freeway in the past for highway and freeway projects. It uses a Joint Use Agreement (JUA) across Caltrans owned land that is outside of the access control line within the loop defined by the current eastbound on ramp. PG&E is upgrading this line to a 24 inch. The design is being coordinated with the proposed interchange designs. A portion of the 24 inch line has been built up the hill where the future extension of Business Center Drive is proposed. The new line will be in conformance with the Caltrans Utility Encroachment Policy where it crosses I-80. It will be bored and jacked under the freeway without a sleeve, per Caltrans Encroachment Permit procedures and PG&E and FHWA standards.
- 16 inch line crossing I-80 in a sleeve west of the Green Valley Road interchange. Like the 10 inch line above, it uses a defined JUA across Caltrans owned land that is outside of the access control line within the loop

defined by the current eastbound on ramp. This line parallels the 24 inch line up the hill where the future extension of Business Center Drive is proposed. The 16 inch crossing of I-80 will be replaced with a new crossing of I-80 parallel to the proposed 24 inch line. It will be bored and jacked under the freeway without a sleeve, per Caltrans Encroachment Permit procedures and PG&E and FHWA standards.

The construction of the proposed eastbound off ramp to Green Valley Road (on the old I-680 roadbed) in Alternative C and Alternative C, Phase 1 will require the relocation of the valve lot. This valve lot will be relocated to a new location east of I-680 and Central Avenue, outside of State right of way. Modifications and realignments to all five of the lines listed above will be required:

- To avoid the proposed new eastbound ramps intersection and to phase the construction, the 32 inch and 16 inch crossings of I-680 will be relocated to the south and will pass under private land adjacent to the existing eastbound off ramp to Green Valley Road before passing under the existing off ramp to access the new valve lot. They will be bored and jacked under the freeway without a sleeve, per Caltrans Encroachment Permit procedures and PG&E and FHWA standards.
- The 24 inch under Lopes Road will be realigned to run under private land adjacent to the existing eastbound off ramp to Green Valley Road before passing under the existing off ramp to access the new valve lot.
- The 16 inch and 24 inch line could extend west of the relocated valve lot, underneath I-680, crossing Green Valley Road north of the existing eastbound I-80 ramp terminus intersection, through the inside of the existing eastbound I-80 loop on ramp (existing State right of way, but not within access control), before angling northwest underneath I-80 to connect to existing facilities on the northside of I-80, outside of State right of way.

Gas Transmission Facilities in the I-680 Red Top Road Area: The 24 inch line under Lopes Road will need to be relocated in the proposed I-680/Red Top Road interchange area in both full build alternatives and Alternative C, Phase 1. It is expected to be run parallel to and just outside of the new right of way, or under Lopes Road.

Gas Transmission Facilities in the SR12 (East) Pennsylvania Avenue Area: PG&E has two gas transmission lines and valves for high pressure (300 psi) gas transmission facilities under Pennsylvania Avenue and across SR12 (East). These existing facilities are:

- A 32 inch gas transmission main that crosses SR12 (East) about 1100 feet west of Pennsylvania Avenue at an angle greater than 30 degrees from perpendicular; existing is in conformance with Caltrans policy for conventional highways, however, it will be out of conformance when SR12

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

(East) becomes a freeway. This line turns parallel to SR12 (East) when it crosses Pennsylvania Avenue 500 feet north of SR12 (East).

- A 16 inch gas transmission main under Pennsylvania Avenue from south of SR12 (East) to 600 feet north of SR12 (East), where it heads northeast in a private easement.
- A 10 inch gas transmission main starts under Pennsylvania Avenue at the 32 inch line above and then parallels the 16 inch line to the northeast.
- A valve cluster exists in the median of Pennsylvania Avenue, which connects all three lines.

Alternative C will have the following impacts on these gas transmission facilities:

- The 32 inch line crossing of SR12 (East) would be realigned to cross perpendicular to the freeway.
- The 32 inch line would be left in place where it crosses Pennsylvania Avenue at the north edge of the proposed westbound ramps intersection and parallel the westbound off ramp for about 150 feet. This will require an exception to the Caltrans Utility Encroachment Policy.
- The 16 inch line would be relocated to cross SR12 (East) west of the proposed Pennsylvania Avenue overcrossing, and would parallel the 32 inch line to where it meets Pennsylvania Avenue north of SR12 (East). The line would be routed in a new private easement west of Pennsylvania Avenue.
- The existing valve facilities in Pennsylvania Avenue north of SR12 would be relocated to the west of Pennsylvania Avenue in private easement to avoid having the valves in the median within State right of way.

Gas Distribution Facilities in the I-80 / Green Valley Road interchange Area: Adjacent to the Valve Lot discussed above, PG&E has dual District Regulator Stations (DRS), which drop high pressure (300 psi) transmission gas to lower pressure (60psi) distribution gas mains. These stations feed a 4 inch line that splits and feeds a 6 inch line that crosses I-680 and a 6 inch line that crosses I-80.

Both Alternative C and C, Phase 1 will require the relocation of the entire gas line crossing of I-80. PG&E has an existing DRS on Mangels Boulevard near Green Valley Road that is fed from the gas transmission mains near the current end of Business Center Drive; the distribution system fed by that DRS is proposed to be “uprated” (operate at a higher pressure) so that the crossing of I-80 can be eliminated. The DRS on Mangels Boulevard is fed by a 4 inch 300 psi line branching off of the 16 inch Transmission main west of the current end of Business Center Drive. This branch location and a section of the 4 inch line will need to be relocated for the extension of Business Center Drive.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

Both Alternative C and C, Phase 1 would impact the sleeve crossing I-680. A new district regulating station east of I-680 is proposed to replace the existing DRS and gas crossing of I-680.

Both Alternative C and C, Phase 1 will require relocation of the existing district regulator stations, along with the adjacent valve lot. The improved and relocated DRS proposed above will eliminate this conflict.

Other Gas Distribution Facilities: PG&E has other gas distribution mains under various local streets being affected by the project. Where the streets are being relocated, these facilities will also be relocated.

Cable and Fiber: Comcast

Comcast has a fiber optic facility crossing under I-80 west of the Suisun Valley Road overcrossing. The crossing of I-80 is 45 degrees from perpendicular to the freeway and therefore is not in conformance with Caltrans Longitudinal Encroachment policies. Comcast also has cables in local streets within the project area; where the streets are being relocated, these facilities will also be relocated.

Cable and Fiber: Level 3

Level 3 has a fiber optic conduit in an easement within the UPRR right of way through Cordelia and Jameson Canyon. At the Cordelia Undercrossing of I-80 (Caltrans only owns an easement within the UPRR right of way), the Level 3 conduit is 45 feet below the surface of I-80, parallel to the UPRR tracks.

The Level 3 fiber continues in the UPRR right of way through Cordelia and Suisun City. The proposed overhead bridges, connectors and widening should not affect the line as those improvements will be designed to span the railroad right of way.

Cable and Fiber: Qwest

Qwest Communications (successor to SP Telecom) has fiber in a conduit mounted on the UPRR bridge at the Cordelia underpass on I-80. Their facilities are considered railroad owned and will be relocated along with the new bridge at the Cordelia underpass (proposed as part of both full build alternatives).

The Qwest fiber continues in the UPRR right of way through Cordelia and Suisun City. The proposed overhead bridges, connectors and widening should not affect the line as those improvements will be designed to span the railroad right of way.

Cable and Fiber: MCI/Verizon

MCI, now a part of Verizon, has fiber in "Joint Structure" with Qwest along the UPRR under SR12 (East). The proposed overhead bridges, connectors and widening should not affect the line as those improvements will be designed to span the railroad right of way.

Telephone Local: The New AT&T

AT&T has numerous single overhead and underground facilities in the local streets within the project area.

AT&T has a significant duct bank running from the south end of the project on I-680 to Suisun Valley Road north of I-80:

- A 4 inch duct bank (varies between 6 and 9 conduits) under Lopes Road from Gold Hill Road to south of Red Top Road are unaffected by all alternatives.
- A 4 inch duct bank (with 12 conduits) under old Lopes Road and previous frontage road from south of Red Top Road to the Cordelia overhead. The section through the proposed Red Top Road interchange in Alternatives B and C and Alternative C, Phase 1 will be relocated to existing and new Lopes Road in that area.
- A 4 inch (with 12 conduits) under Lopes Road/Green Valley Road from the Cordelia overhead to Business Center Drive. It will be in conformance with Caltrans Encroachment Access Policy. Access to the manholes would be performed from outside the State's right of way.
- A 4 inch duct bank (with 12 conduits) under Neitzel Road from the Green Valley Road westbound on ramp intersection to Suisun Valley Road north of I-80. For both full build alternatives and their respective fundable first phase, the line would be relocated to Business Center Drive.

AT&T has a 4 inch duct bank (with 9 conduits) under Ramsey Road from south of Gold Hill Road to Cordelia Road. The conduit bank includes AT&T Network services Transcontinental fiber. It will need to be relocated along with Ramsey Road for the new I-680/Red Top Road interchange proposed as part of both full build alternatives and Alternative C, Phase 1.

AT&T also has a 4 inch duct bank (with 6 conduits) crossing I-80 west of Suisun Valley Road. It crosses I-80 at approximately 45 degrees, so it is not in conformance with Caltrans' Utility Encroachment Policy. It would be relocated to Central Way and the new Suisun Valley Road overcrossing or a new bored crossing west of Suisun Valley Road.

There is a 4 inch duct bank (with 8 conduits) under Beck Avenue where it crosses SR 12 (East). It would be relocated to the new overcrossing in both full build alternatives and Alternative C, Phase 1.

Sewer: Fairfield-Suisun Sanitary District

The Fairfield-Suisun Sanitary District (FSSD) provides sewage treatment services and operates and maintains all sewers 12 inches and larger within the project area. They have the following facilities that would be affected by the project:

- 33 inch sanitary sewer (SS) in sleeve crossing of I-80 1300 feet west of Suisun Valley Road. This sleeve crossing would need to be extended for the freeway widening in all alternatives.
- 21 inch SS in sleeve crossing of I-80 800 feet west of Suisun Valley Road. This sleeve crossing would need to be extended for the freeway widening in all alternatives.
- 24 inch SS running parallel to and north of SR12 (East) on both sides of Beck Avenue: This line would need to be relocated farther to the north for the proposed westbound ramps associated with the Beck Avenue interchange in Alternative C.
- 24 inch SS under Beck Avenue at SR12 (East) would be relocated to the east of the proposed Beck Avenue interchange in Alternative C.
- 36 inch SS under Pennsylvania Avenue at SR12 (East) would be relocated to avoid the proposed Pennsylvania Avenue overcrossing in both full build alternatives. For Alternative C it would be relocated to cross the freeway up to 500 feet east of the proposed overcrossing to minimize the freeway right of way to be crossed.
- 30 inch sanitary sewer crossing Pennsylvania Avenue 450 feet north of SR12 (East): This line would not be relocated. For Alternative C, it would end up under the northern edge of the proposed westbound ramps intersection and be in the proposed State right of way and roughly parallel to the proposed westbound off ramp for 200 feet. This would not be in conformance with Caltrans policy regarding longitudinal utility encroachments.
- 36 inch sanitary sewer force main (SSFM) and 48 inch SSFM coming from the pump station northeast of the SR12 (East)/Pennsylvania Avenue intersection to southwest of the intersection. These two lines follow different paths through the proposed interchange area:
 - The existing 36 inch SSFM would be relocated to cross SR12 (East) west of the pump station and then follow the new connecting road to Suisun City to Pennsylvania Avenue for Alternative C.
 - The existing 48 inch SSFM crossing of SR12 (East) it would be relocated adjacent to the 36 inch SSFM above for Alternative C.

- 30 inch SS flowing toward Suisun City and 36 inch SSFM flowing from Suisun City: These two lines were crossed by the SR12 expressway when it was built. The sewer are at nearly a 60 degree angle from perpendicular across the highway, and therefore do not conform to the Caltrans Utility Encroachment Policy for freeways.
- For Alternative C they would be in conflict with the proposed westbound off ramp to Pennsylvania Avenue. They would be relocated to cross SR12 (East) in compliance with Caltrans policy and then run along the north side of the freeway to the existing pump station.
- 30 inch SS under Lopes Road near the proposed I-680 Red Top Road interchange: This line will need to be relocated to the realigned Lopes Road adjacent to the new interchange proposed as part of both full build alternatives and Alternative C, Phase 1. It will also need to be relocated along with Lopes Road where it will pass under the new alignment of I-680 for both Alternative C and Alternative C, Phase 1.

Sewer: City of Fairfield

The City of Fairfield has sanitary sewers under various local streets being affected by the project. Where the streets are being relocated, these facilities will also be relocated.

Sewer: City of Suisun City

Suisun City has sanitary sewers under various local streets being affected by the project. Where the streets are being relocated, these facilities will also be relocated.

Liquid Fuels: Kinder Morgan

Kinder Morgan has fuel line in two general locations within the project area:

Along I-680: Adjacent to the east side of Ramsey Road, south of the proposed I-680 Red Top Road interchange; the project will not affect Ramsey Road in this area.

In Suisun City: On both sides of the UPRR through Suisun City, including under the existing SR12 (East) overhead. The new overhead structure proposed to connect to the West Street extension in Suisun City will be designed to clear span over the line in the west side of the UPRR right of way.

Branch line to Travis Air Force Base: This line leaves the UPRR right of way along the proposed West Street alignment then follows Benton Court and Driftwood Drive. The West Street extension will require relocation of this line.

- **Railroad Involvement**

The UPRR will be affected at various locations by the project. The California Northern Railroad (CFNR), a subsidiary of Rail America, operates the trains on the track owned by the UPRR from Suisun City through Jameson Canyon to Napa Junction near American Canyon and beyond. The CFNR also has trackage rights on the UPRR mainline from Suisun City to Davis.

- The Cordelia Underpass of the UPRR on I-80 between Red Top Road and SR12 (West) ("Cordelia Underpass") requires reconstruction for Alternative C, and Alternative C, Phase 1 southwest of the existing bridge to accommodate the widening of the freeway. The new bridge would be about 40 feet southwest of the existing bridge. The new undercrossing would be able to accommodate the conversion of the HOV lanes to HOT lanes.
- The realignment of Red Top Road between I-80 and SR12 (West) (in Alternative C and Alternative C, Phase 1) will include a roadway bridge "overhead" at the UPRR, thus separating the roadway traffic from the railroad and hence improving safety at this location. The existing grade crossing will need to be preserved as a private crossing to provide access to utilities in the area. Railroad operations and utilities within UPRR right of way should not be affected.
- Alternative C and Alternative C, Phase 1 will include new connectors between I-680 and I-80 and SR12 (West) that will cross over the UPRR in addition to local streets and other connectors. Railroad operations and utilities within the UPRR right of way should not be affected.
- Alternative C proposes to build a new local roadway between Pennsylvania Avenue just south of SR12 (East) and an extension of West Street in Suisun City. This roadway will include an "overhead" local roadway bridge at the UPRR, which would clear span the existing UPRR tracks.

Refer to the Right of Way section for more information.

- **Creek and Flood Plains**

The project is expected to affect the hydraulic capacities or floodplains of the following creeks (refer to more complete discussion in the Draft Environmental Impact Report and supporting technical studies):

- Green Valley Creek (all alternatives): The new bridges will be constructed so that there is no adverse effect to the 50-year or 100-year hydraulic conditions. Columns will be removed, soffit elevations for the new bridges would be above the 100-year water level.
- Dan Wilson Creek Alternative C: The new bridge would be constructed so that there is no adverse effect to the 50-year and 100-year hydraulic conditions. Columns will be removed and the bridge would clear span the waterway above the 100-year water level.

- Suisun Creek Alternative C: The new bridge would be constructed so that there is no adverse effect to the 50-year or 100-year hydraulic conditions. The new bridge will have a clear span of 110 feet over the creek instead of the three span 72 feet long existing bridge. The bridge soffits would be above the FEMA 100-year flow elevation.
- Raines Drain Alternative C: The existing culverts carrying Raines Drain across I-80 can convey barely half of the 50-year peak flow which includes runoff from the direct watershed as well as overflow from Suisun Creek. As a result, water ponds upstream and overtops the highway. The capacity of Raines Drain under I-80 is limited per an agreement between Caltrans and the Solano Irrigation District (the downstream area would experience more frequent and severe flooding if the capacity were to be increased). The proposed roadway profiles is approximately 3 feet higher than the existing and the westbound truck scales will be placed in an area that currently provides floodplain storage. Any increase in the high point of the highway is expected to cause a similar increase in the height of the ponded water surface upstream of the highway, unless mitigated. The proposed mitigation consists of an upstream inlet structure along with below ground detention which will mimic the existing flood flow patterns. Low flows will be conveyed under I-80 in much the same manner as today. At higher flows, the inlet structure will act as a constriction and water will pond. As water ponds above the existing overtopping elevation, the upstream inlet structure will capture flood flows. These flows will be conveyed under the freeway to a structure that will then redistribute the flows as if the water had over topped the existing freeway. In addition, stable cavities or underground voids will be built under the westbound truck scales facilities to mitigate for the ponding capacity that will be lost by the widened freeway and the new truck scales facility.
- Alonzo Drain and Ledge wood Creek (Alternative C): The improvements would replace existing box culverts for Alonzo Drain under Beck Avenue with a clear span extension of the proposed Beck Avenue overcrossing and add extensions to the existing box culverts under SR12 (East) for the Alonzo Drain and Ledge wood Creek. The existing box culvert for Ledge wood Creek would be extended to accommodate the eastbound lane widening that is part of Alternative C, Phase 1.

- **Highway Planting**

Vegetation will be preserved in areas within the project limits where no construction is planned and existing planting removed by construction activities will be replaced according to Caltrans policy in suitable locations to the maximum extent possible. Similarly any existing irrigation facilities to remain shall be protected in place and if affected the facilities will be relocated or replaced.

The landscape and irrigation improvements will be installed through separate landscaping contracts after completion of various portions of the project. All

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

planting within State right of way will meet Caltrans safety setback requirements for sight distance and clear recovery.

Estimated highway planting for the various alternatives along with a cost is listed in the table below.

Table10. Highway Planting Area and Cost

Alternative	Estimated Highway Planting Area (Acres)	Estimated Highway Planting Cost (\$2010)
C	89	\$4.9 million
C, Phase 1	46	\$2.5 million

Note: Add 25% to these amounts for soft costs (design, project management, construction management)

Estimated Landscape and Irrigation cost allowance of \$53,500/Acre (2011 \$) has been provided for Alternative C-1 and \$54,500/Acre has been provided for Alternative C which is higher than the standard allowance of \$50,000 / Acre (2011 \$) to provide for the cost of water meters and points of connection for irrigation controllers. Location and number of irrigation crossovers, remote irrigation control systems (RICS), etc. will be developed during final design for each construction package. Costs for safety features (MVP's, access gates, gore paving, etc.) are considered as included in the 10% added funds included respectively for "Minor Items" and "Roadway Additions".

Mulch should be applied to all planted areas to reduce weed growth, conserve moisture and minimize maintenance operations.

Drought tolerant planting and associated irrigation will be installed along the outside of the freeway, both sides of ramps and connectors and within loop ramps. Any trees that need to be removed will be replaced at other locations within the right of way. At the westbound scales highway planting will be installed on the north side of the truck scale ramp and along the I-80/SR12 (East) connector (both sides), within the parking area and the perimeter of truck scale facility. Planting will be used in front of the office portion of the building to provide privacy for building occupants and soften the appearance of the building. The landscaping will not interfere with the line of sight or other operational aspects of the roadways and truck scales facility.

A 3-year plant establishment period will be required for each landscaping project.

Water is available for irrigation purposes. The City of Fairfield and Suisun Solano Water Agency (SSWA) have domestic water lines adjacent to the project in various locations that can be used as a water source. The nearest reclaimed water line, from the Fairfield-Suisun Sanitation District is on Chadbourne Road, south of Busch Drive.

Portions of the project are within the limits of Solano Irrigation District (SID). SID has a pressurized irrigation water system along Business Center Drive between the current south end of Business Center Drive and Suisun Valley Road and includes a branch in Green Valley Road that can be used for irrigation of the Green Valley Road interchange. SID has seasonal, gravity-fed non-potable water available within its District's boundaries. Along I-80 the project is within the boundaries of SID from just west of the Suisun Valley Road interchange through the SR12 (East) interchange. Along SR12 (East) the project is within SID's boundaries from I-80 to Beck Avenue. SID's gravity fed irrigation water could be delivered at a constant rate of 2-3 cubic feet per second (cfs) but would require a basin to store the water together with a pump to pressurize the landscape irrigation system.

The various individual roadway projects will include irrigation crossovers to facilitate the potential landscaped areas.

State will be responsible for maintaining all planting and irrigation within State R/W. County and City will be responsible for maintaining all planting and irrigation facilities installed as a part of this project in their respective jurisdictions.

Design for safety features such as maintenance vehicle pullouts and access gates shall be provided for to ensure safe access for maintenance forces.

- **Water Quality**

The project will comply with Caltrans' Statewide NPDES permit. A Storm Water Data Report (SWDR) was prepared for the project, which summarizes the actions taken in compliance with the permit. See Attachment F for copy of the SWDR cover sheet.

This project has a soil disturbance of greater than 1 acre. To comply with the conditions of the Caltrans NPDES Permits, and address the temporary water quality impacts resulting from the construction activities in this project, Standard Special Provision (SSP) 07-345 will be included in the PS&E. This SSP will address the preparation of the Storm Water Pollution Prevention Plan (SWPPP) document and implementation of SWPPP during construction.

Erosion control consists of permanent treatments to slopes and disturbed soil areas. The usual treatments are mulch chips, blankets and mats, tree and shrub planting, and hydro-seed applications. Erosion control will be required for this project.

Water pollution control consists of various temporary measures implemented during construction to control sedimentation, erosion, and the discharge of pollutants. Water pollution control will be required for this project.

The project will need to comply with the conditions of the Caltrans statewide NPDES Permit CAS #000003, Order #99-06-DWQ, issued by the State Water Resources Control Board. This adheres to the compliance requirements of the General Permit CAS #000002, Order #2009-0009-DWQ, for General Construction Activities and the Resolution Number 2001-046 for additional monitoring requirements. These permits require addressing the potential for impacts to existing water quality resulting from temporary construction activities and permanent post-construction water quality conditions.

To address the temporary water quality impacts, special provisions for Water Pollution Control will be included in the contract provisions, which will require the contractor to prepare and implement a SWPPP.

To address post-construction water quality impacts, incorporation of Best Management Practices (BMPs) into the design and operations of all highway projects is also required under Section 4.4 of the Storm Water Management Plan (SWMP), which implements the Caltrans statewide NPDES permit. This consideration process will be documented and reportable in the Annual Report to the Regional Water Quality Control Board.

The Storm Water Report identifies potential locations for acceptable treatment BMPs including biofiltration strips and swales. Treatment BMPs are typically located within loops and other separation areas within interchanges, and along the outer edges of the freeway within the right of way.

To address concerns by the San Francisco Regional Water Quality Control Board regarding potential project impacts to the stability of the receiving waterways, the project will coordinate and apply necessary hydromodification measures as appropriate for highway projects within Caltrans District 4 and specific to the project site.

Due to the presence of shallow groundwater in the study area, it is expected that some excavations will need to be dewatered. During the preparation of the Site Investigation Report, testing will be done to determine if the groundwater is contaminated to develop contract provisions for its handling and disposal during construction. The groundwater sampling results will be compared with the following to determine if it is contaminated:

- California Maximum Contaminant Levels (MCLs) or action levels for drinking water.
- San Francisco Bay Water Quality Control Plan water quality objectives (WQOs) for surface water. A comparison of the sampling results to the parameters on tables 3-3, 3-4, 3-5, and 3-6 of the WQOs will be required. San Francisco Bay Water Quality Control Plan water quality objectives including these tables can be found at:

http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml#2004basinplan

- Cal/EPA Environmental Screening Levels (ESLs) in tables A, C and F for Tier 1 Environmental Risk Assessment found at <http://www.waterboards.ca.gov/sanfranciscobay/esl.shtml>.

- **Noise Barriers**

A Noise Technical Study has been prepared. It identified four locations within the project area where new or modified soundwalls would be expected to reduce the future noise levels by at least 5 dB. Table 11 lists those locations and which Alternatives they would be included in. A Noise Abatement Decision Report (NADR) was also prepared. The results of the NADR are summarized in Section H of item 6 below. In summary the noise barrier soundwall design studied in the NADR determined that the soundwalls were not considered reasonable from a cost perspective. Accordingly no sound walls are proposed as a part of this project.

Table 11. Potential Noise Barrier Location

Location	Affected Alternative	
	C	C, Phase 1
North of SR12 (East), just east of Chadbourne Road (existing, Barrier H-1)	Y	N
Along the I-80 and SR12 (East) flyover transition ramp (Barrier O)	Y	N
South of I-80 just west of Dan Wilson Creek (Barrier R)	Y	N
North of I-80 between Dan Wilson and Suisun Creeks (Barrier Q)	Y	N

- **Non Motorized and Pedestrian Features**

Typically all local road over or under crossings of the freeways will include at least one sidewalk and 8 foot shoulders. These will extend to the State right of way limits on the local streets. In Alternative C and Alternative C, Phase 1, I-680 connectors to I-80 and SR12 (West) will pass over existing Fulton Road, which has sidewalks and parallel parking.

Modified rural roads in the project would match existing. New rural roads would have 10 feet wide shoulders, without sidewalks. Local streets would match adjacent existing cross sections.

A temporary Class 1 bike path will be included in the early phases of the project between the existing western end of Business Center Drive and SR12 (West) and Red Top Road, to replace an existing paved path connecting Green Valley Road at I-80 with SR12 (West) and Red Top Road that is in conflict with the construction of the new connector from westbound I-80 to SR12 (West).

Caltrans and the City of Fairfield would maintain this path within their respective jurisdictions. Portions of this path will become redundant once Business Center Drive, including a Class I Bike Path, is extended to SR12 (West) and will be removed at that time.

The Class I Bike Path/Linear Park along the north side of I-80 east of Abernathy Road will be relocated adjacent to the relocated westbound off ramp in Alternative C.

Table 12 lists modified local roads and indicates whether they include shoulders and/or sidewalks (not shown on plans).

Table 12. Modified Local Roads

Local Road	Alt C	Alt C, Phase 1
Red Top Road, I-80	8 foot shoulders	8 foot shoulder
Undercrossing	5 foot sidewalks	5 foot sidewalks
Red Top Road I-80 to SR12 (West)	10 foot shoulders	10 foot shoulders
Red Top Road SR12 (West) Overcrossing	10 foot shoulders 6 foot sidewalks	10 foot shoulders 6 foot sidewalks
Business Center Drive SR12 (West) to existing Business Center Drive	10 foot shoulder Class I bike path	10 foot shoulder Class I bike path
Green Valley Road, North of I-80	8 foot shoulders 6 foot sidewalks	8 foot shoulders 6 foot sidewalks
Green Valley Road, I-80 overcrossing	8 foot shoulders 6 foot sidewalks	8 foot shoulders 6 foot sidewalks
Lopes Road South of I-80	N/A	N/A
Green Valley Using Old I-680: South of Auto Plaza Court	8 foot shoulders No sidewalk (sidewalk follows old Lopes Road on west)	8 foot shoulders No sidewalk (sidewalk follows old Lopes Road on west)
Green Valley Using Old I-680: North of Auto Plaza Court	8 foot shoulders 6 foot sidewalks	8 foot shoulders 6 foot sidewalks
Red Top Road/I-680 overcrossing (bridge only serves freeway traffic)	8 foot shoulders	8 foot shoulders
Lopes Road Realignment north of Red Top Road	8 foot shoulders 8 feet sidewalk	8 foot shoulders 8 foot sidewalk
Fermi Drive Realignment	8 foot shoulders 8 foot sidewalks	8 foot shoulders 8 foot sidewalks
Fulton Drive (existing under new connectors)	Parking both sides plus sidewalks	Parking both sides plus sidewalks
Ramsey Road Realignment adjacent to proposed I-680/Red Top Road Interchange	5 foot shoulders	5 foot shoulders
Central Way Relocation	N/A	N/A
Suisun Valley Road, I-80 overcrossing and north and south of I-80	8 foot shoulders 6 foot sidewalks	8 foot shoulders 6 foot sidewalks
Beck Avenue north and south of SR12 (East)	8 foot shoulders 6 foot sidewalks	N/A
Pennsylvania Avenue: north of SR12 (East)	6 foot sidewalk	N/A

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

Table 12. Modified Local Roads

Local Road	Alt C	Alt C, Phase 1
Pennsylvania Avenue: south of SR12 (East)	8 foot shoulders 6 foot sidewalks	N/A
Proposed Meyer Way and Road from Pennsylvania Avenue to proposed West Street extension in Suisun City	10 foot shoulders 6 foot sidewalks	N/A
West Street Extension	10 foot shoulders 6 foot sidewalk	N/A

- **Needed Roadway Rehabilitation and Upgrading**

None are currently planned for I-80, I-680 or SR12 (East) within the project limits. The second phase of the Jameson Canyon Project (EA 04-264100) proposes to upgrade to current standards areas that the first phase of that project will not, including the area within the proposed I-80/I-680/SR12 Interchange project limits and spot locations to the west. The second phase of the Jameson Canyon Project is only funded through the environmental stage.

- **Needed Structure Rehabilitation and Upgrading**

The Green Valley Creek, Dan Wilson Creek and Suisun Creek bridges on I-80 will be replaced by the project, with spans greater than existing. All overcrossings of I-80 will be replaced to span the new wider freeway.

Other structures to be widened have not been identified yet as needing rehabilitation. Condition of these structures will be checked during the design phases for the various construction packages.

- **Cost Estimates**

The total cost for the full build preferred alternative and its fundable first phase projects have been estimated. The table below summarizes those estimates. Details of each estimate are included in Attachment D.

The amounts include escalation for right of way and construction. Various Alternative C, Phase 1 construction packages were estimated with bids for them occurring from 2012 to 2018. The escalation was estimated for each package separately. The cost shown in table 13 below is the total cost of all the packages. Escalation for work not included in the fundable first phase (Alternative C, Phase 1) of the full build alternative (Alternative C) was calculated to 2036. See Attachment D for more details.

Table 13. Summary of Project Cost Estimate (Rounded)

Alternative	PREFERRED PROJECT ALTERNATIVES			
	Alternative C, Phase 1 (Fundable First Phase of Alternative C)		Alternative C (Full Build Alternative, including Phase 1)	
TOTAL ROADWAY ITEMS	\$	231,000,000	\$	600,000,000
TOTAL STRUCTURE ITEMS	\$	181,000,000	\$	277,000,000
TRUCK SCALES	\$	--	\$	53,000,000
SUBTOTAL TOTAL CONSTRUCTION COSTS	\$	412,000,000	\$	930,000,000
TOTAL RIGHT OF WAY ITEMS	\$	120,000,000	\$	170,000,000
SOFT COSTS (DESIGN, PM, CONST ADMIN, ETC) - 25%	\$	103,000,000	\$	236,000,000
ENVIRONMENTAL MITIGATION	\$	5,300,000	\$	12,400,000
SUBTOTAL	\$	640,300,000	\$	1,348,400,000
ESCALATED TOTAL ALTERNATIVE COST	\$	664,000,000	\$	2,166,000,000

- **Right of Way Data**

See Attachment G for the Right of Way Data Sheet.

- **Effect of Special Funded Proposal on State Highway**

The proposed project is funded from bridge tolls, STIP, federal, local and Prop 1B funds. The project will improve the capacity and operating characteristics of I-80, I-680, SR12 (West) and SR12 (East).

B. REJECTED ALTERNATIVES

During the initial study of possible improvements to the I-80/I-680/SR12 interchange area, twelve different alternatives and variations were developed and evaluated. These original twelve alternatives were then reduced to four feasible alternatives through a Tier 1 screening process. Attachment M includes the Initial Screening Matrix for Tier 1. Alternatives A, B, C, and D were further developed and then evaluated along with the “No-build” alternative through a Tier 2 screening process which involved a more rigorous and quantitative assessment of the alternatives against a multitude of measures and objectives. The Tier 2 screening process identified Alternatives B and C (discussed above) as the two most reasonable and feasible alternatives to be carried forward and studied in detail during the NEPA/CEQA environmental impact analysis phase of the project. The screening has been the result of a cooperative process involving Caltrans, STA, FHWA and representatives of the Cities of Fairfield and Suisun City and Solano County and other interested stake holders. Attachment M includes the Alternatives Screening Matrix for Tier 2.

Simultaneously with the Tier 1 screening process for the overall project, STA, in coordination with Caltrans and the CHP, completed the Cordelia Truck Scales Relocation Study in 2005. This study identified the need to construct replacement truck scale facilities and evaluated several alternative locations along the I-80, I-505, and SR12 corridors. The study was conducted as a four-tier technical analysis. It resulted in the recommendation that the truck scale facilities remain within the proposed I-80/I-680/SR 12 Interchange project limits.

Rejected Movement in Alternative B - Northbound I-680 to Westbound I-80

While developing the alternatives, consideration was given to maintaining the existing northbound I-680 to westbound I-80 movement. Alternative B does not replace the direct connection between northbound I-680 and westbound I-80. Reasons for not including it in Alternative B were:

- Operational concerns with adding an additional ramp in the interchange area
- Comparatively low volume (480 AM/ 115 PM peak hour trips in 2035)
- Significant additional right of way impacts)7 commercial/restaurant buildings and utilities)
- High cost (approximately \$120 million)

It is proposed that the connection be made via Red Top Road, from a new I-680 interchange to the existing I-80 Red Top Road interchange. Below is a discussion of the different options that were studied and the reasoning behind coming to this conclusion.

Existing Geometry

The existing I-80/I-680 interchange is a full movement Type F6 – trumpet configuration focused on serving the eastern leg of I-80. This interchange shares the connections to and from eastbound I-80 with access to and from the I-80/Green Valley Road interchange, located 0.1 miles to the west. The northbound I-680 to westbound I-80 movement is provided by a connector ramp that exits the left side of I-680 approximately 700 feet south of I-80. The connector ramp crosses over I-80 and curves to the right into an oblong loop with a low speed, then tight radius in the northeast quadrant of the interchange. The existing interchange is located in a very constrained area. Subsequent merge/diverge and horizontal constraints to the west and east are as follows:

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

Activity / Constraint	Existing Distance west along I-80 from NB 680/WB 80 merge point (feet)
I-680 Separation OC	300
Green Valley OC	800
WB Green Valley On ramp	1800
WB SR12 Connector Off Ramp	3800
SR 12 Separation	5000
Cordelia Underpass	5300
Red Top Road Off Ramp	7300

Activity / Constraint	Existing Distance east along I-80 from NB 680/WB 80 merge point (feet)
EB Suisun Valley Road off ramp	0
NB 680 to EB 80 Truck Scales on ramp	N/A
EB Suisun Valley Road on ramp	4100
EB Truck Scales off ramp	6300
WB 80 Green Valley off ramp	N/A
WB Suisun Valley Road on ramp	N/A

Traffic Data

Under the No Build condition the connector is expected to experience the following travel demand:

Peak Hour	Existing (trips)	2015 (trips)	2035 (trips)
AM	110	290	480
PM	90	125	115

The northbound I-680/westbound I-80 connector ramp is used by traffic whose destination is either westbound SR12 (West) or who wish to continue west on westbound I-80. The significant movement is from northbound I-680 to westbound SR12 (West), with the movement from northbound I-680 to westbound I-80 forecast to be at, or below, 50 vehicles per hour during the peak hour in 2035. The reason for the low movement to westbound I-80 is because it is an out-of-direction movement. Northbound I-680 traffic from Contra Costa County and Benicia would use I-780 to access I-80 in Vallejo. Traffic from the Fairfield neighborhoods adjacent to the Gold Hill Interchange would typically access westbound I-80 via the existing I-80/Red Top Road interchange. This pattern is expected to persist even after construction of the full build Alternative B interchange.

Land uses adjacent to the existing and full build Alternative B interchange include:

- Quadrant - Land Uses
- Northwest - Major regional commercial shopping center, office
- Northeast - Riparian habitat mitigation, hotel, medical, office

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

- Southeast - Highway commercial, historical Cordelia, riparian corridor, railroad
- Southwest - Light Industrial, commercial, railroad

Proposed Alternative B Geometry

I-80 is proposed to be six mixed flow lanes and one HOV lane in each direction entering the interchange, and I-680 is proposed to be two mixed flow and one HOV lane in each direction. The Alternative B geometry proposes this interchange be reconstructed as a complex, two-leg directional interchange (Type F-8) with continued emphasis on the I-680 to easterly I-80 movements. Subsequent merge/diverge and horizontal constraints to the west and east are as follows:

Activity / Constraint	Distance west from I - 680 Separation under Alternative B Condition (feet)
Green Valley OC	800
WB SR12 Connector Off Ramp	2500
SR 12 Separation OC	5000
WB Green Valley On ramp	5100
Cordelia Underpass	5300
Red Top Road Off Ramp	7700

Activity / Constraint	Distance east from I - 680 Separation under Alternative B Condition (feet)
EB Suisun Valley Road off ramp	500
NB 680 to EB 80 Truck Scales on ramp	2100
EB Suisun Valley Road on ramp	3100
EB Truck Scales off ramp	6300
WB 80 Green Valley off ramp	300
WB Suisun Valley Road on ramp	1900

Traffic modeling has determined that all existing local interchanges need to remain, together with a new SR12 (West)/Red Top Road interchange (the I-680/Red Top Road interchange replaces the partial I-680/Green Valley Road interchange) in order to preserve and enhance the system of local roadways on which the adjacent land uses, commercial and business interests, and private citizens depend.

Due to the proximity of the I-80 Green Valley interchange, the I-80/Suisun Valley Road interchange and both eastbound and westbound I-80 Truck Scale Facilities, there is too much weaving in the outside lanes to allow standard right side connectivity between the two freeways. The regional through movements on I-680 will merge/diverge in the median of I-80. However, right side connections are provided to allow access from I-680 to both Suisun Valley Road and to the Truck Scales. Alternative B does not replace the direct connection between northbound I-680 and westbound I-80. It is proposed that the

connection be made via Red Top Road, from a new I-680 interchange to the existing I-80 Interchange.

A number of alternatives were analyzed to provide the direct northbound I-680 to westbound I-80 movement but none were considered feasible, due to constrained connection points, out of direction movements, high costs and high impacts with a low projected traffic demand. There are four potential connection points to WB I-80:

1. Between the Red Top Road off ramp and the Green Valley Road on ramp (gap distance of approximately 1 mile, but constrained by Cordelia Underpass and SR12 (West) separation). This location is over 1 mile west of the I-80/I-680 interchange.
2. Between the Green Valley Road on ramp and the SR12 (West) connector off ramp (gap distance of approximately ½ mile). This location has very challenging profile issues.
3. Between the SR12 (West) connector off ramp and the Green Valley Road off ramp (gap distance of 2800 linear feet). This location also has very challenging profile issues and there is a two-lane weave to stay on I-80).
4. Between the Green Valley Road off ramp and the Suisun Valley Road on ramp (gap distance of 1900 linear feet which would require an auxiliary lane).

None of the options presented above are reasonably feasible (especially due to cost, right of way and environmental impacts and the low volume traffic demand), but for further understanding of the situation, the two most promising alternatives studied to access the connection points are discussed in greater detail below:

1. A right side exit flyover connecting to either connection point 1 or 2. This flyover would have exited I-680 adjacent to the Cordelia Overhead and crossed over the I-680 ramps and Green Valley Road (3rd story crossing) before descending to either access point. To make room for the flyover, the proposed Green Valley Road on ramp would be pushed farther to the north, into one of the most regionally significant commercial and office centers in Fairfield. The alignment would have required an additional slip ramp for the connection to SR12 (West). This alignment shift would require acquisition of 7 commercial/restaurant buildings and significantly impact major water, gas transmission and electrical transmission corridors. Connection point 1 would require additional structures to cross over both SR12 (West) and the UPRR right of way. The approximate cost of this alternative is \$140 million for connection point 1 and \$120 million for connection point 2.

A variation of access to connection point 2 would have the flyover merge with the Green Valley Road on ramp, but this was not reviewed in detail due to Caltrans and FHWA's preference to avoid combining local and interstate connections.

2. A right side exit leading to a long horseshoe type connection accessing either connection point 3 or 4. This single lane connection would have exited I-680 adjacent to the Cordelia Overhead, paralleled the right side I-680 connector (to Suisun Valley Road and the Truck Scales) and then crossed over I-80 just west of Suisun Valley Road (overall structure length around 3000 feet) and utilized connection point 3 or 4. The approximate cost of this crossing is \$ 110 - 125 million. The horseshoe alignment would require considerable relocation of the southside frontage road (Central Way) requiring acquisition of an additional seven commercially developed properties on the south side of I-80, and a substantial portion of the parking lot of an office building on the north side of I-80. Additionally using connection point 3 would result in an additional 1.5 acres of sensitive habitat impact (Green Valley riparian habitat mitigation area), including a new bridge over Green Valley Creek. Connection point 4 would require spreading out the westbound ramps adjacent to the Suisun Valley Road interchange, acquiring more land zoned for office park, and lengthening the Suisun Valley Road bridge.

6. CONSIDERATIONS REQUIRING DISCUSSION

A. HAZARDOUS WASTE

A draft Initial Site Assessment (ISA) (GEOCON April 2008) and an updated initial site assessment (GEOCON June 2009) have been performed of the project area.

The ISA update identifies 38 specific properties as potential hazardous waste facilities. Thirty of these (listed in Table 14) were identified as low risk and, thus, would not need further evaluation.

Table 14. Low Risk Identified Potential Hazardous Waste Facilities

Facility	Address
Tower Mart	4720 Gold Hill Road
Sunnyside Farms	199 Red Top Road
Jack-in-the-Box (Former Red Top Mini Market)	107 Red Top Road (formerly 151 Red Top Road)
United Parcel Service	5000 West Cordelia Road
Prime Source	250 Dittmer Road
Arco Station	105 Lopes Road
Napa Valley Beverage Company	497 Edison Court
Hudson Beverage Company	237 Lopes Road
Sierra Truck and Van (Formerly Trail Wagons)	225 Lopes Road
Saturn of Fairfield	4850 Auto Plaza Court
Costco Gas Station	5101 Business Center Drive
Green Valley Cleaners	5055 Business Center Drive
Former Campbells Carpets	4731 Central Way

Table 14. Low Risk Identified Potential Hazardous Waste Facilities

Facility	Address
Vacant Land (former Arco Station)	4510 Central Way
Chevron Station	4490 Central Way
Shell Station	4450 Central Way
Valero Station	4444 Central Place
Arco Station	4449 Central Place
Scandia Family Center	4300 Central Place
Pacific Gas & Electric substation	South of the I-80/SR12 East interchange
Ford of Fairfield	3050 Auto Mall Court
Chrysler dealer	2955 Auto Mall Parkway
Dodge dealer	2901 Auto Mall Parkway
Volvo dealer	2855 Auto Mall Parkway
Hyundai dealer	2775 Auto Mall Parkway
Toyota dealer	2595 Auto Mall Parkway
Canova Moving and Storage	1336 Woolner Avenue
Suisun Fire District	445 Jackson Street
Former Texaco Station	522 Main Street
Union Pacific Railroad/705 West Street	705 West Street

The results of the ISA Update indicate the presence of eight facilities within the project environmental study area that require further evaluation for potential impact on the design and construction of the planned I-80/I-680/SR12 Improvement Project. Additionally, further evaluation of conditions within the existing right of way and on private properties proposed for full or partial acquisition for the improvement projects is recommended. The eight locations and other locations with conditions warranting further evaluations are listed below in Table 15. The proposed improvement project will require right of way acquisition and further hazardous waste evaluations to determine impact on project costs, potential responsible party liability and soil material management during construction.

During the development of the alternatives, feasible alternative geometrics were not identified that would avoid the listed properties. At the I-80/Red Top Road interchange keeping the existing “tight diamond” interchange configuration was not feasible because of the substandard weaving distance between the westbound on ramp from the proposed Green Valley Road and northbound I-680 on ramps to the Red Top Road off ramp; as a result the local roadways need to be reconfigured affecting the Union 76 parcel (Alternatives C and C, Phase 1). The former Fruit Bowl Mobil station site would be affected by both the widening of I-80 and the new westbound truck scales (Alternative C). The westbound truck scales could not be kept near the existing scales location (thus avoiding the former Fruit Bowl Mobil site) because there would have been substandard weaving distance from the truck scales on ramp to the Suisun Valley Road off ramp, the adjacent property at that location is currently being developed and the feasibility of keeping the existing truck scales in operation while constructing the proposed scales.

Prior to final design for the proposed I-80/I-680/SR12 Improvement Project, additional environmental inquiry (parcel owner interviews/private parcel surveys/document

disclosure) and site investigations should be performed to further evaluate potential and documented environmental impairments within the selected alternative project boundaries. The investigations should focus on assessment of potential and/or documented soil and groundwater impacts associated with the identified potential hazardous waste facilities and locations summarized in the ISA Update that are proposed for partial or complete parcel takes (fee title) or use as construction easements. ADL at levels exceeding hazardous waste criteria has been identified in shallow soil within the unpaved shoulders and median within the existing I-80 right of way in portions of the project ESA. Additional ADL studies should be performed at the I-680, SR12 (East), and SR12 (West) corridors once a build alternative is selected to determine lead levels in planned excavation areas and associated soil material management and disposal requirements. It is recommended also that soil sampling be performed within existing Caltrans, City or County right of way where soil excavation is planned next to the identified potential hazardous waste facilities to evaluate management and disposal of potentially contaminated soil and groundwater, and construction worker health and safety requirements.

First encountered groundwater in the general vicinity of the project ESA is at depths between approximately 2.5 and 22 feet. Five of the eight identified facilities are located at and in the vicinity of the project ESA and have documented groundwater contamination associated with UST fuel releases and prior facility operations, which have the potential to impact groundwater in the vicinity of the planned improvement project. Further evaluation of groundwater quality and depth within the project ESA should be based on evaluation of disposal options and potential exposure of workers to contaminated media.

Some properties proposed for full or partial Caltrans acquisition are either currently or have had a history of use for agricultural purposes and residual agricultural chemicals may be present in soils at these properties. Additionally, UPRR tracks cross the project ESA adjacent to the I-80/SR12 (West) interchange, at the I-680/Cordelia Road intersection, and on SR12 (East) west of Suisun City. Potential accidental releases or impacts from current railroad construction and operations (e.g., ballast and herbicide weed control) may have impacted land within the UPRR right of way within the project ESA.

Structures present within the existing Caltrans right of way (one Truck Inspection Facility) and those present on land proposed for full or partial Caltrans acquisition may contain Asbestos Containing Materials (ACMs) and Lead Containing Paint (LCP). An asbestos and LCP survey must first be conducted at buildings proposed for demolition as part of the improvement projects to satisfy Bay Area Air Quality Management District (BAAQMD) requirements (asbestos) and demolition waste disposal characterization (asbestos and lead).

The results of the site reconnaissance, historical and regulatory file research, and prior field investigations have not indicated the potential presence of abandoned Underground Storage Tanks (USTs) within the existing Caltrans right of way. Documented and potential abandoned USTs do exist on several parcels as summarized in the ISA Update. Other undocumented USTs associated with former and existing residential, agricultural

and commercial related refueling operations may exist within the project ESA. If encountered, undocumented USTs, septic systems and domestic/agricultural wells should be properly removed or abandoned in accordance with State's procedures.

Yellow thermoplastic and paint striping that is removed during planned roadway improvements may require special handling and disposal. These handling and disposal requirements are typically addressed in Caltrans' special provisions for the removal of yellow traffic stripe. Surveys for asbestos-containing pipe, treated-wood and molten-sulfur-treated rail posts will be performed during the PS&E stages. Any existing asbestos-containing pipe, treated-wood waste and molten-sulfur-treated rail posts will require proper handling and disposal in accordance with regulatory requirements.

Kinder Morgan Pipeline should be notified in advance of any planned excavation at or near the petroleum pipeline adjacent to: I-680 corridor (western portion of the project ESA), the UPRR tracks in Suisun City (eastern portion of the project ESA), or any other roadway segment within project ESA.

Caltrans ISA Checklist summarizes the findings, conclusions, and recommendations of the ISA Update.

Subsequent site investigation studies will be conducted as the designs of the various construction packages are developed.

The excavated ADL contaminated material is anticipated to be buried underneath the proposed ramps and truck scale facility. Truck scale facility buildings have been identified as containing lead-containing paint and asbestos-containing materials. These materials will properly be addressed as part of the building demolition.

Table 15. Properties and locations with conditions warranting further evaluations

Facility	Address	APN	Impact to Right of Way and Acquisition	Information Source(s)	Environmental Impacts/ Chemical of Concern	Regulatory Status	Potential Impact to I-80/I-680/SR12 Improvement Project and Recommendations
76 Station	119 Red Top Road	0180-01-0070	Moderate Impact C and C, Phase 1 ESA	Recon LUST SCDRM Files	Active service station located within the project ESA. UST's were removed in 1995. A leak in a waste oil UST was discovered and petroleum-impacted soil excavated. Confirmation soil samples did not contain detectable levels of contaminants. Low levels of BTEX reportedly remain in soil at a depth of 4.5 feet along the former product piping trenches. Groundwater not encountered in the excavation and the SCDRM indicates impacts to soil only. Replacement UST's reportedly subsequently installed at the facility	This facility was granted UST case closed status from the SCDRM in August 1997.	This facility presents a moderate risk of impacting the I-80/I-680/SR12 (West) Alternative C, and Alternative C, Phase 1 based on proposed construction area boundaries. A partial or full parcel take may require UST removals, and additional soil and groundwater characterization and remediation from past petroleum hydrocarbon releases. Exploratory borings should be performed for any planned construction excavations on and adjacent to this facility to evaluate worker health and safety and soil disposal options.
Former Terminal Stations, Inc.	100 Suisun Valley Road		Moderate Impact Alt C ESA	SCDRM Files LUST	Currently vacant land, formerly occupied by a truck refueling facility located immediately west of I-80, north of the I-80/I-680 interchange. In 1984 a waste oil/diesel fuel discharge from the facility to an unnamed flood control channel was discovered adjacent and parallel to I-80. Impacted soil was excavated and surface water removed for offsite disposal. In 1987, USTs were operated at the property without a SCDRM permit A 1987 soil and groundwater investigation conducted along the perimeter of the facility included two soil boring locations within the Caltrans ROW adjacent to westbound I-80. Petroleum-impacted groundwater encountered in Caltrans ROW. In 1987, widespread onsite petroleum impacts to soil were identified. In 1988 all USTs were removed under SCDRM permit. In 1993, the groundwater flow direction was toward the south (toward the I-80/I-680 interchange). Subsequent groundwater extraction was conducted and monitoring indicated decreasing contaminant levels in groundwater.	Based on the decreasing contaminant concentration trends in groundwater, use of the property and lack of sensitive receptors within 1,000 feet, the SCDRM concluded that the facility met the requirements for low-risk case closure. The SCDRM granted UST case closure on May 3, 2001.	This facility presents a moderate risk of impacting the I-80/I-680/SR12 (West) Alternative C based on proposed construction area boundaries. Exploratory borings should be performed within the Caltrans right of way adjacent to the property to evaluate potential impacts to soil and groundwater, worker health & safety, and soil disposal options related to former petroleum hydrocarbon releases from UST operations and past surface water discharges at the adjacent property.
76 Station	134 Pittman Road		Moderate Impact Alt C ESA	Recon SCDRM Files LUST	Active service station located at the northeast corner of the Pittman Road/Suisun Valley Road entrance ramp to eastbound I-80. USTs removed in 1993 and impacted onsite soil and groundwater over-excavated and over-pumped for offsite disposal. Groundwater wells installed and monitored through 2001. Groundwater impacts indicated decreasing trends. Groundwater flow direction in 2001 was toward the west-southwest. Impacted groundwater has approached the property boundary at Pittman Road, south of the eastbound I-80 entrance ramp.	SCDRM granted low risk UST case closure on July 27, 2001.	This facility presents a moderate risk of impacting the I-80/I-680/SR12 (West) Alternative C based on proposed construction area boundaries. Exploratory borings should be performed in the Caltrans ROW at the Pittman Road/I-80 area prior to construction to evaluate soil and groundwater conditions, worker health & safety, and soil disposal groundwater treatment options due to potential impacts from petroleum hydrocarbon releases at the adjacent property.

Table 15. Properties and locations with conditions warranting further evaluations

Facility	Address	APN	Impact to Right of Way and Acquisition	Information Source(s)	Environmental Impacts/ Chemical of Concern	Regulatory Status	Potential Impact to I-80/I-680/SR12 Improvement Project and Recommendations
Former Old Fruit Bowl Mobil Station (Valine Ranch Property)	4000 Russell Road		Moderate Impact Alt C ESA	SCDRM Files LUST	The property is a former service station (operated from 1946 to 1972) located west of and adjacent to I-80 within the project ESA on land proposed for Caltrans acquisition. Five USTs removed in 2000 under observation by SCDRM. Onsite petroleum impacts to soil and groundwater identified. Impacted soil over-excavated for onsite remediation and groundwater over-pumped for offsite disposal. Residual petroleum impacted soil and groundwater remain onsite.	SCDRM granted case closure on June 11, 2008.	This facility presents a moderate risk of impacting the I-80/I-680/SR12 (West) Alternative C based on proposed construction area boundaries. Exploratory borings should be performed if partial or full parcel take is required to evaluate soil and groundwater conditions, worker health and safety, and soil disposal and groundwater treatment options due to impacts from residual petroleum hydrocarbon releases at the property.
Moore Tractor Company	4088 Russell Road	0027-510-040	Moderate Impact Alt C ESA	Recon Prior Phase 1 SCDRM Files	Currently a tractor sales and service facility located northwest of the I-80/SR12 (East) interchange and within the project ESA on land proposed for Caltrans acquisition. SCDRM inspections reported bulk automotive fluids stored at the property including diesel fuel (500-gallon AST), engine oil, and waste oil. A cement sump associated with a wash rack was also noted. Past SCDRM violations have included an overflowing sump, onsite automotive fluid spills, and improper drum storage.	No pending regulatory action or active violations are noted for this facility.	This facility presents a moderate risk of impacting the I-80/I-680/SR12 (West) Alternative C based on proposed construction area boundaries. Exploratory borings should be performed if partial or full parcel take is required to evaluate potential impacts to soil and groundwater, worker health & safety, and soil disposal and groundwater treatment options related to past use of petroleum hydrocarbons and past operations at the property.
Concrete Pipe Distributors	4974 Abernathy Road	0027-510-070	Moderate Impact Alt C ESA	Recon Prior Phase 1	Currently a concrete pipe distributor located southwest of the I-80/SR12 (East) interchange. A prior UST was reportedly removed in approximately 1985. No SCDRM information regarding the removal. 55-gallon drums from the adjacent Moore Tractor Co. were observed stored at the facility in 1994.	No pending regulatory action or active violations are noted for this facility.	This facility presents a moderate risk of impacting the I-80/I-680/SR-12 West Alternative C based on proposed construction area boundaries. Exploratory borings should be performed if partial or full parcel take is required to evaluate potential impacts to soil and groundwater, worker health & safety, and soil disposal and groundwater treatment options related to former UST operation and past conditions noted at the property.
Former Sheldon Oil Co.	426 Main Street		Moderate Impact Alts C ESA	LUST Sanborn Maps SCDRM Files	A former bulk petroleum storage facility located at the north end of the Suisun Channel, northeast of a portion of the project ESA. The property has been redeveloped to support a commercial office building (One Harbor Plaza), associated parking lot, and harbor waterfront walkways. The former Sheldon Oil Company was depicted in 1945 and 1954 Sanborn Maps. The facility stored bulk quantities of diesel fuel No. 2, asphalt emulsion, heating fuel Nos. 4, 5, 6, and used motor oil. Onsite soil impacted by petroleum hydrocarbons to a minimum depth of 9 feet. Onsite groundwater also impacted. Impacted areas extend to the Suisun Channel. Additional information regarding investigations and clean-up at the property were not available in SCDRM files.	SCDRM granted case closure to the facility on October 18, 1995.	This facility presents a moderate risk of impacting Alternative C based on proposed construction area boundaries. Exploratory borings should be performed prior to roadway construction in areas near Main Street in Suisun City to evaluate potential impacts to soil and groundwater, worker health & safety, and soil disposal and groundwater treatment options related to residual impacts related to former UST operations and other onsite chemical handling operations at the adjacent property.
Former Sheldon Oil Co.	526 School Street		Moderate Impact Alts C ESA	LUST SCDRM Files	Currently a vacant lot (formerly used by the Sheldon Oil Co. as a truck washing/cleaning facility from the mid-1940s to 1993) located west of the Suisun Channel, at or adjacent to a portion of the project ESA. Operations at the facility included the use of trichloroethylene (TCE) to clean truck tanks. Onsite	On-going groundwater monitoring required by SCDRM.	This facility presents a moderate risk of impacting the SR12 (East) Alternative C based on proposed construction area boundaries. Exploratory borings should be performed if partial or full parcel take is required to evaluate potential impacts to soil and groundwater, worker health and safety, and soil disposal and groundwater treatment options related to former onsite chemical handling

Table 15. Properties and locations with conditions warranting further evaluations

Facility	Address	APN	Impact to Right of Way and Acquisition	Information Source(s)	Environmental Impacts/ Chemical of Concern	Regulatory Status	Potential Impact to I-80/I-680/SR12 Improvement Project and Recommendations
					TCE discharges reported and onsite soil and onsite/offsite groundwater impacted by petroleum hydrocarbons and VOCs identified. VOC-impacted groundwater has migrated offsite to the northeast. Impacted soil excavated and groundwater over-pumped for offsite disposal in 2006. Groundwater monitoring on-going.		operations.
I-80/I-680/SR12 West and East Bridge Structures	Various Location		Existing I-80/I-680/SR12 West and East Right of Way	Recon	Existing bridge structures to be renovated, or removed.	N/A	Asbestos and lead-containing paint surveys should be conducted at the bridge structures prior to any planned renovation or demolition to evaluate worker health & safety, abatement and waste disposal options and comply with applicable regulations, including Bay Area Air Quality Management District requirements.
I-80/I-680/SR12 West and East	Right of Way Acquisition		New Right of Way	Recon	Properties with current or historical agricultural land use may contain residual agricultural chemicals in shallow soil.	N/A	Conduct soil investigations for pesticides, herbicides, and metals as applicable on land proposed for full or partial acquisition based on past agricultural land usage to evaluate soil reuse or disposal options.
I-80/I-680/SR12 West and East	Right of Way Acquisition		New Right of Way	Recon	Existing structures within the project ESA and on parcel takes requiring demolition.	N/A	Asbestos and lead-containing paint surveys should be conducted prior to any planned renovation or demolition of buildings either within the Caltrans ROW or on properties proposed for full or partial takes to evaluate worker health & safety, abatement and waste disposal options and comply with applicable regulations, including Bay Area Air Quality Management District requirements.
I-80/I-680/SR12 West and East	Union Pacific Railroad Bridge and Crossing		Existing I-80/I-680/SR12 West and East Right of Way	Recon	Planned excavation and grading within existing ROW and potential railroad crossing in SR-12 East. Potential metals, herbicides, petroleum hydrocarbons, and PAHs resulting from past railroad operations.	N/A	Perform soil and groundwater sampling for metals, herbicides, petroleum hydrocarbons, and PAHs as applicable based on proposed construction practices at UPRR Bridge (near I-80/SR12 West interchange and potential UPRR track crossing in Suisun City to evaluate potential impacts to soil and groundwater, worker health & safety, and soil disposal and groundwater treatment options related to past railroad operations.
I-80/I-680/SR12 West and East	Existing Corridors		Existing I-80/I-680/SR12 West and East Right of Way	Recon Prior Nearby ADL Study	Planned excavation and grading within existing right of way	N/A	Perform shallow soil sampling to evaluate potential ADL in soil for worker health & safety and soil disposal options related to historical automobile exhaust emissions.
I-80/I-680/SR12 West and East	Existing Corridors		Existing I-80/I-680/SR12 West and East Right of Way	Recon	Planned excavation and pavement work within existing right of way	N/A	Further evaluate potential hazardous waste issues and provide construction special provisions for thermoplastic traffic paint, asbestos pipe, bridge rail post sulfur and proper abandonment of wells, septic systems, and encountered unidentified USTs.

Notes:
ESA – Environmental Study Area
UST – Underground Storage Tank
AST – Aboveground Storage Tank
UPRR – Union Pacific Railroad
BTEX – Benzene, Toluene, Ethylbenzene, and Total Xylenes
N/A – Not Applicable

EDR – Environmental Data Resources database
SFBRWQCB – San Francisco Bay Regional Water Quality Control Board
LUST – Leaking UST
PAHs – Polynuclear Aromatic Hydrocarbons

SCDRM – Solano County Department of Resource Management
ROW – Right of Way
ADL – Aerially Deposited Lead
TPHg – Total Petroleum Hydrocarbons as Gasoline
TPHd – Total Petroleum Hydrocarbons as Diesel

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

B. VALUE ANALYSIS

The “I-80/I-680/I-780 Major Investment and Corridor Study”, 2004, and the “Cordelia Truck Scales Relocation Study, February 16, 2005” evaluated several alternatives and optimized those using value analysis techniques.

The Tier 1 and Tier 2 screening steps used to identify the current two alternatives also extensively used value analysis techniques.

A formal value analysis study was performed for the project in August 2006, prior to the selection of alternatives to be evaluated in detail in the EIR/EIS. The VA team developed three sets of alternatives, one for improvements to Alternative B, one for Alternative C and one related to the construction of an I-80 Bypass to the south (South Parkway).

The set of improvements related to the construction of the South Parkway were discarded along with that concept due to the high environmental impact. Other concepts that initially appeared to have net positive performance value were not included in the current Alternatives B and C due to changes in assumed conditions (e.g. funding now becoming available for I-680 HOV/HOT lanes) or due to the fact that they had only limited net positive performance with major flaws to be overcome. The proposal with the greatest net positive performance improvement, the construction of grade separations or other capacity improvements along SR12 (East) as early contracts of the project, was included in the current alternatives. Alternative B, Phase 1 included construction of the Beck Avenue/SR12 (East) interchange and Alternative C, Phase 1 includes addition of a third eastbound lane on SR12 (East) from I-80 to the Webster Street off ramp.

C. RESOURCE CONSERVATION

The scope of the I-80/I-680/SR12 interchange project is to reduce recurring congestion through a multi-modal approach and improve traffic safety and vehicular access. These improvements in operational efficiency would allow the most effective use of limited resources.

The project will require a significant amount of either new alignment or widened alignment and structural section to be built. However, wherever possible, the existing highway is being utilized as part of the new freeway, frontage road and bikeway system. In addition, aerial deposited lead (ADL) laden soil excavated from along the shoulders or median of existing I-80, I-680 and SR12 (East and West) will be identified for encapsulation within the proposed roadway embankments. Asphalt grindings will be recycled as aggregate and shoulder backing and rubberized asphalt will be used in the proposed structural section. Metal beam guard rail will be salvaged. Certain signs may require relocation.

The proposed project will minimize the use of energy and nonrenewable resources. Measures to conserve energy and nonrenewable resources during construction will be considered during the design phase of the project.

At the westbound truck scales, the existing paved areas of the inspection area will be left in place for contingency uses. The materials in the existing buildings will be recycled where practical.

The westbound truck scales will be designed with the goal of obtaining the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver certification; consistent with the Governor's Executive Order S-20-04 for Energy Conservation. The building design goals will be to use 28% less energy and 30% less water than a typical building the same size as the Truck Inspection Facility (TIF). The building will incorporate a solar-voltaic system on the roof which is expected to generate over 12% of the building's energy needs; day-lighting will be used in 75% of the rooms to reduce the amount of electric lighting needed.

D. RIGHT OF WAY

Right of Way Required

The project would impact agricultural lands, commercial, retail, industrial warehouse and undeveloped lands all within Solano County. The westbound truck scales in the full build alternative (Alternative C) would require the demolition of one existing residence and associated buildings (barns, sheds, etc.) at 4018 Russell Road.

Right of Way Data Sheets have been prepared for each alternative and are included in Attachment G. They include estimated cost information. A summary is included in the tables below:

**Table 16. Right of Way Parcel Information (Land and Improvements) Summary
(Compiled from Right of Way Data Sheets)**

Number of:	Alternative C, Phase 1			Alternative C		
	Part Take	Full Take	Estimated \$	Part Take	Full Take	Estimated \$
Vacant Land Parcels	16	1	\$ 12,475,000	36	3	\$ 22,120,000
Single Family Residential Units.	1	0	\$ 545,000	3	0	\$ 575,000
Multi-Family Residential Units	0	0	\$ 0	1	0	\$ 85,000
Commercial/Industrial Parcels	20	7	\$ 58,256,000	45	13	\$ 70,350,000
Farm/Agricultural Parcels	2	0	\$ 4,715,000	12	0	\$ 6,730,000
Permanent and Temporary Easements	0	0	\$ 0	0	0	\$ 0
Other Parcels	8	7	\$ 3,254,000	15	19	\$ 5,115,000
TOTALS	47	15	\$ 79,245,000	112	35	\$ 104,975,000

Table 17. Estimated Total Right of Way and Utility Relocation Costs

Item	Alternative C, Phase 1	Alternative C
Acquisition	\$ 79,245,000	\$ 104,975,000
Utility Relocation	\$ 33,800,000	\$ 54,600,000
Relocation Assistance Program	\$ 1,940,000	\$ 2,690,000
Clearance Costs	\$ 150,000	\$ 330,000
Right of Way Support Costs	\$ 915,000	\$ 2,205,000
Easements (Utility and TCE)	\$ 4,100,000	\$ 5,200,000
Total	\$ 120,150,000	\$ 170,000,000

Railroad. There will be involvement with UPRR at three locations with the preferred alternative. Plus an additional location for the full build alternative at each location either new or modified construction and maintenance agreements will be needed with the UPRR as well as a California Public Utilities Commission Order (GO88-B or a formal application):

- Alternative C and Alternative C, Phase 1: Cordelia Underpass of the UPRR by I-80. The existing bridge will be replaced. The project will require that the UPRR right of way across I-80 be widened to the southwest. The railroad's right of way on either side of I-80 is already sufficiently wide to accommodate the alignment of the relocated underpass (apparently as the result of an earlier alignment of the railroad).
- Alternative C and Alternative C, Phase 1 will build a new overhead of the UPRR for Red Top Road as part of an immediately adjacent new interchange on SR12 (West). The proposed overhead will clear span over the railroad right of way.
- Alternative C and Alternative C, Phase 1 will have multiple new highway connectors clear spanning over the existing UPRRR right of way immediately southeast of the I-80 right of way adjacent to the Cordelia underpass.
- Alternative C will include a new local road over the UPRR in Suisun City, connecting to an extension of West Street. That overhead will span over the railroad. It will require railroad land currently used by adjacent businesses that will also need to be acquired.

The California Northern Railroad operates on the tracks owned by the UPRR from Suisun City, through Cordelia and Jameson Canyon to Napa County and beyond.

Utilities. The project will require utility relocation and modification. Mapping verification efforts are under way to confirm utility relocations and modifications with the following agencies and utility owners:

- AT&T (California Long Distance, Global and Local Service – TCG)
- City of Benicia (Water Transmission)
- City of Fairfield

- City of Suisun City
- City of Vallejo (Water Transmission and Distribution)
- COMCAST
- Department of Water Resources
- Fairfield Suisun Sanitary District
- Kinder Morgan Energy Partners
- Level 3 Communications
- MCI
- PG&E (Gas transmission and distribution, electric transmission and distribution, cell towers)
- Qwest Communications
- Solano Irrigation District (SID)
- Suisun-Solano Water Authority (Joint Venture of City of Suisun City and Solano Irrigation District)

Permanent utility easements and encroachment permits, CCUA and JUAs would be required to relocate existing utility lines. All utilities will be potholed and positively identified during the design phase. See the detailed discussion in the utilities section of this report for descriptions of the required relocations.

PG&E Valve Lot Relocation: Phase transfer/swapping of rights between PG&E and Caltrans.

The PG&E Gas Transmission Valve Lot and transmission mains crossing I-80 and I-680 will require relocation under both Alternative C and Alternative C, Phase 1. PG&E owns in fee the existing valve lot in the area defined by I-680, I-80 and Green Valley Road/Lopes Road. The valve lot will be relocated to a former Fairfield – Suisun School District Intermediate School site located on Central Way immediately east of I-680. Caltrans District Right of Way management has been consulted and has provided conceptual concurrence.

The new gas transmission main crossings of I-80 and existing I-680 will require the acquisition of gas line easements from adjacent private parcels. A small private vacant parcel between Central Way, existing I-680 and the City/County line will also need to be acquired for the relocation of a district regulating station from the existing valve lot.

Environmental Mitigations

The project's Final Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) has identified a series of mitigations requiring the acquisition of a combination of land to be placed in trust, conservation easements and mitigation credits. Costs for the acquisition of these land rights is included in the environmental mitigation items in the various alternatives estimates.

Relocation Impact Study Report

A Community Impact Assessment (CIA) which evaluates the effects of the project on the human environment has been prepared in accordance with all applicable Caltrans and FHWA guidelines pertaining to community impact assessments. The CIA discusses the effects of the proposed alternatives on land use, farmlands, population and housing, the local and regional economy, community facilities and services, and on low-income and minority communities. A summary of the community effects of each alternative is presented below.

Table 18. Community Effects of Each Alternative

Agriculture	Alternative C	Alternative C, Phase I
Williamson Act Contracts (Prime Farmland)	3 parcels/ 14.4 acres	
Conservation Easement	2 parcels/ 22.5 acres	
Impacted Agricultural Parcels (Total)	18 parcels/ 139 acres	9 parcels/74 acres
Population and Housing		
Census Tract Block Groups	11	11
Residential Building Displacements	1	
Environmental Justice		
Environmental Justice Communities	0	0
Local and Regional Economy		
Displaced Businesses	49 businesses	22 businesses

Each project alternative would result in substantial conversion of agricultural lands. Adverse impacts to agriculture would be mitigated by protecting prime farmland within Solano County through long-term land use restrictions, such as agricultural easements. The mitigation of impacts to prime farm lands will be consistent with the DEIR/S.

Alternative C would primarily affect industrial warehouse uses located to the west of I-680 and south of I-80.

The Caltrans Relocation Assistance Program was developed to help eligible displaced individuals or businesses move with as little inconvenience as possible. All rights and services provided under Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, would be strictly adhered to. The rights of non-tenured occupants of displaced properties would be preserved. It is Caltrans policy that persons displaced as a result of Caltrans-sponsored transportation programs shall receive fair and humane treatment and shall not suffer unnecessarily as a result of projects designed for the benefit of the public. No occupants would be required to relocate until comparable replacement housing has been made available to them.

Project alternatives would not result in an adverse impact on environmental justice communities. In addition, the alternatives are consistent with applicable Solano County, City of Fairfield, and City of Suisun City General Plan goals and policies pertaining to land use and transportation.

Airspace Lease Areas

There is no known use of airspace leases within the project area. Both alternatives create new local roadways that could accommodate future airspaces leases, if the local agencies allow them.

E. ENVIRONMENTAL ISSUES

A Final EIR/EIS has been prepared and certified (see Attachment E for the final EIR/EIS).

The Biological Opinion was approved on April 16, 2012.

The I-80/I-680/SR2 Interchange Project is a project by Caltrans and subject to state and federal environmental review requirements, including the CEQA and NEPA. In developing the scope of this EIR/EIS and the project alternatives, two main factors were considered for the NEPA and CEQA analysis.

- Project alternatives need to meet the future traffic demand within the 20 year planning horizon
- CEQA project alternatives be comprehensive enough to allow for a notice determination (NOD) under CEQA to be issued and project right of way to be acquired for the fundable first phase and accounted for in long-range plans for the build alternative.

A full build alternative, Alternative C, was developed, as well as a fundable first phase (Alternative C, Phase 1). Completing a CEQA analysis on the full build (albeit not fundable within MTC's RTP 2035 horizon) project alternative also facilitates environmental review of the project in the future, and allows STA and local agencies in the project area to proceed with planning activities and protecting land for future right of way needs. Local jurisdictions - in this case the City of Fairfield and Solano County - will be able to use the CEQA analysis in the EIR/EIS to adopt plan lines for corridor planning purposes. The necessary right of way can be accounted for in local plans to ensure that development does not occur in areas that will eventually be acquired for roads and right of way necessary to operate and maintain the facilities. This approach also provides analysis of a fundable first phase for each alternative that meets NEPA and FHWA criteria so that a ROD can be issued while providing analysis and approval for the long-term interchange design for the proposed project.

Funding to construct the full build alternative to be cleared by CEQA has not yet been identified. However, due to its local and regional significance the I-80/I-680/SR12

Interchange project continues to be the highest priority transportation project in Solano County for STA, as well as the MTC and Caltrans.

Natural Environmental Study Report

Natural resources were identified through coordination with U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), a review of existing information, and a variety of field studies conducted by ICF Jones & Stokes biologists. Natural resources were documented or identified as having the potential to occur within the study area and therefore could be affected by the proposed project. The Natural Environment Study (ICF Jones & Stokes 2009) addresses potential impacts of the project alternatives to natural communities, and special-status species and their habitat.

Alternative C and Alternative C, Phase 1 would affect the following natural communities: riparian woodland, valley oak woodland, perennial marsh, seasonal wetland; seasonal drainage; and perennial drainage. Alternative C and Alternative C, Phase 1 would also affect live oak woodland and alkali marsh natural communities. Alternative C would affect the blue oak and valley oak woodland natural community on the hill between Cordelia and the truck scales along the south side of I-80.

Alternative C and Alternative C, Phase 1 would also impact the Suisun Marsh Secondary Management Area.

Alternative C would affect pappose tarplant and Contra Costa goldfields, including its critical habitat. Alternative C, Phase 1 would also affect pappose tarplant. Alternatives C would affect saline clover. Alternative C and Alternative C, Phase 1 could affect showy Indian clover. Neither of the proposed alternatives would have an effect on alkali milk vetch or streamside daisies. See Table 19 for a summary of impacts on sensitive natural communities and Table 20 for a summary of impacts on sensitive plant species and native trees.

Costs have been identified and included in the alternative project estimates to offset the impacts/affects to communities, habitat and species identified in the DEIR/DEIS. Temporary impacts on alkali season marsh and jurisdictional and non-jurisdictional seasonal wetlands will be avoided and minimized through use of barrier fencing, worker training, and biological monitoring during construction.

04-SOL-80/680/12 Interchange

PM I-80 10.6-16.5

PM I-680 10.0 – 13.1

PM SR12 (West) R1.7-R2.8

PM SR12 (East) L1.8 – R4.8

Program Code HE11

Table 19. Summary of Sensitive Communities by Project Alternative

Impact Type	Sensitive Natural Communities (acres)											
	Riparian Woodland	Blue Oak Woodland	Valley Oak Woodland	Live Oak Woodland	Perennial Drainage	Jurisdictional Seasonal Drainage ^b	Non-Jurisdictional Seasonal Drainage	Jurisdictional Perennial Marsh ^a	Non-Jurisdictional Perennial Marsh	Jurisdictional Alkali Seasonal Marsh	Jurisdictional Seasonal Wetland	Non-Jurisdictional Seasonal Wetland
Alternative C												
Temporary	0.25	0.52	0.02	1.68	0.92	0.52	0.17	3.68	0	0.13 ^c	0.70 ^c	0.01 ^c
Permanent	2.24	0	0.17	12.17	0.66	2.28	0.11	5.03	0	1.03	8.62	0.36
Total Alternative C Impacts	2.49	0.52	0.19	13.85	1.58	2.80	0.28	8.71	0	1.16	9.32	0.37
Alternative C, Phase 11.66												
Temporary	0.08	0	0.02	2.03	0.51	0.40	0.05	1.66	0	0	0	0.01 ^c
Permanent	1.11	0	0.14	11.77	0.10	1.95	<0.01	0.44	0	0	3.88	0.34
Total Alternative C, Phase 1 Impacts	1.19	0	0.16	13.80	0.61	2.35	0.05	2.10	0	0	3.88	0.35

^aPerennial marsh acreages include areas mapped as perennial wetland drainage in the delineation.

^bNon-jurisdictional season drainage impacts are provided in Section 3.3.2.5 of the EIR/EIS. No compensatory mitigation is required for the impacts on non-jurisdictional seasonal drainages, as discussed in Section 3.3.2.5 of the EIR/EIS.

^c Temporary impacts on alkali seasonal marsh and jurisdictional and non-jurisdictional seasonal wetland will be avoided and minimized through use of barrier fencing, worker training, and biological monitoring during construction.

Source: FEIR/FEIS Table 3.3.1-1

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

**Table 20. Summary of Sensitive Plant Species and Native Tree Impacts by Project Alternative
(number of plants unless otherwise noted)**

	Alkali Milk-Vetch	Pappose Tarplant	Contra Costa Goldfields	Goldfields Critical Habitat (acres)^a	Streamside Daisy	Saline Cover	Native Trees^b (# of Trees)
Alternative C							
Temporary	0	0	0	8.55	0	0	0
Permanent	0	200	30	39.59	0	65	6
Total	0	200	30	48.14	0	65	6
Alternative C, Phase 1							
Temporary	0	0	0	2.68	0	0	0
Permanent	0	2	0	5.85	0	0	4
Total	0	2	0	8.53	0	0	4

^a Includes all habitats in the designated critical habitat for Contra Costa goldfields. Only a part of the impact acreage is within suitable habitat for goldfields.

^b Includes only native trees mapped outside of riparian woodland and oak woodland habitats.

Source: FEIR/FEIS Table 3.3.3-2

Alternative C and C, Phase 1 would potentially affect vernal pool fairy and tadpole shrimp habitat, valley elderberry longhorn beetle habitat, California red-legged frog aquatic and upland habitat, Swainson's hawk foraging habitat, western pond turtles, nesting birds, special-status bats, central California coast steelhead, central valley fall/late fall-run Chinook salmon, and Sacramento splittail. Alternative C, and Alternative C, Phase 1 would potentially affect Callippe butterfly and California red-legged frog critical habitat. Alternative C would affect California Tiger Salamander upland and aquatic habitats, but the Alternative C, Phase 1 alternative would only affect upland habitat. Neither alternative would affect special status fish species. See Table 21 for a summary of impact on special status wildlife species.

Table 21. Summary of Special-Status Wildlife and Fish Species Potential Presence and/or Impacts by Project Alternative

Impact Type	Callippe Butterfly Habitat Present	Vernal Pool Fairy and Tadpole Shrimp Habitat (acres)	VELB (number of shrubs)	CRLF Aquatic Habitat (acres)	CRLF Upland Habitat (acres) ^a	CRLF Critical Habitat	CTS Upland Habitat	CTS Aquatic Habitat	Swainson's Hawk Foraging Habitat ^b	Nesting Birds ^c	Special Status Bats
Alternative C											
Indirect		1.08	1								
Direct	Yes	1.50	10	Temp: 1.25 Perm: 1.68	Temp: 12.99 Perm: 142.63	Temp: 0.13 Perm: 22.89	Temp: 3.35 Perm: 12.58	Temp: 0.49 Perm: 4.47	Perm: 224.60	Yes	Yes
Alternative C, Phase 1											
Indirect		0.28	2								
Direct	Yes	1.43	10	Temp: 0.64 Perm: 1.22	Temp: 6.34 Perm: 128.51	Temp: 0.48 Perm: 22.54	Temp: 0 Perm: 0.76	None	Perm: 169.64	Yes	Yes

^a Upland habitat for CRLF includes riparian woodland, live oak woodland, blue oak woodland, other woodland, upland scrub, seasonal wetland, alkali seasonal marsh, non-native annual grassland, and ruderal vegetation communities.

^b Only permanent impacts are shown because there are no mitigation requirements for temporary losses of foraging habitat.

^c Includes special-status birds such as burrowing owl and northern harrier as well as resident and migratory species.

Tree removal will take place before the start of the nesting season (February 1), as needed, for raptors and migratory birds protected under the Migratory Bird Treaty Act (MBTA).

Cultural Resources

The study area was examined for cultural resources and a series of reports conforming to Caltrans standards were prepared addressing archaeological and architectural resources. The Historic Resources Evaluation Report (HRER) documented that 2 eligible historic districts are located within the indirect Area of Potential Effect (APE). The Village Cordelia Historic District includes 26 contributing properties, and the Suisun Historic District consists of 103 contributing properties. No architectural resources were recommended individually eligible for listing in the national or state registers.

An Archaeological Survey Report (ASR) noted that two known archaeological resources are located within the APE, CA-SOL-242 and CA-SOL-262. Neither of these sites were relocated during this or previous surveys. An assessment of archaeological sensitivity based on the distribution of known sites in the project vicinity, landform, proximity to resources and other variables indicates that areas of particular sensitivity are within 0.125 miles of freshwater creeks (particularly

Green Valley and Suisun Creeks), Holocene Fan deposits, and Clear Lake or Sycamore clay deposits. The ASR recommended that, though no surface indications of archaeological resources were located in the project area, further subsurface investigation (Extended Phase I) was necessary based on the sensitivity of the area.

The Archaeological Extended Phase 1 and Geoarchaeological Assessment consisted of a pedestrian survey of the entire project area, a literature search at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and consultation with the Native American Heritage Commission (NAHC) and the individuals listed by the NAHC as persons with knowledge or interest of the area. An Extended Phase I study was completed in July 2009.

Because more than 20 archaeological sites have been recorded within several miles of the current area of proposed effect (APE), and because younger Holocene soils in general have the potential to contain buried archaeological sites, some of the project area is considered moderately to highly sensitive for buried resources, especially those areas near Green Valley Creek and Suisun Creek. Given this situation, 12 subsurface mechanical test trenches were excavated within the project area as an initial program of geoarchaeological assessment. Trench locations were selected based on topography, mapped soils, and accessibility. It is anticipated that additional subsurface work will be necessary as project plans evolve.

Twelve trenches were excavated for this portion of the study. One possible isolated prehistoric feature was encountered in a Trench near Suisun Creek. This feature consisted of a discrete area of burnt/oxidized reddish soil and concentrations of carbon at approximately 40 inches below the ground surface. No indications of rock, shell, or bone were observed. No other cultural resources were identified during testing.

Paleontological Resources:

The Paleontological Sensitivity Analysis compared the paleontologically sensitive geologic units within the project area to the areas that each project alternative would affect through excavation necessary for structures. Alternative C and Alternative C, Phase 1 will affect sensitive deposits in the vicinity of the existing I-80/SR12 (West) interchange. The technical document recommends a monitoring plan for these areas.

Energy Resources

Potential direct and indirect energy impacts as a result of the proposed project were analyzed based on guidance and procedures developed by Caltrans for estimating the impacts on energy resources from construction, maintenance, and operation of transportation projects. There are no thresholds of significance for

energy consumption. Instead, Caltrans and FHWA require a discussion of the potential energy effects of proposed projects, with particular emphasis on identifying and avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. A qualitative comparison of the project alternatives was employed.

The energy analysis consists of two elements: direct and indirect energy. Direct energy uses consist of energy consumed by fossil fueled vehicles using the interchange. Indirect energy includes the energy associated with construction and maintenance of the interchange on other roadways infrastructures.

The direct energy calculations give an estimate of the potential annual energy consumed by fossil-fueled vehicles using the interchange. The direct energy analysis for the technical study compares the estimated Vehicle Miles Traveled (VMT), delay, and average network speed on the I-80/I-680/SR 12 interchange system-wide measures of effectiveness network that would result under implementation of the project alternatives and the No Project Alternative in 2015 and 2035. It is assumed that societal, economic, or regulatory changes affecting fuel economy are equally reflected in the VMTs for each project alternative and would not change between alternatives. Indirect energy is the energy required to construct, operate, and maintain the transportation network. The indirect energy consumption analysis compares the quantities of material for structures construction, numbers of structure types, lane-miles of roadway for all alternatives, including the No Project Alternative. No detailed quantitative assessment of construction and maintenance impacts of indirect energy consumption is possible. Instead, a qualitative assessment was performed.

Direct energy consumption results from motor vehicle travel through the area. Both the full build alternatives and their fundable first phases would result in increased VMT, reduced hours of delay, and increased motor vehicle speed and their corresponding fundable first phases over no-project conditions. Under 2035 conditions for both build alternatives, a.m. peak hour vehicle speeds would increase to the optimal range for fuel efficiency, increasing fuel efficiency in comparison to the No Project Alternative. Despite this difference, neither the No Project Alternative, nor either of the build alternatives or their fundable first phases would result in an inefficient, wasteful, and unnecessary consumption of direct energy.

Indirect energy consumption would result from project construction and maintenance. Each build alternative would result in increased consumption of indirect energy from construction activities, as only the build alternatives would be constructed. In addition, each build alternative would result in increased consumption of indirect energy from maintenance activities, as each build alternative would increase lane miles. However, these minor increases would not be sufficient to be considered an inefficient, wasteful, or unnecessary consumption of energy. Additionally, with respect to the proposed project, the long-term direct energy requirements are of greater importance and decreases in

consumption of direct energy would balance the energy consumption associated with the one-time construction activities and the minimal maintenance.

Visual Impact Assessment

The project area is already developed with the major highway interchange of I-80, I-680 and SR12. The surrounding visual environment includes a diverse array of industrial, commercial and residential development as well as farmland and grazing land. The buildings around the existing interchange vary height, color, size and age. In general, the building elements around the existing interchange appear randomly placed and do not appear unified. Farmland and grazing land is dispersed between these artificial elements. The existing visual quality in the project area is generally low to moderate.

All build alternatives would result in several adverse and beneficial localized changes to visual character. The extent of paved surface would increase and in the area of new overpasses, on and off ramps, utility towers, and interchange components, could obstruct specific long-distance view. However, because the project involves improvement of existing freeways and interchanges, as a whole it would not be out of character.

The project would result in several localized changes to visual character. Alternative B would result in two beneficial impacts to visual quality (viewpoints 1 and 10) and two adverse impacts to visual quality (viewpoints 2 and 8); Alternative C would result in only one beneficial impact to visual quality (viewpoint 10), and would result in three adverse impacts to visual quality (viewpoints 2, 6 and 8). However, since the project is the improvement of an existing interchange, as a whole it would not be out of character with the existing major highway interchange or add significant new sources of light and glare. The project as a whole would not result in an extreme visual change or create severe adverse visual impacts.

Although the project as a whole would not result in severe visual impacts, it would alter the existing visual quality in the selected viewpoints. Overall, one of the alternatives would result in more dramatic visual quality changes than the other.

Alternative C would have a greater adverse visual impact than Alternative B. The variation in height and the large scale of the interchange structures of Alternative C would contrast more dramatically with the existing rural and suburban aesthetic and decrease visual quality more severely than Alternative B.

Caltrans mandates that a qualitative/aesthetic approach should be taken to minimize visual quality loss in the project area. This approach addresses the actual cumulative loss of visual quality that will occur in the project view shed when the project is implemented. It also constitutes minimization measures that can more readily generate public acceptance of the project.

Visual minimization measures will consist of adhering to the following design requirements in cooperation with Caltrans' District landscape Architect. While these measures will not fully reduce or avoid effects such as view blockage that will occur at several viewpoints, the measures will help to reduce the overall visual effects of the project and project elements.

All visual minimization measures will be designed and implemented with the concurrence Caltrans' District Landscape Architect.

- Caltrans will replace highway planting within the project limits per policy. Caltrans will work with the City of Fairfield during development of highway planting plans.
- Light and glare screening measures shall be incorporated into project plans during final design, including the use of downward cast lighting.
- The I-80 westbound truck scales building materials and forms are to blend with local architectural features of the surrounding community, consistent with the architecture and landscaping of the I-80 Eastbound Truck Scales Relocation Project.
- Soundwalls, overpass structures, landscaping and other freeway-related structures and features will be consistent with the corridor aesthetic recommendations for the I-80 corridor being prepared by the STA.

Mitigation Plan and Estimate

A draft Mitigation and Minimization Measures plan is being drafted as an attachment to the DEIR/S. The plan will indicate the types of impacts, mitigation ratios, responsibilities and when the measures are expected to implemented. Once the Preferred Alternative has been identified and Biological Opinion obtained a more detailed mitigation plan and estimate will be developed.

Preliminary cost estimates have been developed for the various mitigation measures that are independent of construction activities (see Table 22).

Activities that are part of the highway construction activities have been estimated separately as part of the construction costs.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

	Alternative C	Alternative C, Phase 1
Farmland	\$ 4,700,000	\$ 1,100,000
Woodlands	\$ 1,500,000	\$ 800,000
Wetlands	\$ 500,000	\$ 100,000
Vernal Pools (Shrimp Habitat) and Goldfields Replanting	\$ 600,000	\$ 300,000
Burrowing Owls	\$ 400,000	\$ 300,000
Valley Elderberry Longhorn Beetle	\$ 100,000	\$ 100,000
California Red Legged Frog	\$ 300,000	\$ 200,000
Swainson's Hawks Foraging	\$ 3,700,000	\$ 2,100,000
Subtotal : Biological	\$ 7,100,000	\$ 3,900,000
Cultural	\$ 600,000	\$ 300,000
Total Mitigations	\$ 12,400,000	\$ 5,300,000

F. AIR QUALITY CONFORMITY

The latest update to MTC's RTP: "Transportation 2035 Plan," which MTC adopted on April 22, 2009 lists the project. Funding for portions of the project are included in the current 2009 TIP (Funding through FY 2011-12). The design concept and scope of Alternative C, Phase 1 is consistent with the project description in the current 2035 RTP and 2009 TIP. Should another alternative be chosen, an amendment of the TIP would be required before the project could proceed.

Air quality resources were identified through coordination with Caltrans, the California Air Resources Board, and the Bay Area Air Quality Management District (BAAQMD) in accordance with standards set by the federal Clean Air Act and the California Clean Air Act. Findings, regulatory guidance, and data maintained by FHWA and the Environmental Protection Agency (EPA), and a prior study prepared by project traffic engineers were used to quantify existing and future air quality conditions for the proposed project. Emissions of criteria pollutants, greenhouse gases, and mobile-source air toxics, along with ambient air quality effects of traffic emissions, were modeled using industry-standard tools known to and developed in part by Caltrans.

Air quality resources in the project area were documented as being affected by construction-related emissions and operational emissions generated by all alternatives except the No-Build Alternative.

Modeled traffic volumes and operating conditions were obtained from the traffic data prepared by the project traffic engineers. Discussions with the project traffic engineers indicated that traffic volumes would not change with or without project conditions. Therefore, existing year (2004), interim year (2015) with and without project, and design-year (2035) with and without project conditions were evaluated.

Results of intersection and segment CO modeling within the project area and mainline I-80, I-680, and SR12 segments indicate that CO concentrations are not anticipated to exceed the 1- or 8- hour NAAQS and CAAQS standards.

Although truck traffic will not exceed 8% of the traffic volumes, ADT on I-80 would be in excess of 125,000. The proposed project is therefore considered a POAQC per the EPA's 2006 Transportation Conformity Rule. A qualitative PM hot spot analysis was conducted to demonstrate the project would not result in new violations of the federal PM 2.5 air quality standards. Confirmation of this determination was made by the appropriate state and local agencies, including MTC and Caltrans, during interagency consultation (IAC) on December 8, 2010.

Analysis shows that implementation of the build alternatives, relative to existing conditions, would result in decreases in all MSA T emissions under all alternatives for all conditions analyzed for 2015 and 2035 conditions. Relative to the 2015 No Project condition, implantation of the build alternatives would result in increases in acrolein; benzene; 1, 2-butadiene; and diesel particulate matter emissions and decreases in acetaldehyde; benzene; and formaldehyde emissions. Relative to the 2035 No Project condition, implementation of the build alternatives would result in increases in all MSAT emissions under all alternatives for all conditions, except for decreases in acetaldehyde and formaldehyde for 2035 Alternative C, Phase 1.

Project-level emissions were obtained by comparing future with-project emissions to future no-project emissions, modeled using Caltrans' CT-EMFAC model and vehicle activity data provided by Fehr & Peers. Analysis indicates that ROG, NOx, CO, and PM10 emissions would exceed BAAQMD thresholds in the year 2015. ROG, NOx, and CO emissions would decrease in the year 2035. In 2035, PM10 emissions would increase but remain within BAAQMD thresholds.

During construction, temporary increases in ROG, NOx, CO and PM emissions would result from grubbing/land clearing, grading/excavation, drainage/utilities/subgrade construction, and paving activities and construction worker commuting patterns. Pollutant emissions would vary daily, depending on the level of activity, specific operations, and prevailing weather.

GHG emissions for the proposed project would be produced during construction and during operation after construction. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

G. COMPLETE STREETS

The Department in 2008, through DD-64-1, established policy that all transportation improvements are opportunities to improve safety, access, and mobility for all travelers in

California and recognized that bicycles, pedestrian, and transit modes were all integral elements of the transportation system – “complete streets”. California Streets and Highway Code Section 888.2 states: The Department shall not construct a state highway as a freeway that will result in the severance or destruction of an existing major route for nonmotorized transportation traffic and light motorcycles, unless it provides a reasonable, safe and convenient alternative route or such a route exists.

This project includes standard width shoulders and sidewalks on all local street improvements enhancing the local connectivity across the freeways and highways as follows:

Alternative C-1

Across SR12 west at the proposed SR12 west/Red Top Road interchange, across I-80 at the I-80/Green Valley Road interchange. Additionally a Class 1 bike facility is proposed along the Business Center Extension allowing connectivity between the bike route along SR12 west (Jameson Canyon) and downtown Fairfield.

Alternative C

Similar improvements as noted for Alternative C-1 together with enhanced bike/pedestrian facilities (standard shoulders and sidewalks) across I-80 at the I-80/Suisun Valley Road interchange, across SR12 east at the SR12 east/Beck Road and SR12 east/Pennsylvania interchanges and across the UPRR with the frontage road that connects the SR12 east/Pennsylvania interchange to downtown Suisun City.

The above facilities, which include providing additional capacity on these crossings, increase the connectivity and reliability of the complete transportation system, also enhance opportunities for transit.

H. CONTEXT SENSITIVE SOLUTIONS

The Department recognizes that context sensitive solutions are an important element of a holistic transportation system that complements and enhances community values and objectives. The project spans both urban and rural areas, requiring different solutions in each area. In the alignment north of I-80 the magnitude of earthwork has been reduced as much as possible to minimize grading as well as minimizing impact to sensitive habitat and cattle grazing lands. In the more urban areas, in addition to improving non-motorized travel opportunities, bridge and structure aesthetics has been developed in close coordination to the City of Fairfield and varies in appearance from the more rural and to the more urban areas.

I. TITLE VI CONSIDERATIONS

The provisions for low-mobility and minority groups will be incorporated into the project. Refer to “Non Motorized and Pedestrian Features” discussion above for locations of shoulders and sidewalks on local roads.

- Where sidewalks are being added, a minimum of 4 feet clearance will be provided to obstacles such as electroliers, signal standards, fire hydrants, etc.
- Curb ramps will be provided at intersections within the State right of way where they currently do not exist and where new sidewalk is being added, or where existing curb ramps do not conform to ADA standards.
- The existing Class 1 Bike Path along the north side of I-80 adjacent to the westbound off ramp to Abernathy Road will be relocated along with the westbound off ramp in Alternative C.

The above proposed improvements were designed in accordance with Design Information Bulletin 82-03 “Pedestrian Accessibility Guidelines for Highway Project.”

As the westbound Truck Inspection Facility is a specialized “off line” facility, there are no applicable provisions related to low mobility and minority groups. The facility will be designed to meet accessibility standards for people with disabilities and to accommodate disabled personnel (e.g. curb ramps and avoidance of any steps, except for access into inspection pits).

Estimated capital cost of new and upgraded ADA elements is approximately \$1.1 Million for Alternative C-1, which consists of \$650,000 for sidewalk and curb ramps, \$400,000 for a class 1 bike facility along Business Center Drive Extension and \$50,000 for bridge railings.

J. NOISE ABATEMENT DECISION REPORT

A noise technical study has been prepared for the project under the requirements of 23 CFR 772. Noise barriers are currently located in a number of residential areas in the project area on the west side of I-680 and on the north side of SR12 (East). Traffic noise impacts are predicted to occur at 47 units under Alternative B, Phase 1; 72 units under Alternative B; 36 units under Alternative C, Phase 1; and 61 units under alternative C. A noise impact analysis was conducted for the project. Noise levels at Activity Category B land uses (outside activities) within the project are predicted to approach or exceed the Noise Abatement Criteria (NAC) and noise barriers must be considered.

Noise barriers were evaluated in four locations: north of SR12 (East), just east of Chadbourne Road (existing, Barrier H-1); along the I-80 and SR12 (East) flyover transition ramp (Barrier O (SB4)); south of I-80 just west of Dan Wilson Creek (Barrier R); and north of I-80 between Dan Wilson and Suisun Creeks (Barrier Q). Increasing the height of Barrier H-1 to 14 feet would reduce noise levels. Construction of Barriers O, Q and R would also result in a 5 dB or more noise reduction. Raising the height of the other existing noise barriers would not achieve the 5 dB of noise reduction and therefore were not evaluated.

The Noise Abatement Decision Report (NADR) was completed in March 2010, it includes noise abatement construction cost estimates that were based on site-specific

conditions. These cost estimates were compared to the total reasonableness allowances as shown in Table 22.

Table 22. Summary Cost Reasonableness of Evaluated Noise Barriers, I-80/I-680/SR12 Project

Replacement of Existing Walls in Suisun City								
Report Barrier	Height Feet	Receivers Benefitted	Length Feet	Area Sq Feet	Allowance Per Home	Allowance Total Wall Cost	Estimate Total Wall Cost	Cost Reasonable?
H-1	14	25	2,250	31,500	\$ 47,000	\$ 1,175,000	\$ 1,560,000	No
	16	25	2,250	36,000	\$ 47,000	\$ 1,175,000	\$ 1,700,000	No

New Evaluated Barriers								
Report Barrier	Height Feet	Receivers Benefitted	Length Feet	Area Sq Feet	Allowance Per Home	Allowance Total Wall Cost	Estimate Total Wall Cost	Cost Reasonable?
E-2	10	1	1,160	11,600	\$ 45,000	\$ 45,000	\$ 440,000	No
	12	1	1,160	13,920	\$ 47,000	\$ 47,000	\$ 500,000	No
	14	1	1,160	16,240	\$ 47,000	\$ 47,000	\$ 560,000	No
	16	1	1,160	18,560	\$ 47,000	\$ 47,000	\$ 600,000	No
E-3	6	1	750	4,500	\$ 45,000	\$ 45,000	\$ 200,000	No
	8	1	750	6,000	\$ 45,000	\$ 45,000	\$ 260,000	No
	10	1	750	7,500	\$ 47,000	\$ 47,000	\$ 280,000	No
	12	1	750	9,000	\$ 47,000	\$ 47,000	\$ 330,000	No
	14	1	750	10,500	\$ 47,000	\$ 47,000	\$ 370,000	No
	16	1	750	12,000	\$ 47,000	\$ 47,000	\$ 390,000	No
O	10	1	4,800	48,000	\$ 49,000	\$ 49,000	\$ 2,530,000	No
	12	3	4,800	57,600	\$ 49,000	\$ 147,000	\$ 2,800,000	No
	14	3	4,800	67,200	\$ 51,000	\$ 153,000	\$ 3,030,000	No
	16	3	4,800	76,800	\$ 51,000	\$ 153,000	\$ 3,250,000	No
R	6	7	1,400	8,400	\$ 49,000	\$ 343,000	\$ 500,000	No
	8	7	1,400	11,200	\$ 51,000	\$ 357,000	\$ 570,000	No
	10	8	1,400	14,000	\$ 51,000	\$ 408,000	\$ 650,000	No
	12	8	1,400	16,800	\$ 53,000	\$ 424,000	\$ 730,000	No
	14	8	1,400	19,600	\$ 53,000	\$ 424,000	\$ 790,000	No
	16	8	1,400	22,400	\$ 53,000	\$ 424,000	\$ 850,000	No

Note Relocation of Each Wall

H-1: North side of SR12 (East) between westbound exit to Chadbourne and east of Columbus Drive.

E-2: East side of I-680 between Jameson Creek and the UPRR

E-3: East side of I-680 at the northbound on ramp merge area at proposed Red Top Road interchange.

O: South side of I-80 west of Hale Ranch Road.

R: South side of I-80 between Suisun Valley Road and Dan Wilson Creek.

As shown in Table 22, the estimated construction costs exceed the reasonableness allowance in all cases. Accordingly, the barrier designs studied in this analysis are not considered reasonable from a cost perspective. The public input process has been completed with no comments requesting noise barriers and the final determination is that none of the barriers evaluated is reasonable and feasible.

7. OTHER CONSIDERATIONS AS APPROPRIATE

• PUBLIC HEARING PROCESS

Public Review and Comment

The Draft EIR/EIS was available for public review from August 10, 2010 to October 18, 2010, during which time comments were accepted. A total of 21 written comments were received from agencies and citizens. Comment letters included comments regarding the following resource areas: Land Use, Farmlands, Utilities, Traffic and Transportation, Hydrology and Floodplain, Air Quality, Noise and Biological Environment.

Public Meeting

A public meeting was held on Thursday, September 23, 2010 at the Solano County Administration Building from 6:00 to 8:00 pm. The purpose of the meeting was to present the Draft EIR/EIS including both build alternatives and their associated fundable first phases and to solicit comments from the public. Twenty-six attendees signed in at the open house. The format of the meeting was an informational open house. Exhibit boards showing the project and addressing all issue areas were available for viewing and Caltrans and STA staff were available to answer questions. Comment forms were available at the public meeting to facilitate the submission of written comments by attendees. A court reporter was provided at the open house to accept verbal comments. A total of seven comments (four written and three verbal) were submitted at the public meeting.

Overview of Comments on the Draft EIR/EIS

Comments were submitted by:

Federal Agencies

- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- FEMA
- U.S. Fish and Wildlife Services

State Agencies

- California Regional Water Quality Control Board

Local Agencies

- City of Fairfield

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

- Solano County Department of Resource Management
- Solano County
- Solano Irrigation District
- Fairfield-Suisun Unified School District

Community Organizations

- FixFairfield.org
- BCDC
- Solano County Land Trust
- Bay Area Ridge Trail Council

Members of the Public

- Neal Johnson
- Edgar V. Salire, PE
- John Futini
- Jackie Kepley
- Jeff Dittmer
- Jaeger, McHugh & Company, on behalf of the owners of Edison Court
- Manoj Sahni
- Woody Darnelle
- Lesley Brunner
- Linda Mellor
- Walter Permann
- Michelle Valine

Preferences for the proposed alternatives were expressed as summarized in Table 23.

Table 23. Alternatives Preferences

	Federal	State	Local	Community Organization	Public (Noted by Comment)*
Alternative B	U.S. Environmental Protection Agency (indicates the Alternative C, Phase 1 may not meet purpose/need)				1-1 12-1 18-12
Alternative C	U.S. Army Corps of Engineers		City of Fairfield Solano County Department of Resource Management		M-3-1 M-4-1 M-7-1

Table 23. Alternatives Preferences

	Federal	State	Local	Community Organization	Public (Noted by Comment)*
No State Preference	FEMA U.S. Fish and Wildlife Services	California Regional Water Quality Control Board	Solano County Solano Irrigation District Fairfield-Suisun Unified School District	FixFairfield.org BCDC Solano County Land Trust Bay Area Ridge Trail Council	2-1 13-1 M-1-1 M-5-1
No Build Alternative					M-2-1

* refers to public comment identification system in FEIR/S.

Below is a summary of comments by topic:

Air Quality Impacts

- U.S. Environmental Protection Agency
- City of Fairfield, Fairfield-Suisun Unified School District
- One Member of the Public

Agricultural Impacts

- U.S. Environmental Protection Agency
- Solano County Land Trust
- One Member of the Public

Approval of Project Need

- Solano County, Solano County Department of Resource Management, City of Fairfield
- One Member of the Public

Automobile Traffic and Congestion

- U.S. Army Corps of Engineers, U.S. EPA
- City of Fairfield, Fairfield-Suisun Unified School District
- FixFairfield.org

Bicycle and Pedestrian Impacts

- City of Fairfield, Fairfield-Suisun Unified School District
- Bay Area Ridge Trail Council
- Three members of the public

Climate Change

- U.S. Environmental Protection Agency
- BCDC

Cost, Taxes

- FixFairfield.org
- Three Members of the Public

Economic Impacts

- City of Fairfield
- Two Members of the Public

Environmental Justice, Cultural Resources

- U.S. Environmental Protection Agency

Geology/Seismic Impacts

- U.S. Army Corps of Engineers

MSAT

- U.S. Environmental Protection Agency

Noise Impacts

- U.S. Environmental Protection Agency
- City of Fairfield, Fairfield-Suisun Unified School District
- Two Members of the Public

Planning

- City of Fairfield
- One Member of the Public

Project Location and Neighbor Impacts

- U.S. Environmental Protection Agency
- City of Fairfield, Fairfield-Suisun Unified School District
- BCDC
- Five Members of the Public

Regulatory Concerns, NEPA

- U.S. Environmental Protection Agency

Water Quality Impacts

- FEMA, U.S. Army Corps of Engineers
- Solano Irrigation District, City of Fairfield
- California Regional Water Quality Control Board
- BCDC

Wetlands

- U.S. Environmental Protection Agency
- California Regional Water Quality Control Board

Wildlife, Habitat, Environmental Impacts

- U.S. Fish and Wildlife Services
- City of Fairfield
- BCDC
- One Member of the Public

Visual Impacts

- City of Fairfield

Unrelated/Comments Outside of Project Scope

- Solano County
- FixFairfield.org
- One Member of the Public

• ROUTE MATTERS

The majority of work identified along I-80 and I-680 for the preferred alternative and the fundable first phase will require changes to the existing freeway agreements. The freeway upgrades of the existing expressway on SR12 (East) in Alternative C will require new freeway agreements to replace the existing controlled access highway agreements. The upgrades of SR12 (West) at Red Top Road to freeway in Alternative C and Alternative C, Phase 1 will require a new freeway agreement. Freeway agreements are currently being prepared and will be finalized when Environmental Document is approved.

Freeway Agreements and New Connections

Table 24 lists the existing Freeway Agreements and Controlled Access Highway within the project limits and whether they will be affected by this project. It also lists the new Agreements that will be required.

Table 24. Affected Freeway and Controlled Access Highway Agreements/New Agreements

Agreement	Alternatives	
	Alternative C	Alternative C, Phase 1
Freeway agreement between the State and the County of Solano dated October 21, 1958 for the section of State Highway Route 74 (I-680) from 0.5 miles south of Jameson Creek to Route 7 (I-80) near Cordelia and Route 7 (I-80) between Cordelia Road and 0.3 miles east of Green Valley Creek.	Y	Y
Freeway agreement between the State and the County of Solano dated May 7, 1963 for the section of State Route 74 (I-680) between 0.9 mile north of the Benicia Arsenal Boundary and 0.5 mile south of Jameson Creek.	Y	Y
Freeway agreement between the State and the County of Solano dated July 25, 1966 for the section of Route 80 (Old Route 7) from the Napa-Solano County Line and the junction with Route 12 near Cordelia.	Y	Y
Freeway agreement between the State and the City of Fairfield dated October 1, 1974 for the section of Route 80 from 0.3 miles east of Green Valley Road to 0.3 miles east of Suisun Valley Road.	Y	Y
Freeway agreement between the State and the City of Fairfield dated January 17, 1984 for the section of Route 80 from Hale Ranch Road to LedgeWood Creek.	Y	N
Freeway agreement between the State and the County of Solano dated April 3, 1984 for the section of Route 80 from 0.3 miles east of Suisun Valley Road to Chadbourne Road.	Y	N
Controlled Access Highway agreement between the State and the County of Solano dated February 6, 1979 for the section of Route 12 from 0.15 mile west of Chadbourne Road to Marina Boulevard.	Y (Replace with City Agreements)	N
Controlled Access Highway agreement between the State and the City of Suisun City for the section of Route 12 from 0.4 mile east of Pennsylvania Avenue to Marina Boulevard.	Y (New Freeway Agreements)	N
Controlled Access Highway Agreement between the State and the City of Fairfield for the section of Route 12 from Junction with Route 80 to 0.1 mile east of LedgeWood Creek.	Y (New Freeway Agreements)	N

As outlined above, revisions to the existing or new Freeway Agreements will be required with Solano County and the City of Fairfield for all segments of the project.

Approval from the CTC will be required for new alignment of I-680 and new public road connections to freeway.

Route Adoptions

A Route Adoption is required for the new alignment of I-680 in Alternative C and Alternative C, Phase 1 as they are in a developed urban environment and a portion of the existing freeway will be relinquished to Fairfield.

Relinquishments

For Alternative C and Alternative C, Phase 1, the revised Freeway Agreement will provide for the relinquishment of a portion of I-680 to the City of Fairfield. The Freeway Agreement will also include provisions for modifying the existing freeway roadway to be used as Green Valley Road near I-80 and to connect with Lopes Road at its southern end.

Other Agreements

Table 25 lists the existing maintenance agreements within the project limits and whether they will be affected by this project. It also lists the new agreements that would be required.

Table 25. Affected Maintenance Agreements

Agreement	Alternatives	
	Alternative C	Alternative C, Phase 1
Maintenance Agreement between the State and Solano County for SR12 (West) dated April 1, 1983	Y	Y
Maintenance agreement between the State and County of Solano dated January 2, 1964 for the Green Valley Road overcrossing, Suisun Valley Road overcrossing and Abernathy Road overcrossing.	Y	Y
Maintenance agreement between the State and County of Solano dated June 16, 1970 for the Red Top Road undercrossing.	Y	Y
Maintenance agreement between the State and City of Fairfield dated April 6, 1994 for the Red Top Road overcrossing, Green Valley Road overcrossing, Suisun Valley Road overcrossing and Airbase Parkway overcrossing.	Y	Y
New Maintenance Agreement for the interchanges on SR12 (East) with City of Fairfield and Suisun City	Y	N
New Maintenance Agreement with the I-680 Red Top Road interchange with the City of Fairfield	Y	Y
New Maintenance Agreement with Red Top Road from I-680 to SR12 (West) between the State, City of Fairfield and Solano County.	Y	Y

Revisions to the existing or new maintenance agreements will be required with Solano County and the City of Fairfield for all segments of the project.

The new maintenance agreement for Red Top Road from I-680 to SR12 (West) will document the City of Fairfield's approval and also that of Solano County regarding the use of Red Top Road by traffic traveling between two of the freeways. This agreement will also document the roles of the City of Fairfield and Solano County to maintain these

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

roadways. Table 26 lists those movements that would use Red Top Road when travelling between two of the freeways.

Table 26. Freeway to Freeway Movements Using Red Top Road

Movements	Existing	Alternatives	
		Alternative C	Alternative C, Phase 1
Northbound I-680 to Westbound I-80	N	N	N
Northbound I-680 to Westbound SR12 (West)	N	N	N
Eastbound I-80 to Southbound I-680	N	N	N
Eastbound I-80 to Westbound SR12 (West)	Y	Y	Y
Eastbound SR12 (West) to Westbound I-80	Y	Y	Y
Eastbound SR12 (West) to Southbound I-680	N	N	Y

- **PERMITS**

The permits listed in Table 27, below, are required for this project:

Table 27. Alternatives Preferences

Agency	Permit, Approval or Consultation	Status
U.S. Fish and Wildlife Service	Consultation under Section 7 of the federal Endangered Species Act	Biological Assessment has been submitted to USFWS.
National Marine Fisheries Service	Consultant under Section 7 of the federal Endangered Species Act and for Essential Fish Habitat under Magnuson-Stevens Fishery Conservation and Management Act	Concurrence Letter has been issued.
U.S. Army Corps of Engineers	Clean Water Act Section 404 individual permit for placement of fill	Application to be submitted after NEPA completed
California Department of Fish and Game	California Fish and Game Code Section 1602 streambed alteration agreement for waters of the state; potential consultation under Section 2081 of the California Endangered Species Act (CFG Code, Sections 2050 et seq); CEQA trustee agency	To be completed after CEQA completed
San Francisco Bay Regional Water Quality Control Board	Non-point Clean Water Act Section 402 National Pollutant Discharge Elimination System permit (General Construction Permit), Clean Water Act Section 401 water quality certification	Application to be submitted after CEQA completed
Bay Area Air Quality Management District	Permit for air pollutant emission-generating equipment	Application to be submitted if portable engines and certain other equipment have not previously been registered with the California Air Resources Board after CEQA completed
California Public Utilities Commission	General Order 131-D filing requirements for high-voltage electrical lines	Application to be submitted after CEQA completed
California Public Utilities Commission	GO-112 Design, construction, testing, maintenance and operation of utility gas gathering, transmission and distribution piping systems	Application to be submitted after CEQA completed
Solano County	Marsh Development Permit	Application to be submitted after CEQA completed

• **COOPERATIVE AGREEMENTS**

Cooperative Agreements will be needed between Caltrans and STA for design, right of way and construction for each construction package of the I-80/I-680/SR12 Interchange project as funding is identified and becomes available.

The existing Cooperative Agreements and Memorandums of Understandings between Caltrans and the STA that relate to this project include:

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

Table 28. Existing Cooperative Agreements

Execution Date	Type of Document	Scope of Agreement
June 13, 2002	Cooperative Agreement 4-1905-C	For Study of Improvements to I-80 in Fairfield and parallel facilities. Funding is from the I-80/I-680/SR12 Interchange project (Project 25.3)
December 31, 2007	Cooperative Agreement 4-1905-A1	Amendment #1, to extend the termination date of the original Agreement
September 23, 2010	Cooperative Agreement 4-1905-A2	Amendment #2, for state to reimburse authority for stat's actual costs in connection with obtaining the USFWS biological opinion/approval and extension of the termination date of the original agreement.
January 1, 2012	Cooperative Agreement 4-1905-A3	Amendment #3, to increase the budget for obtaining USFWS biological opinion/approval and extend the termination date of the original agreement.
April 15, 2011	Cooperative Agreement 4-2313	For PS&E and Right of Way Components of the new I-80 westbound to SR12 westbound connector.
October 21, 2011	Cooperative Agreement 4-2377	For PS&E of the new westbound I-80 connector to southbound I-680 in Solano County.
December 1, 2011	Cooperative Agreement 4-2376	For PS&E and Right of Way Components of the new interchange on I-680 at Red Top Road along with the realignment of Lopes Road, Ramsey Road and Fermi Drive.

Copies of the existing agreements for Preliminary Engineering are attached as Attachment J.

The funding for the project is from TCRP, STIP, CMIA, Bridge Toll Funds from MTC, Regional HOT lanes funding from MTC and other sources. This project is part of the Corridor Improvements near I-80/I-680 interchange being sponsored by the STA. Caltrans will own, operate and maintain the completed work within the designated state right of way. Solano County and the Cities of Fairfield and Suisun City will own, operate and maintain the completed work outside the designated state right of way within their respective jurisdictions, including funding of those activities.

The STA, in cooperation with Caltrans, has already initiated the project planning, environmental and Project Report processes, under the existing cooperative agreement for the overall I-80/I-680/SR12 interchange project. STA is performing the work with oversight being provided by Caltrans. This relationship is proposed to continue under the proposed Cooperative Agreement for Design. The construction contracts for work exclusively within the state right of way will be administered by Caltrans. Similarly the construction contracts for work exclusively outside the state right of way will be administered by STA. Specifically the items funded and performed for work on the State Highway System by each agency are as follows:

Table 29. STA and Caltrans Responsibilities

Item	Solano Transportation Authority (STA)		State (Caltrans)	
	Perform	Fund	Perform	Fund
Environmental Mitigation		X	X	
STA Costs	X	X		
Environmental Documentation	X	X	X	
Design Engineering	X	X		
Project Management	X	X		
Design Oversight (Independent Quality Assurance)			X	X
Construction/Construction Management	X	X	X	
Maintenance of Completed Project			X	X
Right of Way	X	X	X	

- **TRANSPORTATION MANAGEMENT PLAN FOR USE DURING CONSTRUCTION**

Transportation Management Plans (TMP) will be needed for the various construction packages. Various TMP elements such as a Public Information Program, enhanced Freeway Service Patrol, Highway Advisory Radio, portable changeable message signs, use of existing fixed changeable message signs, and a CHP Construction Zone Enhanced Enforcement Program (COZEED) are expected to be used to alleviate and minimize delay to the traveling public. There will be numerous construction packages, each one of which will have a specific TMP tailored to its scope. The contract packaging and sequencing of improvements will have as one of its primary goals the avoidance of increases in delay to the traveling public. A TMP Data Sheet is included as Attachment H.

- **STAGE CONSTRUCTION**

The I-80/I-680/SR12 interchange will be built with a series of construction packages over a number of years. Maintenance of traffic, incremental value of the specific improvements and funding will control the sequence and timing of the various contracts. Detailed construction staging and traffic handling plans will be developed for each of the contracts. Traffic operations analysis will be performed for each roadway construction package.

The general construction sequence will involve building the fundable first phase (Phase 1) portions of each full build alternative before building the remainder.

- **ACCOMMODATION OF OVERSIZE LOADS**

The westbound truck scales facilities will be designed to process extra legal oversize load/vehicle, though not all portions of the facility may be designed to directly accommodate them. Oversized loads will be accommodated during construction.

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

- **GRAFFITI CONTROL**

Final design of the bridge, retaining walls, sound walls and truck inspection facility will include selection of materials and finishes that discourage graffiti and expedite its removal when it occurs.

Graffiti should not be a major problem at the truck inspection facility due to the fact that the facility is expected to be manned 24 hours a day by CHP personnel.

- **RISK MANAGEMENT PLAN**

A Risk Management Plan has been prepared and is included as Attachment I.

- **MATERIALS RECOMMENDATION**

A Life Cycle Cost Analysis (LCCA) was performed and approved on October 2, 2012. The preliminary pavement sections for the mainline corridor are as follows:

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

Table 30. Mainline Corridor Preliminary Pavement Sections

Location	Pavement Section
I-80 East of Interchange Inside Lanes	1.05' JPCP 0.35' LCB 0.70' AS 0.65' LTS
I-80 East of Interchange Outside Lanes	1.20' JPCP 0.35' LCB 0.70' AS 0.65' LTS
I-80 West of Interchange Inside Lanes	1.00' JPCP 0.35' LCB 0.60' AS 0.65' LTS
I-80 West of Interchange Outside Lanes	1.15' JPCP 0.35' LCB 0.70' AS 0.65' LTS
I-680 Inside Lanes	0.95' JPCP 0.35' LCB 0.60' AS
I-680 Outside Lanes	1.05' JPCP 0.35' LCB 0.70' AS
SR12 (East)	1.05' JPCP 0.35' LCB 0.70' AS 0.65' LTS
SR12 (West)	0.10' OGFC 0.20' RHMA-A 0.40' HMA-A 0.65' LCB 1.60' AS
Green Valley Road Westbound Off and Eastbound On Ramps on I-80	1.05' JPCP 0.35' LCB 0.70' AS 0.65' LTS
Low Volume Connectors with I-680 and Other Ramps on I-80 East of I-680	0.10' OGFC 0.20' RHMA-G 0.35' HMA 0.75' AB 0.90' AS
Local Interchange Ramps on I-80 (West of Interchange), I-680 and SR12 (West)	0.10' OGFC 0.20' RHMA-G 0.35' HMA 0.75' AB 0.90' AS

R-Value testing will be performed for each individual design package, to confirm pavement design approach.

The LCCA evaluation indicated that 40-year JPCP would be appropriate for I-80, the new alignment portion of I-680 (between Red Top Road and I-80), the widening portion of I-680 along SR12 (East), and the Green Valley Road westbound off and eastbound on ramps, while 20-year Hot Mix Asphalt/Rubberized Hot Mix Asphalt sections would be appropriate for SR12 (West) and for the remaining ramps and connectors.

The LCCA was based on the following design parameters:

I-80 – West of I-680/SR12 Interchange

AADT (2015)	108,550	D	58%
AADT (2055)	186,850	T	5.7%
DHV	18,685	V	75 MPH
ESAL	71,100,000	TI _{40-In}	12.5
		TI _{40-Out}	15.0

I-80 – East of I-680/SR12 Interchange

AADT (2015)	183,350	D	58%
AADT (2055)	239,650	T	5.7%
DHV	23,965	V	75 MPH
ESAL	126,400,000	TI _{40-In}	13.5
		TI _{40-Out}	16.0

I-680 Design Designation

AADT (2015)	74,350	D	53%
AADT (2055)	103,050	T	5.2%
DHV	10,305	V	75 MPH
ESAL	27,700,000	TI _{40-In}	11.5
		TI _{40-Out}	13.5

SR12 (West)

AADT (2015)	108,550	D	68%
AADT (2055)	186,850	T	7.2%
DHV	18,685	V	65 MPH
ESAL	71,100,000	TI ₄₀	14.0

• **UNITS**

The project designs will be prepared in English units.

8. PROGRAMMING

A. PROGRAMMING

The project is listed in MTCs RTP (Transportation 2035). See Funding discussion below. This project is identified in the following planning documents:

- STA's Cordelia Truck Scales Relocation Study, February 16, 2005

04-SOL-80/680/12 Interchange
 PM I-80 10.6-16.5
 PM I-680 10.0 – 13.1
 PM SR12 (West) R1.7-R2.8
 PM SR12 (East) L1.8 – R4.8
 Program Code HE11

- STA's I-80/I-680/I-780 Major Investment and Corridor Study 2004
- STA's I-80/I-680/I-780 Corridor Study Highway Operations Plan, 2009

The project was listed in the Regional Measure 2 and TCIF programs.

B. SCHEDULE

PA&ED Complete –October 2012

Advance Utility Relocation (PG&E Gas Transmission and Electric Transmission) - April 2013

PS&E Complete Alternative C, Phase 1 - Initial Construction Package – March 2013

R/W Certification Alternative C, Phase 1 - Initial Construction Package–November 2012

Begin Construction Alternative C, Phase 1 - Initial Construction Package –September 2013

Complete Alternative C, Phase 1 contracts in 2018

Remainder of full build Alternatives - After 2035 as Funding becomes available.

C. FUNDING

The fundable first phase (Phase 1) of the Preferred Alternative will be funded from bridge tolls, STIP, federal, local and Proposition 1B funds.

It is listed in MTC's Transportation 2035 (RTP), as shown in Table 31.

Table 31. Project Funding Sources (dollars in millions and escalated)

Reference Number	Project/Program	Total Project Funding
230326	Improve I-80/I-680/SR12 Interchange, including connecting I-680 northbound to SR12 westbound (Jameson Canyon) adding connectors and reconstructing local interchanges (Phase 1).	\$487.9
22700	Construct Parallel Corridor north of I-80 from Red Top Road to Business Center Drive (portion of funding shown in RTP) (remaining funds).	\$35.0
230687	I-680/I-80 Interchange in Solano County – widen to add an express lane direct connector (portion of funding shown in RTP)	\$228.0
	Total Funding	\$750.9

In addition the project should be able to compete for funds from the following project listed in the RTP:

- Part of Project 230660: Regional HOT Network, I-80 Corridor, I-80 in Solano County from Red Top Road to Air Base Parkway – convert HOV lanes to HOT lanes. Entire I-80 corridor Committed Funds: \$768.1 million. Amount estimated for portion within the I-80/I-680/SR12 interchange project limits is \$20 million.
- Part of project 230686 Regional HOT Network, I-680 Corridor: I-680 in Solano County from Benicia-Martinez Bridge to I-80 – widen to add a HOT lane in each direction. Entire I-680 corridor except I-80/I-680 HOT Connector Committed Funds:

\$849M. Amount estimated for portion within the I-80/I-680/SR12 interchange project limits is \$135 million.

- Eligible to compete for funds from Project 23073 "with net HOT revenue, fund corridor improvements including transit operating and capital needs, freeway operations, interchanges, roadway maintenance and local access." Total estimated amount for Bay Area is \$6.1 billion.

9. REVIEWS

Mike Thomas, Design Coordinator for the Division of Design, reviewed the alternative plans and has concurred with the features of the preferred alternative (Alternative C, Phase 1). Supplemental fact sheets for each construction package will be processed as needed and as funding becomes available.

FHWA involvement has been ongoing. Those activities have included:

- A major project oversight agreement was signed by STA, Caltrans and FHWA on June 20, 2009 (see Attachment L).
- The concepts have been presented and discussed with FHWA and the District's Program Advisor, Doanh Nguyen. The plans reflect their input.
- A Concept Acceptance Report has been prepared and submitted for Alternative C, Phase 1 to FHWA on May 25, 2010. As additional support for the Concept Acceptance Report, an updated Draft Project Report; Addendum to the Traffic Operations Analysis Report (TOAR); Conceptual Signage plan for Alternative C, Phase 1; and layout plans were also sent to FHWA on July 15, 2010. Fact Sheet Exceptions to Mandatory Design Standards for Alternative C, Phase 1 was approved on March 17, 2011. A Supplemental Fact Sheet Exception to Mandatory Standards for Alternative C, Phase 1 was approved on September 14, 2012.
- On September 20, 2011, FHWA provided conceptual approval of the EOA on the fundable first phase (Alternative C, Phase 1) of the preferred alternative (Alternative C).
- A separate Concept Approval Report was prepared in October 2008 for the two full build alternatives on the Interstate System, and FHWA provided informal concurrence for Alternative C in October 2008.
- On December 15 and 16, 2010, FHWA hosted a cost simulation review of the project cost estimates, and found the estimate for Alternative C, Phase 1 as shown in this document to have greater than the 85% confidence level.

Caltrans constructability branch has reviewed the plans in February 2010, and their comments have been incorporated.

10. PROJECT PERSONNEL

To facilitate contacts with team members responsible for preparation of the Project Report, names and phone numbers of key staff are identified below.

Caltrans Project Manager	-	Nicolas Endrawos	(510) 286-5123
Caltrans Project Development Team Leader	-	Roni Boukhalil	(510) 286-5694
Caltrans Environmental Unit Supervisor	-	Melanie Brent	(510) 286-5231
Caltrans Right of Way Branch Reviewer	-	Linda Emadzadeh	(510) 286-5404

In addition to the above-mentioned key staff, the following PDT members were involved with the preparation of this Project Report.

Caltrans

Cameron Oakes	(510) 622-5758
Evelyn Gestuvo	(510) 286-4939
Mike Thomas	(510) 286-4687
Gordon Brown	(510) 622-5932
Joe Peterson	(510) 286-6377
Tracy Bertram	(916) 227-8397

FHWA

Jeff Holm	(916) 498-5021
Lanh Phan	(916) 498-5046

Solano Transportation Authority

Janet Adams	(707) 424-6010
Dale Dennis	(925) 686-0619

Solano County

Matt Tuggle	(707) 784-2797
-------------	----------------

City of Fairfield

Wayne Lewis	(707) 428-7632
-------------	----------------

California Highway Patrol

Mike Ferrell	(707) 864-5552
--------------	----------------

Mark Thomas & Company/Nolte Associates Joint Venture

Mike Lohman	(925) 938-0383
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Fehr & Peers

Ellen Poling	(925) 930-7100
--------------	----------------

Jones & Stokes

Maggie Townsley	(916) 737-3000
Shahira Ashkar	(916) 737-3000

04-SOL-80/680/12 Interchange
PM I-80 10.6-16.5
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8
Program Code HE11

CirclePoint

Scott Steinwert

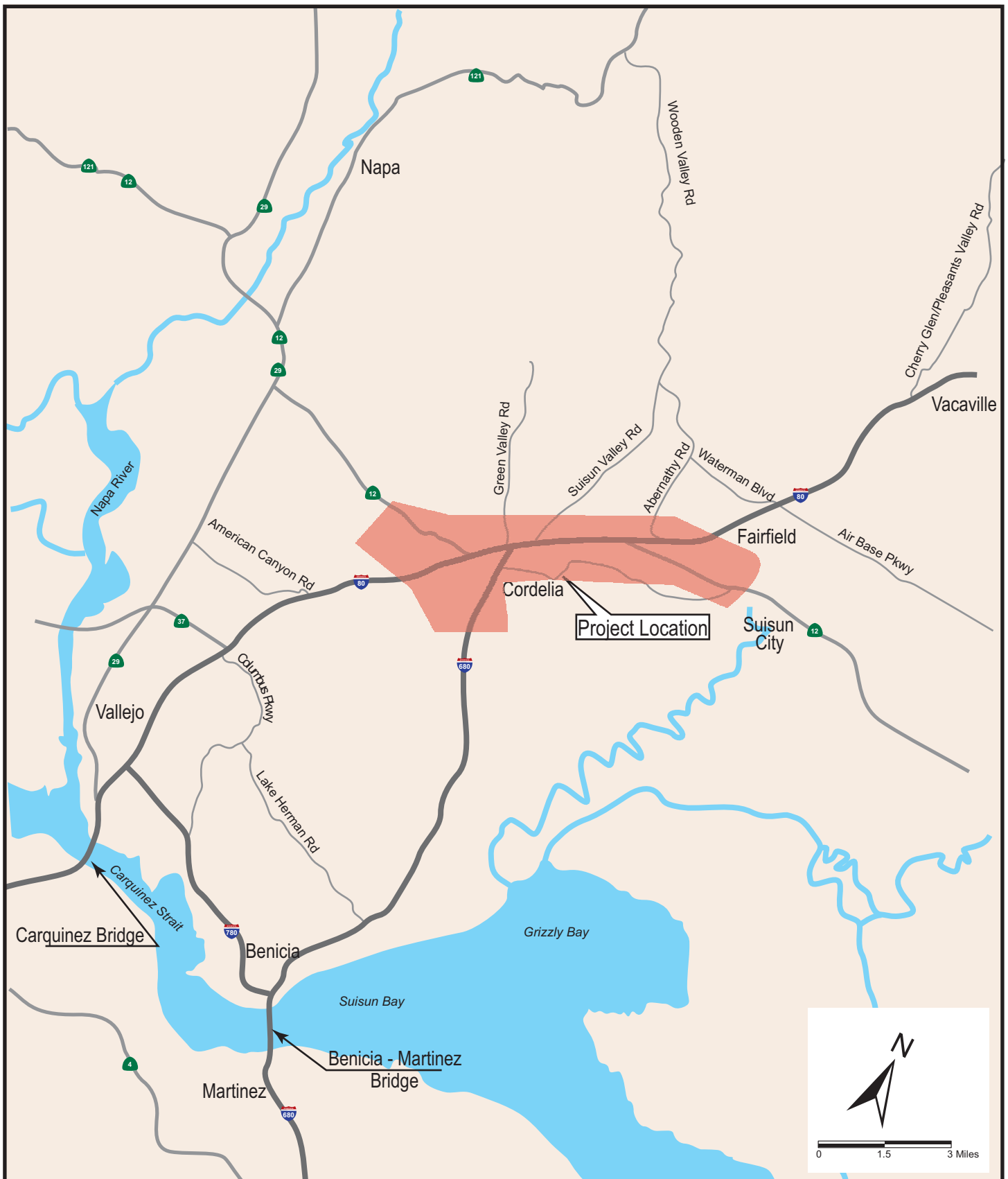
(510) 285-6700

11. LIST OF ATTACHMENTS

- A. Project Location and Vicinity Maps
- B. Project Photo Maps, Right of Way Requirements Maps and Right of Way Parcel Acquisition Lists
- C. Project Cross Sections, Layouts, Profiles and Bridge Plans, for the preferred project: Alternative C and Alternative C, Phase 1 (under separate cover)
- D. Project Report Cost Estimates
- E. Final Environmental Document: Title Page and Summary (under separate cover)
- F. Storm Water Data Report Cover Sheet
- G. Right of Way Data Sheet
- H. Transportation Management Plan Data Sheet
- I. Risk Management Plan
- J. Cooperative Agreements
- K. Pavement Strategy Checklist
- L. Oversight Agreement for I-80/I-680/SR12 Interchange
- M. FHWA Approval of Supplemental Fact Sheets and final Engineering Operational Acceptability
- N. FHWA approval of Design Exception Fact Sheets

ATTACHMENT A

Project Location and Vicinity Maps



STa

Solano Transportation Authority



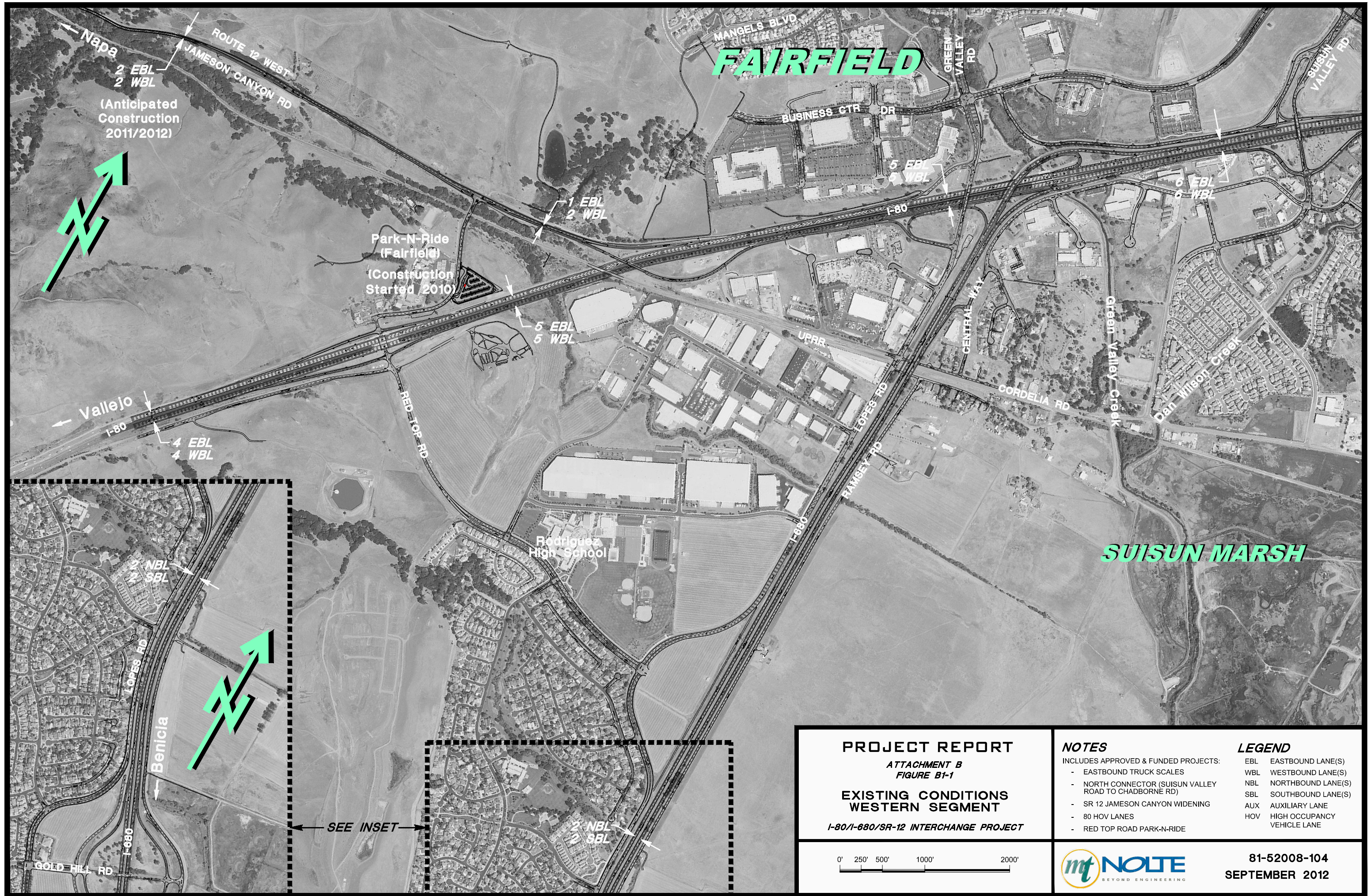
I-80 / I-680 / SR12
Interchange Project

Attachment A-2

Vicinity Map

ATTACHMENT B

Project Photo Maps, Right of Way Requirements
Maps and Right of Way Parcel Acquisition Lists



SEE FIGURE B1-2

PROJECT REPORT

**ATTACHMENT B
FIGURE B1-1**

**EXISTING CONDITIONS
WESTERN SEGMENT**

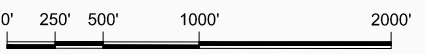
I-80/I-680/SR-12 INTERCHANGE PROJECT

NOTES

- INCLUDES APPROVED & FUNDED PROJECTS:
- EASTBOUND TRUCK SCALES
 - NORTH CONNECTOR (SUISUN VALLEY ROAD TO CHADBORNE RD)
 - SR 12 JAMESON CANYON WIDENING
 - 80 HOV LANES
 - RED TOP ROAD PARK-N-RIDE

LEGEND

EBL	EASTBOUND LANE(S)
WBL	WESTBOUND LANE(S)
NBL	NORTHBOUND LANE(S)
SBL	SOUTHBOUND LANE(S)
AUX	AUXILIARY LANE
HOV	HIGH OCCUPANCY VEHICLE LANE



**81-52008-104
SEPTEMBER 2012**

FAIRFIELD

SOLANO COUNTY



SEE FIGURE B1-1

SEE FIGURE B1-3



PROJECT REPORT

*ATTACHMENT B
FIGURE B1-2*

**EXISTING CONDITIONS
CENTRAL SEGMENT**

I-80/I-680/SR-12 INTERCHANGE PROJECT

NOTES

INCLUDES APPROVED & FUNDED PROJECTS:

- EASTBOUND TRUCK SCALES
- NORTH CONNECTOR (SUISUN VALLEY ROAD TO CHADBORNE RD)
- SR 12 JAMESON CANYON WIDENING
- 80 HOV LANES
- RED TOP ROAD PARK-N-RIDE

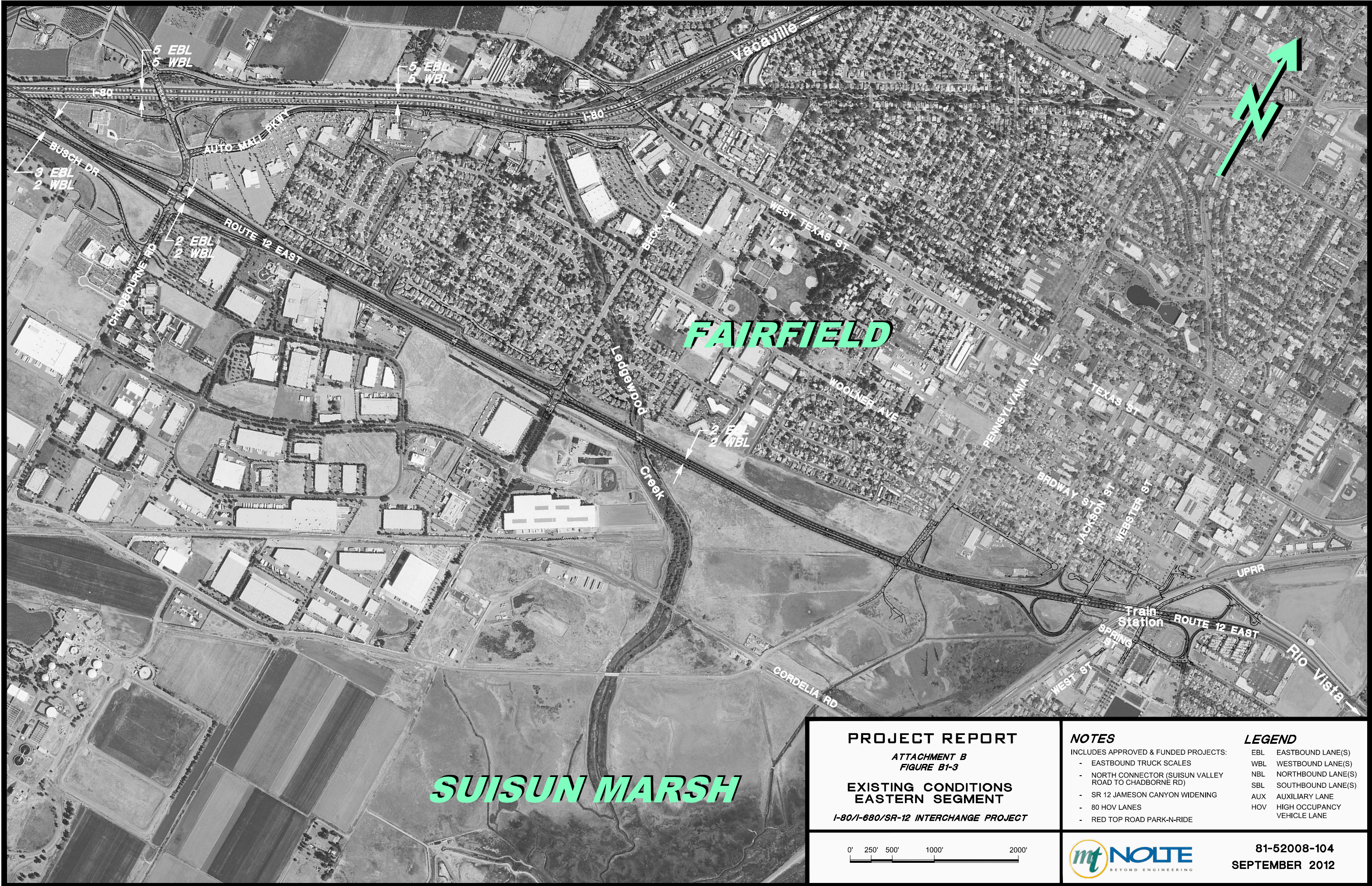
LEGEND

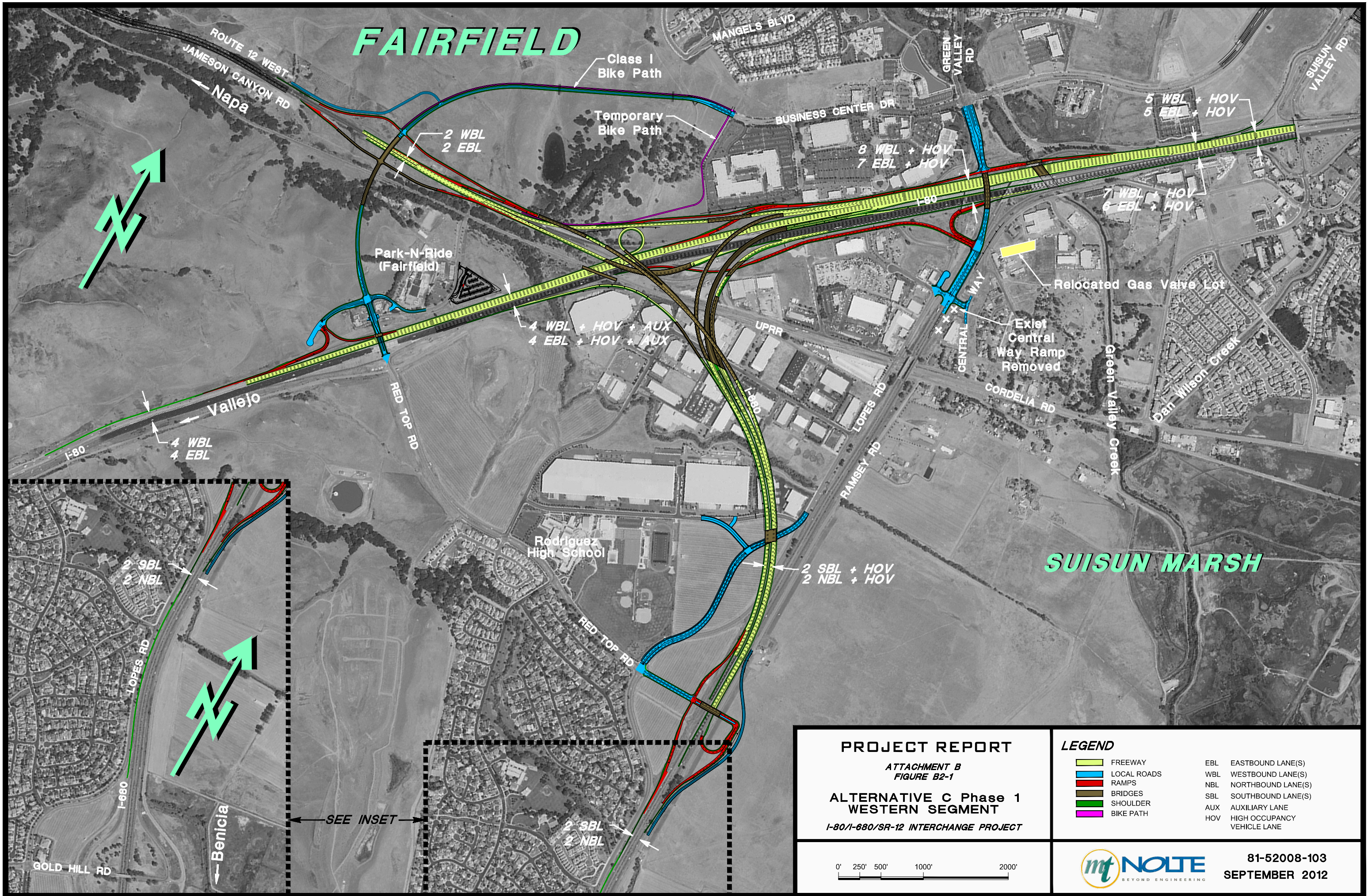
EBL	EASTBOUND LANE(S)
WBL	WESTBOUND LANE(S)
NBL	NORTHBOUND LANE(S)
SBL	SOUTHBOUND LANE(S)
AUX	AUXILIARY LANE
HOV	HIGH OCCUPANCY VEHICLE LANE



**81-52008-104
SEPTEMBER 2012**

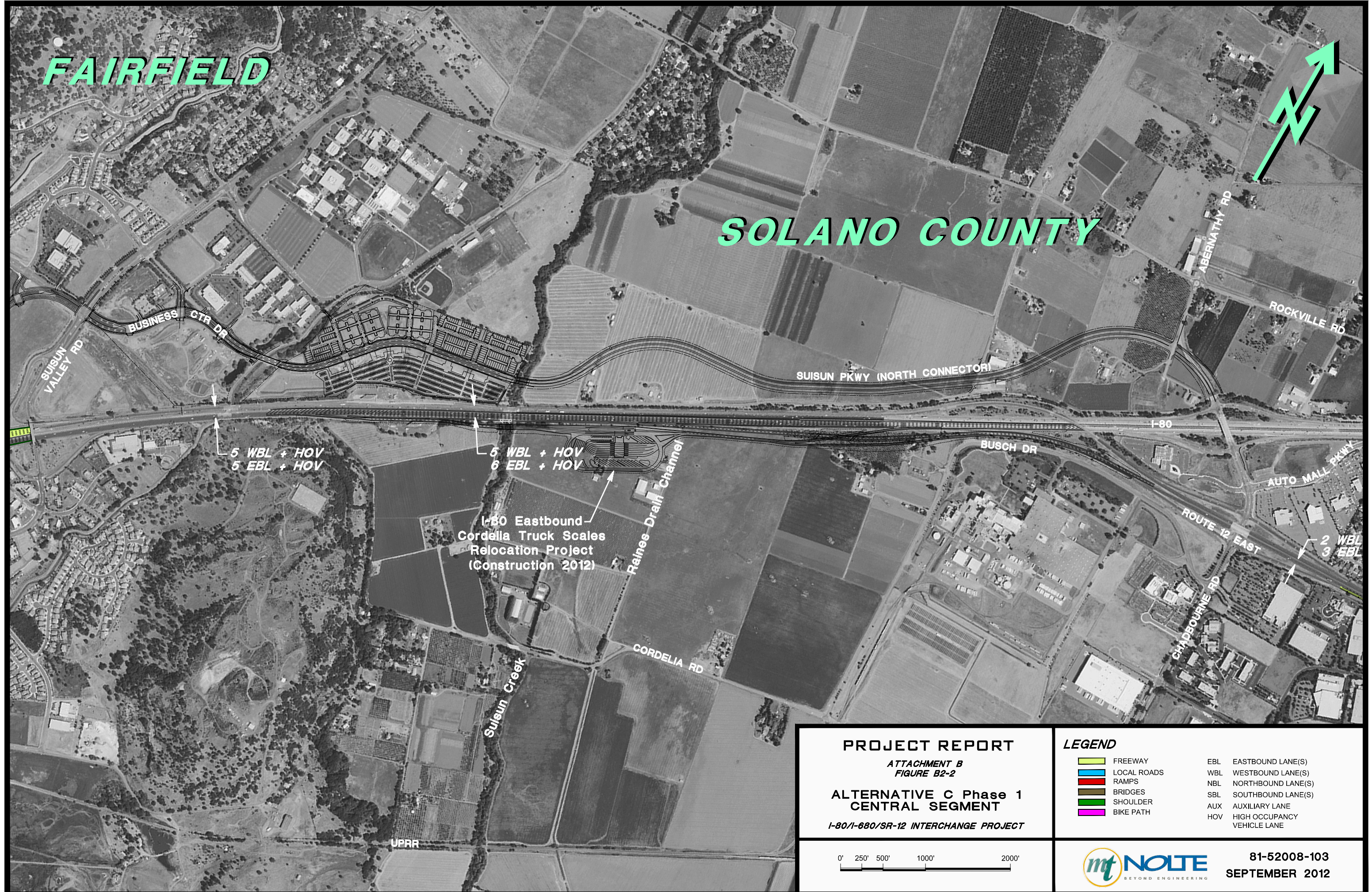
SEE FIGURE B1-2





SEE FIGURE B2-1

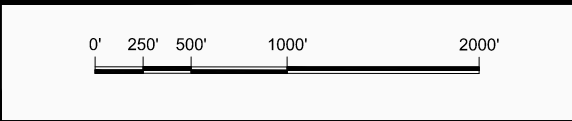
SEE FIGURE B2-3



PROJECT REPORT
*ATTACHMENT B
FIGURE B2-2*

**ALTERNATIVE C Phase 1
CENTRAL SEGMENT**

I-80/I-680/SR-12 INTERCHANGE PROJECT

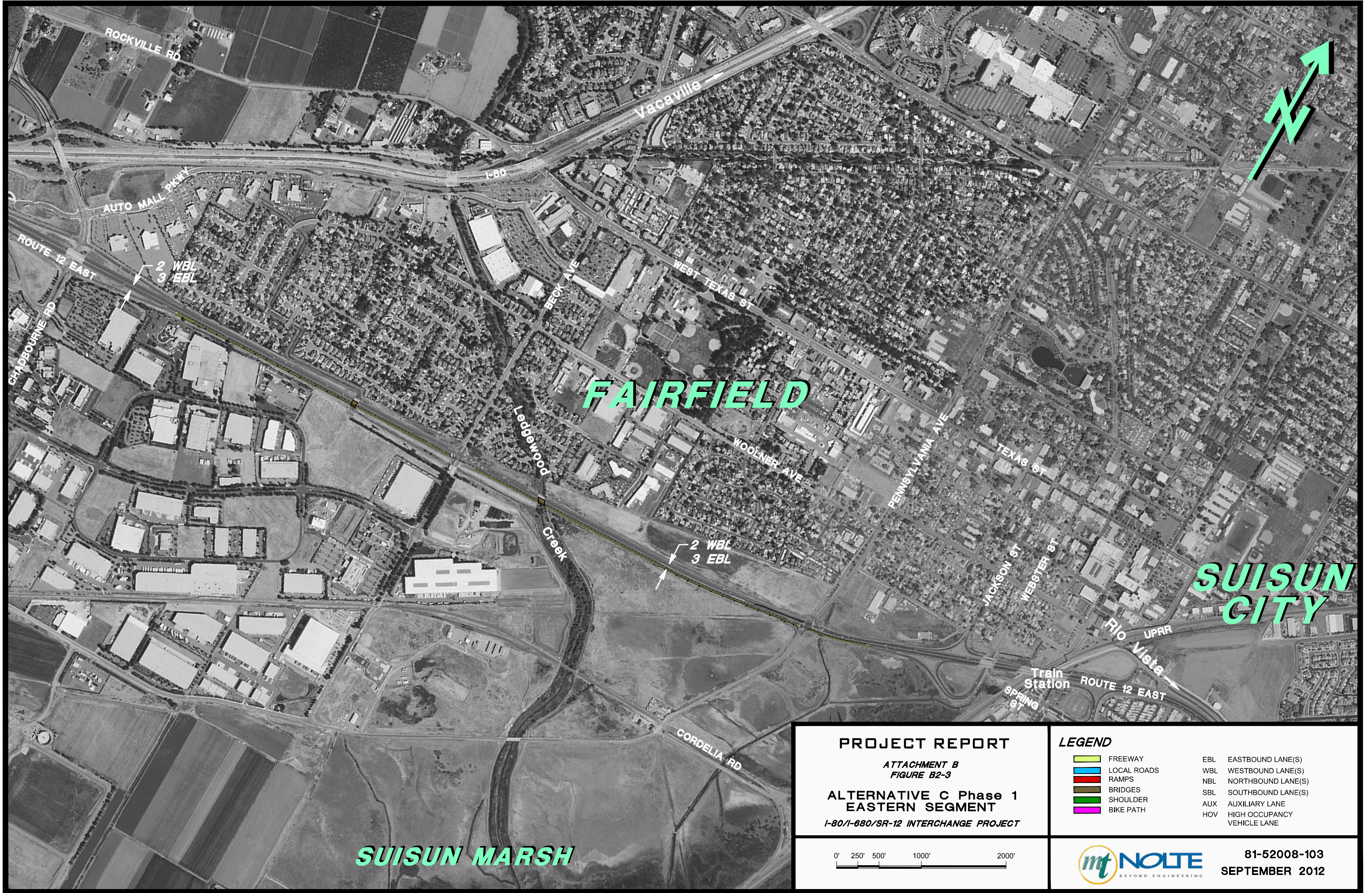


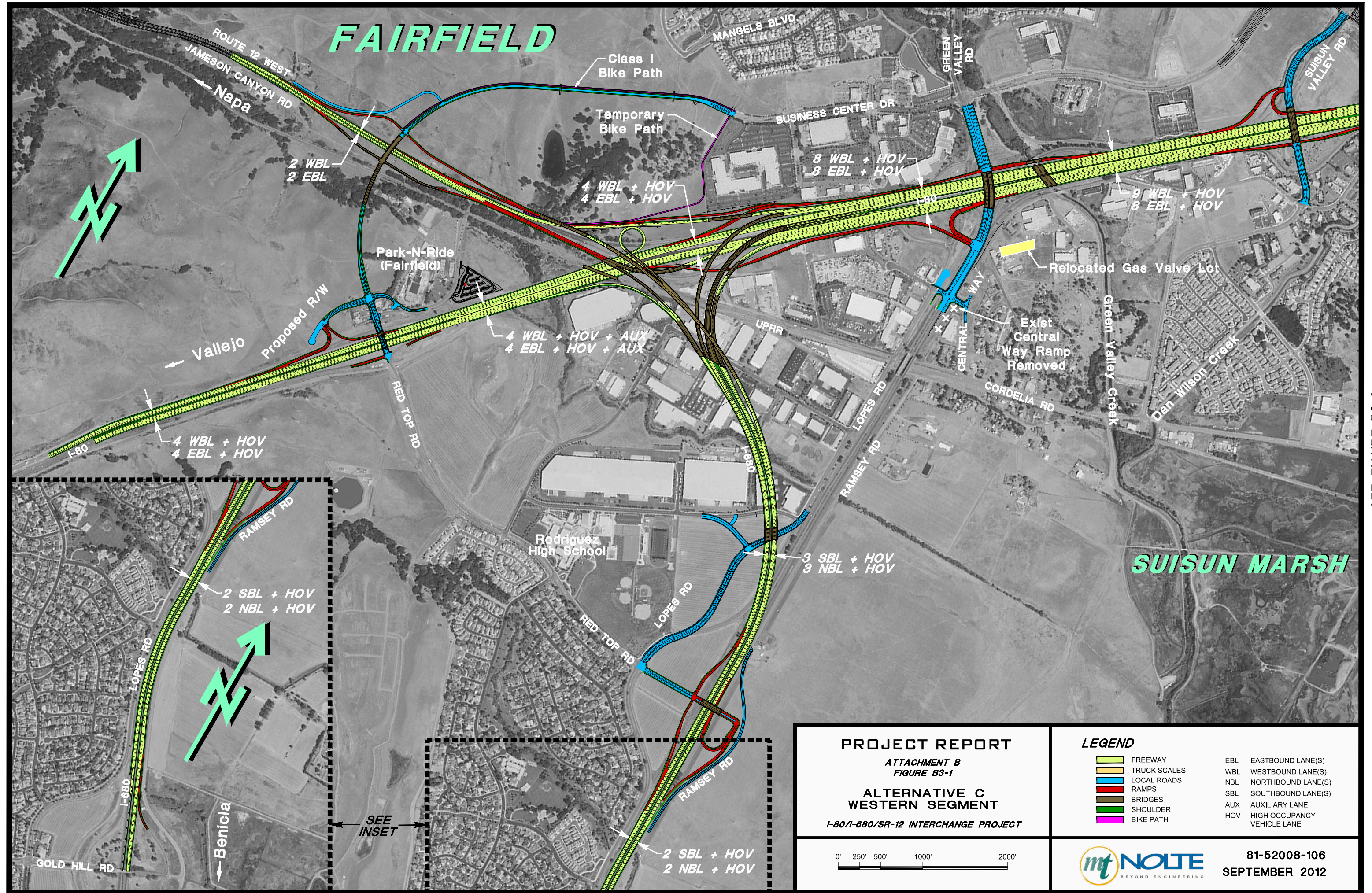
LEGEND	
	FREEWAY
	LOCAL ROADS
	RAMPS
	BRIDGES
	SHOULDER
	BIKE PATH
EBL	EASTBOUND LANE(S)
WBL	WESTBOUND LANE(S)
NBL	NORTHBOUND LANE(S)
SBL	SOUTHBOUND LANE(S)
AUX	AUXILIARY LANE
HOV	HIGH OCCUPANCY VEHICLE LANE

NOLTE
BEYOND ENGINEERING

81-52008-103
SEPTEMBER 2012

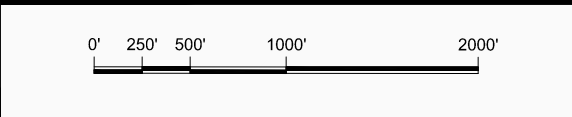
SEE FIGURE B2-2





SEE FIGURE B3-2

PROJECT REPORT
ATTACHMENT B
FIGURE B3-1
ALTERNATIVE C
WESTERN SEGMENT
I-80/I-680/SR-12 INTERCHANGE PROJECT



LEGEND	
	FREEWAY
	TRUCK SCALES
	LOCAL ROADS
	RAMPS
	BRIDGES
	SHOULDER
	BIKE PATH
EBL	EASTBOUND LANE(S)
WBL	WESTBOUND LANE(S)
NBL	NORTHBOUND LANE(S)
SBL	SOUTHBOUND LANE(S)
AUX	AUXILIARY LANE
HOV	HIGH OCCUPANCY VEHICLE LANE

NOLTE
BEYOND ENGINEERING

81-52008-106
SEPTEMBER 2012

FAIRFIELD

SOLANO COUNTY



SEE FIGURE B3-1

SEE FIGURE B3-3



PROJECT REPORT

ATTACHMENT B
FIGURE B3-2

**ALTERNATIVE C
CENTRAL SEGMENT**

I-80/I-680/SR-12 INTERCHANGE PROJECT

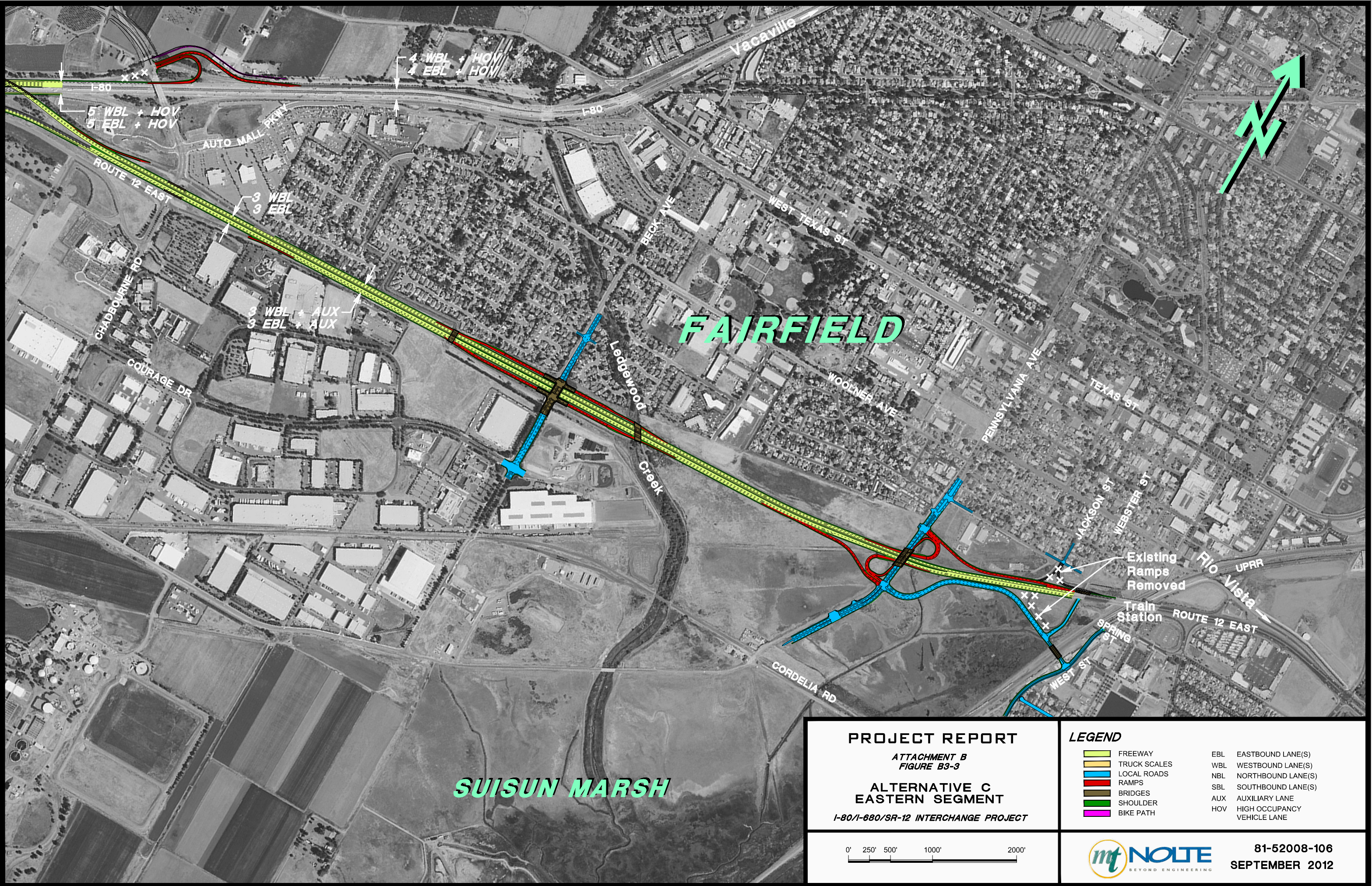
LEGEND

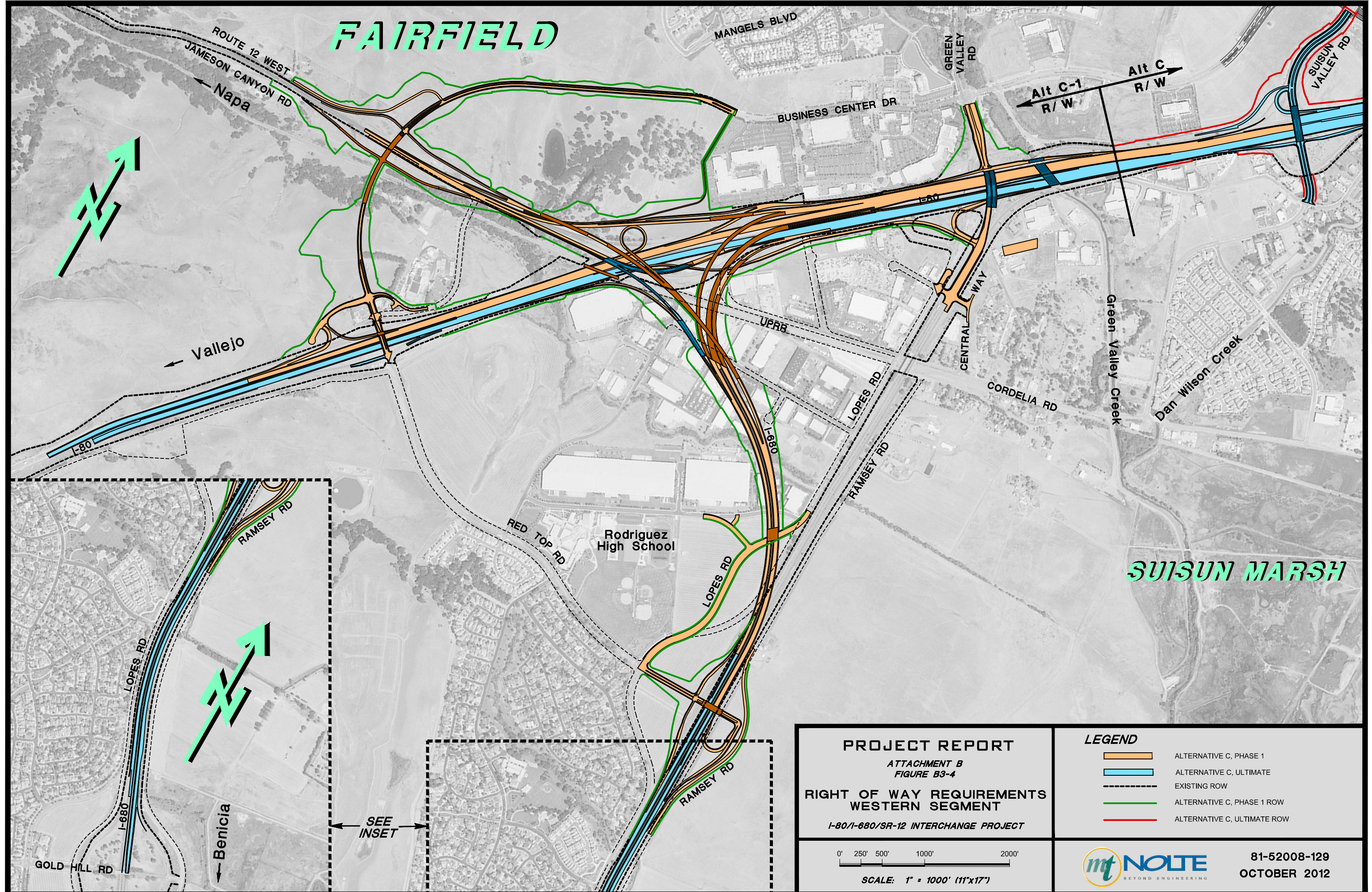
	FREEWAY	EBL	EASTBOUND LANE(S)
	TRUCK SCALES	WBL	WESTBOUND LANE(S)
	LOCAL ROADS	NBL	NORTHBOUND LANE(S)
	RAMPS	SBL	SOUTHBOUND LANE(S)
	BRIDGES	AUX	AUXILIARY LANE
	SHOULDER	HOV	HIGH OCCUPANCY VEHICLE LANE
	BIKE PATH		

0' 250' 500' 1000' 2000'

81-52008-106
SEPTEMBER 2012

SEE FIGURE B3-2





FAIRFIELD

SUISUN MARSH

PROJECT REPORT
ATTACHMENT B
FIGURE B3-4
**RIGHT OF WAY REQUIREMENTS
WESTERN SEGMENT**
I-80/I-680/SR-12 INTERCHANGE PROJECT

0' 250' 500' 1000' 2000'
SCALE: 1" = 1000' (11"x17")

LEGEND

	ALTERNATIVE C, PHASE 1
	ALTERNATIVE C, ULTIMATE
	EXISTING ROW
	ALTERNATIVE C, PHASE 1 ROW
	ALTERNATIVE C, ULTIMATE ROW

NOLTE
BEYOND ENGINEERING

81-52008-129
OCTOBER 2012

SEE FIGURE B3-5

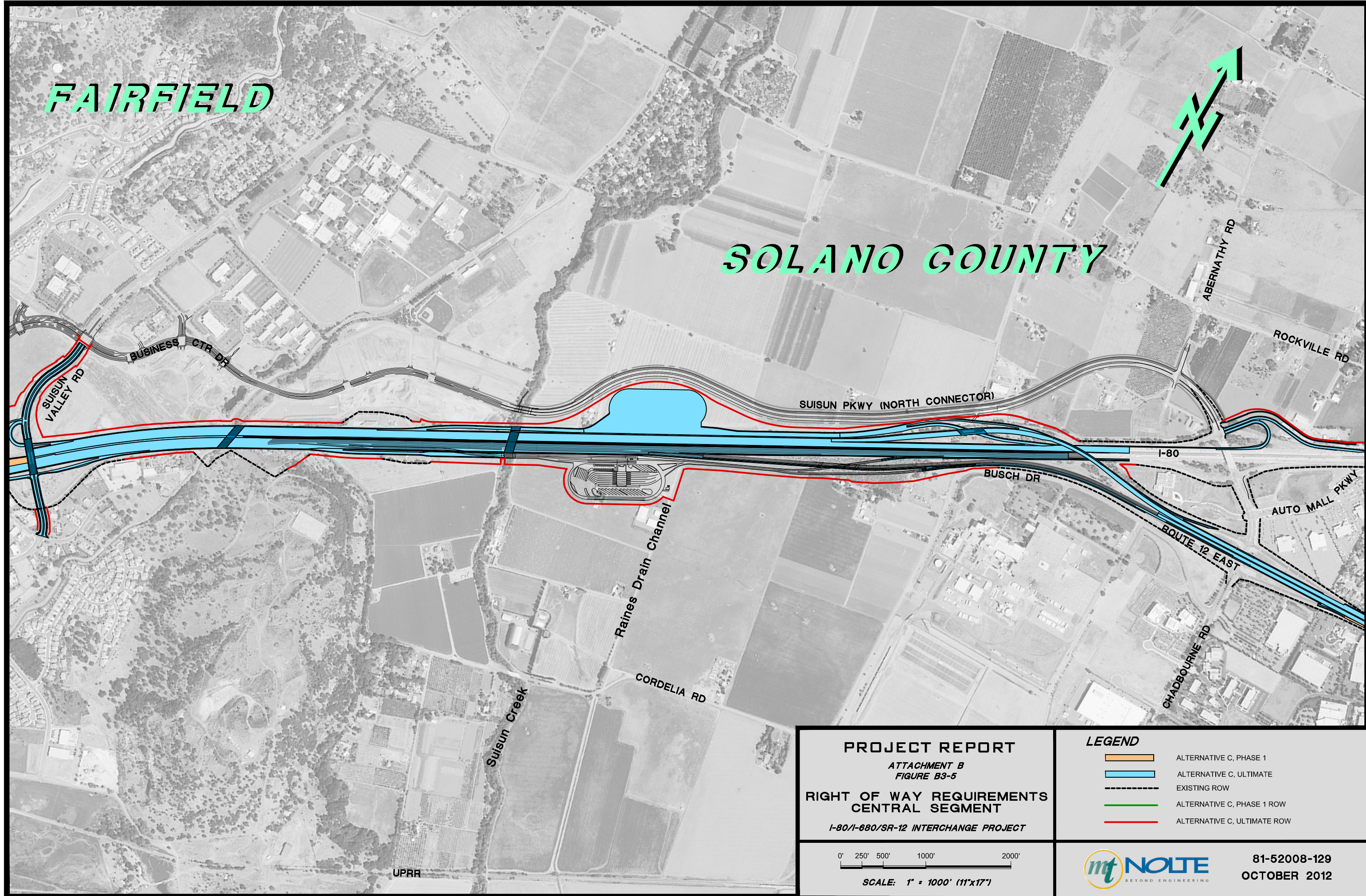
FAIRFIELD

SOLANO COUNTY



SEE FIGURE B3-4

SEE FIGURE B3-6



PROJECT REPORT
ATTACHMENT B
FIGURE B3-5
RIGHT OF WAY REQUIREMENTS
CENTRAL SEGMENT
I-80/I-680/SR-12 INTERCHANGE PROJECT

0' 250' 500' 1000' 2000'
SCALE: 1" = 1000' (11"x17")

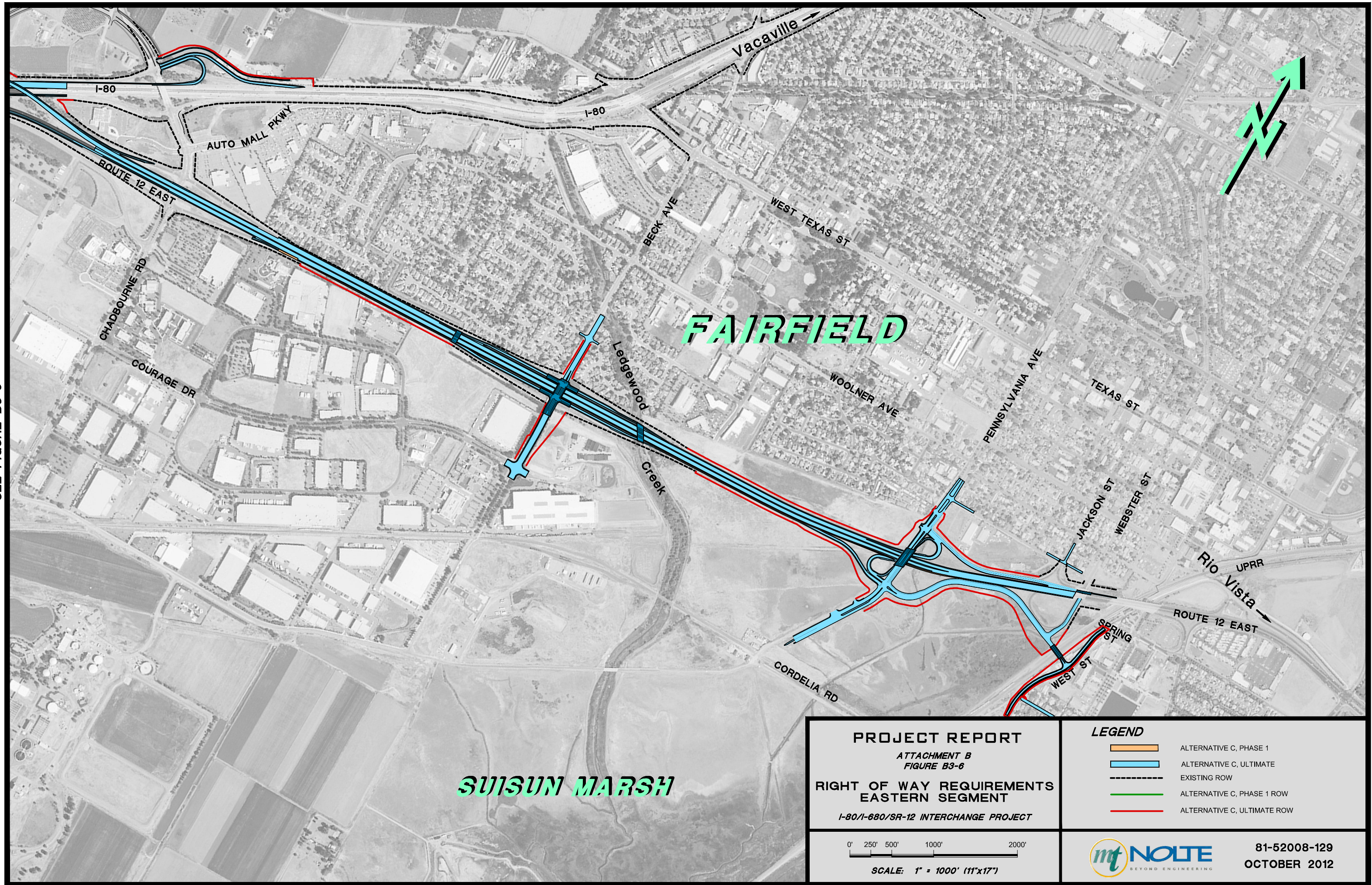
LEGEND

- ALTERNATIVE C, PHASE 1
- ALTERNATIVE C, ULTIMATE
- EXISTING ROW
- ALTERNATIVE C, PHASE 1 ROW
- ALTERNATIVE C, ULTIMATE ROW



81-52008-129
OCTOBER 2012

SEE FIGURE B3-5



I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C (including Alternative C-1)

Figure	Salano County Assessor Parcel Number
B3-4	0045-280-010
B3-4	0045-280-040
B3-4	0045-280-050
B3-4	0045-280-060
B3-4	0045-280-070
B3-4	0045-280-160
B3-4	0045-280-440
B3-4	0045-280-490
B3-4	0045-280-530
B3-4	0045-280-540
B3-4	0045-280-550
B3-4	0045-280-560
B3-4	0045-280-570
B3-4	0045-280-590
B3-4	0045-290-010
B3-4	0045-310-120
B3-4	0045-310-560
B3-4	0045-310-580
B3-4	0045-310-650
B3-4	0045-310-660
B3-4	0045-310-850
B3-4	0045-310-860
B3-4	0045-310-870
B3-4	0046-050-180
B3-4	0148-260-010
B3-4	0148-260-040

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C (including Alternative C-1)

Figure **Salano County Assessor
Parcel Number**

B3-4	0148-260-050
B3-4	0148-260-080
B3-4	0148-260-090
B3-4	0148-270-010
B3-4	0148-270-060
B3-4	0148-270-170
B3-4	0148-270-240
B3-4	0148-270-290
B3-4	0148-270-300
B3-4	0148-270-310
B3-4	0148-270-320
B3-4	0148-270-330
B3-4	0148-270-340
B3-4	0148-280-120
B3-4	0148-280-130
B3-4	0148-280-140
B3-4	0148-280-280
B3-4	0180-010-050
B3-4	0180-010-070
B3-4	0180-010-080
B3-4	0180-010-090
B3-4	0180-010-100
B3-4	0180-010-110
B3-4	0180-070-060
B3-4	0180-070-070
B3-4	0180-110-023

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C (including Alternative C-1)

Figure **Salano County Assessor**
Parcel Number

B3-4	0180-110-050
B3-4	0180-120-010
B3-4	0180-120-050
B3-4	0180-120-060
B3-4	0180-120-070
B3-4	0180-120-080
B3-4	0180-130-050
B3-4	0180-130-060
B3-4	0180-130-070
B3-4	0180-130-080
B3-4	0180-130-090
B3-4	0180-130-100
B3-4	0180-130-110
B3-4	0180-140-020
B3-4	0180-140-030
B3-4	0180-140-040
B3-4	0180-140-050
B3-4	0180-140-060
B3-4	0180-140-180
B3-4	0180-140-190
B3-4	0180-140-290
B3-4	0180-160-010
B3-4	0180-160-020
B3-4	0180-160-070
B3-4	0180-160-180
B3-4	0180-160-200

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C (including Alternative C-1)

Figure	Salano County Assessor Parcel Number
B3-4	0180-160-210
B3-4	0180-160-220
B3-5	0027-251-310
B3-5	0027-251-330
B3-5	0027-251-340
B3-5	0027-251-370
B3-5	0027-251-400
B3-5	0027-251-420
B3-5	0027-251-440
B3-5	0027-260-240
B3-5	0027-270-030
B3-5	0027-271-060
B3-5	0027-340-080
B3-5	0027-350-010
B3-5	0027-510-010
B3-5	0027-510-030
B3-5	0027-510-060
B3-5	0027-510-160
B3-5	0027-510-200
B3-5	0027-510-210
B3-5	0028-123-040
B3-5	0028-123-050
B3-5	0028-200-530
B3-5	0028-200-570
B3-5	0028-750-120
B3-5	0028-750-130

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C (including Alternative C-1)

Figure	Salano County Assessor Parcel Number
B3-5	0028-750-290
B3-5	0028-750-300
B3-5	0045-340-110
B3-5	0045-340-180
B3-5	0045-340-310
B3-5	0045-340-320
B3-5	0045-340-500
B3-5	0150-240-010
B3-5	0150-240-020
B3-5	0150-270-050
B3-5	0150-270-060
B3-5	0150-270-080
B3-6	0028-692-420
B3-6	0028-692-450
B3-6	0028-792-100
B3-6	0028-792-110
B3-6	0028-792-120
B3-6	0028-792-130
B3-6	0028-792-140
B3-6	0031-170-340
B3-6	0031-301-440
B3-6	0032-010-140
B3-6	0032-010-170
B3-6	0032-010-190
B3-6	0032-010-230
B3-6	0032-010-300

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C (including Alternative C-1)

Figure	Salano County Assessor Parcel Number
B3-6	0032-010-320
B3-6	0032-010-390
B3-6	0032-010-460
B3-6	0032-020-040
B3-6	0032-020-140
B3-6	0032-020-160
B3-6	0032-020-180
B3-6	0032-020-190
B3-6	0032-020-200
B3-6	0032-020-210
B3-6	0032-020-240
B3-6	0032-020-250
B3-6	0032-020-260
B3-6	0032-020-270
B3-6	0032-031-020
B3-6	0032-031-030
B3-6	0032-052-090
B3-6	0032-052-100
B3-6	0032-052-120
B3-6	0032-052-210
B3-6	0032-081-020
B3-6	0032-081-030
B3-6	0032-081-040
B3-6	0032-081-050
B3-6	0032-081-060
B3-6	0032-081-310

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C (including Alternative C-1)

Figure **Salano County Assessor**
Parcel Number

B3-6	0032-111-010
B3-6	0032-113-130

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C1

Figure	Solano County Assessor Parcel Number
B3-4	0045-280-040
B3-4	0045-280-050
B3-4	0045-280-060
B3-4	0045-280-440
B3-4	0045-290-010
B3-4	0045-310-120
B3-4	0045-310-650
B3-4	0045-310-660
B3-4	0045-310-850
B3-4	0046-050-180
B3-4	0148-260-010
B3-4	0148-260-040
B3-4	0148-260-050
B3-4	0148-260-080
B3-4	0148-260-090
B3-4	0148-270-010
B3-4	0148-270-060
B3-4	0148-270-170
B3-4	0148-270-290
B3-4	0148-270-300
B3-4	0148-270-310
B3-4	0148-270-320
B3-4	0148-270-330
B3-4	0148-270-340
B3-4	0148-280-120
B3-4	0148-280-130

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C1

Figure	Solano County Assessor Parcel Number
B3-4	0148-280-140
B3-4	0148-280-280
B3-4	0180-010-050
B3-4	0180-010-070
B3-4	0180-010-080
B3-4	0180-010-090
B3-4	0180-010-100
B3-4	0180-010-110
B3-4	0180-070-060
B3-4	0180-070-070
B3-4	0180-110-050
B3-4	0180-120-010
B3-4	0180-120-050
B3-4	0180-120-060
B3-4	0180-120-070
B3-4	0180-120-080
B3-4	0180-130-050
B3-4	0180-130-060
B3-4	0180-130-070
B3-4	0180-130-080
B3-4	0180-130-090
B3-4	0180-130-100
B3-4	0180-130-110
B3-4	0180-140-020
B3-4	0180-140-030
B3-4	0180-140-040

I-80/I-680/SR-12 Interchange Project
Right of Way Parcel Acquisition
(Full and Partial Takes) List

Alternative C1

Figure	Solano County Assessor Parcel Number
B3-4	0180-140-050
B3-4	0180-140-060
B3-4	0180-140-180
B3-4	0180-140-190
B3-4	0180-140-290
B3-4	0180-160-010
B3-4	0180-160-020
B3-4	0180-160-070
B3-4	0180-160-180
B3-4	0180-160-200
B3-4	0180-160-210
B3-4	0180-160-220
B3-5	0045-280-070

ATTACHMENT C

Project Cross Sections Layouts, Profiles and Bridge
Plans for the Preferred Project: Alternative C and
Alternative C, Phase 1
(Under Separate Cover)

ATTACHMENT D

Project Report Cost Estimates

I-80/I-680/SR12 Interchange - Alt C - Preliminary Cost Estimate

District-County-Route: 04-Sol-12, 80, 680

PM: I-80 10.8-17.0; I-680 10.0-13.1

SR12 West R1.7-R2.8

SR12 East L1.8-R4.8

EA: 0A5300

Program Code: HE11

PROJECT DESCRIPTION:

Limits: I-80 - from 0.7 mile west of Red Top Road undercrossing to 0.8 mile east of the Abernathy Road overcrossing; I-680 - from Gold Hill Road

Overcrossing to junction with I-80; SR12 (W) - from 0.7 mile west of the Red Top Road intersection to junction with I-80;

SR12 (E) - from junction with I-80 to overhead at UPRR between Fairfield and Suisun City

Proposed Improvement (Scope): 1-80/I-680/SR12 INTERCHANGE IMPROVEMENTS

Alternate: ALTERNATIVE C

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 600,000,000
TOTAL STRUCTURE ITEMS	\$ 277,000,000
TRUCK SCALES	\$ 53,000,000
SUBTOTAL CONSTRUCTION COSTS	\$ 930,000,000
TOTAL RIGHT OF WAY ITEMS	\$ 170,000,000
ENVIRONMENTAL MITIGATION	\$ 12,400,000
SOFT COSTS (Design, PM, Const Admin, etc) - 25%	\$ 236,000,000
SUBTOTAL ALTERNATIVE COST (2012 \$'s)	\$ 1,348,400,000

ESCALATED TOTAL ALTERNATIVE "C" COST

\$ 2,166,000,000

Reviewed by District Program Manager

(signature)

Approved by Project Manager

(signature)

(Date)

Phone No.

510-286-5122

Alt C

Page No. 1 of 6

District-County-Route 04-Sol-12, 80, 680

PM: I-80 10.8-17.0; I-680 10.0-13.1

SR12 West R1.7-R2.8

SR12 East L1.8-R4.8

EA: 0A5300

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	2,522,742	CY	\$ 9	\$ 22,704,677	
Imported Borrow	2,129,085	CY	\$ 8	\$ 17,032,681	
Export	130,100	CY	\$ 8	\$ 1,040,800	
Clearing & Grubbing	200	AC	\$ 10,000	\$ 2,000,000	
Develop Water Supply	1	LS	\$ 580,000	\$ 580,000	

Subtotal Earthwork \$ 43,358,158Section 2 Pavement Structural Section*

PCC Pavement

Concrete Pavement	515,500	CY	\$ 150	\$ 77,325,000	
Lean Concrete Base	72,000	CY	\$ 100	\$ 7,200,000	
Aggregate Subbase	202,000	CY	\$ 20	\$ 4,040,000	
Asphalt Concrete Pavement					
Hot Mix Asphalt	95,000	TON	\$ 70	\$ 6,650,000	
Hot Mix Asphalt (Open Graded)	9,400	TON	\$ 95	\$ 893,000	
Rubberized HMA-Gap Graded	19,400	TON	\$ 100	\$ 1,940,000	
Lean Concrete Base	33,600	CY	\$ 100	\$ 3,360,000	
Aggregate Subbase	0				
Aggregate Base	165,000	CY	35	\$ 5,775,000	

Lime Treated Base	263,000	CY	\$ 55	\$ 14,465,000	
Edge Drains	89,600	FT	\$ 11	\$ 985,600	
Treated Bases	1	LS	\$ 12,300,000	\$ 12,300,000	

Subtotal Pavement Structural Section \$ 134,933,600Section 3 Drainage

Large Drainage Facilities					
Storm Drains					
Pumping Plants					
Project Drainage (X-Drains, overside, etc.)	1	LS	\$ 39,000,000	\$ 39,000,000	

Subtotal Drainage \$ 39,000,000

District-County-Route 04-Sol-12, 80, 680

PM: I-80 10.8-17.0; I-680 10.0-13.1

SR12 West R1.7-R2.8

SR12 East L1.8-R4.8

EA: 0A5300

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls					
Retaining Walls - MSE	326,000	SF	\$ 120	\$ 39,120,000	
Retaining Walls - Type 1 Pile	41,000	SF	\$ 180	\$ 7,380,000	
Retaining Walls - Type 1 Spread Ftg	41,000	SF	\$ 170	\$ 6,970,000	
Noise Barriers	25,000	SF	\$ 50	\$ 1,250,000	
Barriers and Guardrails	110,400	FT	\$ 60	\$ 6,624,000	
Design Pollution Prevention & Treatment	1	LS	\$ 5,930,000	\$ 5,930,000	
Hazardous Waste Mitigation	8	Sites	\$ 100,000	\$ 800,000	
Work					
Landscaping/Irrigation	89	AC	\$ 54,500	\$ 4,850,500	
SWPPP	1	LS	\$ 3,300,000	\$ 3,300,000	
Aerial Lead	50,000	CY	\$ 80	\$ 4,000,000	
Median Island	48,000	SF	\$ 10	\$ 480,000	
Sidewalk, Curb, and Gutter	117,800	SF	\$ 10	\$ 1,178,000	
Bike Trail Relocation	1	LS	\$ 202,000	\$ 202,000	
Temporary MSE walls	50,000	SF	\$ 60	\$ 3,000,000	
Subtotal Specialty Items					\$ 85,085,000
<u>Section 5 Traffic Items</u>					
Lighting	206	EA	\$ 15,000	\$ 3,090,000	
Interconnect	1	LS	\$ 309,000	\$ 309,000	
Traffic Signals	16	EA	\$ 250,000	\$ 4,000,000	
Modify Traffic Signals	3	EA	75,000	225,000	
Overhead Sign Structures	20	EA	\$ 300,000	\$ 6,000,000	
Roadside Signs	1	LS	\$ 1,500,000	\$ 1,500,000	
Traffic Control	1	LS	\$ 16,000,000	\$ 16,000,000	
Traffic Operations Systems	1	LS	\$ 8,000,000	\$ 8,000,000	
Transportation Management Plan	1	LS	\$ 6,000,000	\$ 6,000,000	
Ramp Meters - Local Road Ramps	14	EA	\$ 120,000	\$ 1,680,000	
Ramp Meters - Connectors	3	EA	\$ 250,000	\$ 750,000	
Striping	1,566,000	FT	\$ 0.65	\$ 1,017,900	
Remove Yellow Thermoplastic	102,000	FT	\$ 3.70	\$ 377,400	
Subtotal Traffic Items					\$ 48,949,300
TOTAL SECTIONS 1 thru 5					\$ 351,326,058

District-County-Route 04-Sol-12, 80, 680

PM: I-80 10.8-17.0; I-680 10.0-13.1

SR12 West R1.7-R2.8

SR12 East L1.8-R4.8

EA: 0A5300

Section 6 Minor Items

Item Cost

Section Cost

\$ 351,326,058 x 10% = \$ 35,132,606
(Subtotal Sections 1 thru 5)

TOTAL MINOR ITEMS \$ 35,132,606

Section 7 Roadway Mobilization

\$ 386,458,664 x 5% = \$ 19,322,933
(Subtotal Sections 1 thru 6)

Mobilization \$ 386,458,664 x 10% = \$ 38,645,866
(Subtotal Sections 1 thru 6)

TOTAL ROADWAY MOBILIZATION + TRO \$ 57,968,800

Section 8 Roadway Additions

Supplemental Work

\$ 444,427,463 x 10% = \$ 44,442,746
(Subtotal Sections 1 thru 7)

Contingencies

\$ 444,427,463 x 25% = \$ 111,106,866
(Subtotal Sections 1 thru 7)

TOTAL ROADWAY ADDITIONS \$ 155,549,612

TOTAL ROADWAY ITEMS \$ 599,977,076
(Subtotal Sections 1 thru 8)

Estimate Prepared By Brandon Rock Phone# (925) 938-0383 Date 10/22/2012
(Print Name)

Estimate Checked By Michael Lohman Phone# (925) 938-0383 Date 10/22/2012
(Print Name)

District-County-Route 04-Sol-12, 80, 680PM: I-80 10.8-17.0; I-680 10.0-13.1SR12 West R1.7-R2.8SR12 East L1.8-R4.8EA: 0A5300

II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)
Bridge Name	<u>Complex</u>	<u>Simple</u>	<u>Bridge</u>
Structure Type	<u>structures</u>	<u>structures</u>	<u>Removal</u>
Width (out to out) - (ft)	<u>0</u>	<u></u>	<u></u>
Span Lengths - (ft)	<u>0</u>	<u></u>	<u></u>
Total Area - (sf)	<u>1,043,600</u>	<u>9,000</u>	<u></u>
Footing Type (pile/spread)	<u></u>	<u></u>	<u></u>
Cost Per sf			
(incl. 10% mobilization and 20% contingency)	<u>\$ 240</u>	<u>\$ 175</u>	<u>\$</u>
Total Cost for Structure	<u>\$ 250,500,000</u>	<u>\$ 1,600,000</u>	<u>1,000,000</u>

SUBTOTAL STRUCTURES ITEMS \$ 253,100,000
(Sum of Total Cost for Structures)

Railroad Related Costs:	<u>Rebuild UPRR Cordelia Underpass structure</u>	<u>\$ 5,700,000</u>
	<u>Rebuild UPRR Underpass Approaches</u>	<u>\$ 5,000,000</u>
	<u></u>	<u>\$</u>

SUBTOTAL RAILROAD ITEMS \$ 10,700,000

Time Related Overhead (TRO) \$ 263,800,000 5% 13,190,000

TOTAL STRUCTURES ITEMS \$ 276,990,000
(Sum of Structures Items plus Railroad Items)

TRUCK SCALES Lump sum estimate for the westbound truck scales based on \$ 53,000,000
the estimate for eastbound truck scales being built by a separate project.

Estimate Prepared By Brandon Rock Phone# (925) 938-0383 Date 10/22/2012
(Print Name)

District-County-Route 04-Sol-12, 80, 680
PM: I-80 10.8-17.0; I-680 10.0-13.1
SR12 West R1.7-R2.8
SR12 East L1.8-R4.8
EA: 0A5300

III. RIGHT OF WAY ITEMS

NON-ESCALATED VALUE

A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ <u>104,975,000</u>	
B. Utility Relocation (State share)	\$ <u>54,600,000</u>	
C. Relocation Assistance	\$ <u>2,690,000</u>	
D. Clearance/Demolition	\$ <u>330,000</u>	
E. Title and Escrow Fees	\$ <u>2,205,000</u>	
F. Easements	\$ <u>5,200,000</u>	
		TOTAL RIGHT OF WAY ITEMS \$ <u>170,000,000</u>
		(Non-Escalated Value)

Anticipated Date of Right of Way Certification Varies 2012 thru 2036
(Date to which Values are Escalated)

F. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work * \$

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

ENVIRONMENTAL MITIGATION ITEMS

Farmland	LS	\$ <u>4,700,000</u>	\$ <u>4,700,000</u>
Mitigations for Biological Impacts (Including monitoring where applicable):			
Woodlands	LS	\$ <u>1,500,000</u>	
Wetlands	LS	\$ <u>500,000</u>	
Vernal Pools (Shrimp habitat) & Goldfields Replanting	LS	\$ <u>600,000</u>	
Burrowing Owls	LS	\$ <u>400,000</u>	
Valley Elderberry Longhorn Beetle	LS	\$ <u>100,000</u>	
California Red Legged Frog	LS	\$ <u>300,000</u>	
Swainson's Hawks Foraging		\$ <u>3,700,000</u>	
Subtotal: Biological			\$ <u>7,100,000</u>
Cultural	LS	\$ <u>600,000</u>	\$ <u>600,000</u>
		TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$ <u>12,400,000</u>

Estimate Prepared By Brandon Rock Phone# (925) 938-0383 Date 10/22/2012
(Print Name)

***I-80/I-680/SR12 Interchange - Alternative C, Phase 1
(Preliminary Cost Estimate)***

District-County-Route: 04-Sol-12, 80, 680

PM: I-80 10.9-13.5; I-680 10.7-13.1

SR12 West R1.7-R2.8

SR12 East L2.4-R4.3

EA: 0A5300

Program Code: HE11

PROJECT DESCRIPTION:

Limits: I-80 from 0.5 mile west of Red Top Road undercrossing to Suisun Valley Road overcrossing; I-680 from 0.7 mile north of Gold Hill Road overcrossing to junction with I-80; SR12 (W) from 0.7 miles west of the Red Top Road interseciton to junction with I-80; SR12 (E) from 0.2 mile east of Chadbourne Road overcrossing to 0.2 mile east of Pennsylvania Avenue

Proposed Improvement (Scope): I-80/I-680/SR12 INTERCHANGE IMPROVEMENTS

Alternate: ALTERNATIVE C, PHASE 1 (Fundable First Phase)

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 231,000,000
TOTAL STRUCTURE ITEMS	\$ 181,000,000
 SUBTOTAL CONSTRUCTION COSTS	 \$ 412,000,000
 SOFT COSTS (Design, PM, Const Admin, etc) - 25%	 \$ 103,000,000
ENVIRONMENTAL MITIGATION	\$ 5,300,000
TOTAL RIGHT OF WAY ITEMS	\$ 120,000,000
 SUBTOTAL ALTERNATIVE COST (2012 \$'s)	 \$ 640,300,000

ESCALATED TOTAL ALTERNATIVE "C" PHASE 1 COST

\$ 664,000,000

Reviewed by District Program Manager

(signature)

Approved by Project Manager

(signature)

(Date)

Phone No.

510-286-6122

Alt C1

Page No. 1 of 6

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	976,000	CY	\$ 9	\$ 8,784,000	
Imported Borrow	1,500,000	CY	\$ 8	\$ 12,000,000	
Export	130,000	CY	\$ 8	\$ 1,040,000	
Clearing & Grubbing	49	AC	\$ 10,000	\$ 490,000	
Develop Water Supply	1	LS	\$ 220,000	\$ 220,000	
Subtotal Earthwork					\$ 22,534,000

Section 2 Pavement Structural Section

PCC Pavement (___Depth)

Concrete Pavement	87,300	CY	\$ 150	\$ 13,095,000	
Lean Concrete Base	15,000	CY	\$ 100	\$ 1,500,000	
Aggregate Subbase	120,000	CY	\$ 20	\$ 2,400,000	
Asphalt Concrete Pavement					
Hot Mix Asphalt	87,300	TON	\$ 70	\$ 6,111,000	
Hot Mix Asphalt (Open Graded)	7,300	TON	\$ 95	\$ 693,500	
Rubberized HMA-Gap Graded	15,800	TON	\$ 100	\$ 1,580,000	
Lean Concrete Base	14,200	CY	\$ 100	\$ 1,420,000	
Aggregate Subbase	0				
Aggregate Base	57,000	CY	\$ 35	\$ 1,995,000	
Lime Treated Subbase	55,600	CY	\$ 55	\$ 3,058,000	
Edge Drains	48,200	FT	\$ 11	\$ 530,200	
Pavement Reinforcing Fabric					

Subtotal Pavement Structural Section \$ 32,383,000

Section 3 Drainage

Large Drainage Facilities					
Storm Drains					
Pumping Plants					
Project Drainage (X-Drains, overside, etc.)	1	LS	\$ 9,300,000	\$ 9,300,000	

Subtotal Drainage \$ 9,300,000

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls					
Retaining Walls - MSE	280,600	SF	\$ 120	\$ 33,672,000	
Retaining Walls - Type 1 Pile	34,900	SF	\$ 180	\$ 6,282,000	
Retaining Walls - Type 1 Spread Ftg	32,600	SF	\$ 170	\$ 5,542,000	
Noise Barriers	0		50		
Barriers and Guardrails	47,300	LF	\$ 60	\$ 2,838,000	
Design Pollution Prevention & Treatment BMPs			\$ 3,303,000	\$ 3,303,000	
Hazardous Waste Mitigation	1	Sites	\$ 100,000	\$ 100,000	
Work					
Landscaping/Irrigation	46	AC	\$ 54,500	\$ 2,507,000	
SWPPP	1	LS	\$ 1,400,000	\$ 1,400,000	
ADL	20,000	CY	\$ 80	\$ 1,600,000	
Median Island	48,000	SF	\$ 10	\$ 480,000	
Sidewalk, Curb, and Gutter	105,000	SF	\$ 10	\$ 1,050,000	
Bike Trail Relocation	1	LS	\$ 202,000	\$ 202,000	
Temporary MSE Walls					
Subtotal Specialty Items					\$ 58,976,000
<u>Section 5 Traffic Items</u>					
Lighting	120	EA	\$ 15,000	\$ 1,800,000	
Interconnect	1	LS	\$ 180,000	\$ 180,000	
Traffic Signals	7	EA	\$ 250,000	\$ 1,750,000	
Modify Existing Traffic Signal	3	EA	\$ 75,000	\$ 225,000	
Overhead Sign Structures	12	EA	\$ 300,000	\$ 3,600,000	
Roadside Signs	1	LS	\$ 890,000	\$ 890,000	
Traffic Control	1	LS	\$ 1,700,000	\$ 1,700,000	
Traffic Operations Systems	1	LS	\$ 3,300,000	\$ 3,300,000	
Transportation Management Plan	1	LS	\$ 3,000,000	\$ 3,000,000	
Ramp Meters - Local Road Ramps	6	EA	\$ 120,000	\$ 720,000	
Ramp Meters - Connectors	3	EA	\$ 250,000	\$ 750,000	
Striping	741,000	FT	\$ 0.65	\$ 482,000	
Remove Yellow Thermoplastic	45,000	FT	\$ 3.70	\$ 167,000	
Subtotal Traffic Items					\$ 18,564,000
TOTAL SECTIONS 1 thru 5					\$ 141,757,000

District-County-Route 04-Sol-12/60/680

PM: I-80 10.9-13.5; I-680 10.7-13.1

SR12 West R1.7-R2.8

SR12 East L2.4-R4.3

EA 0A5300

Section 6 Minor Items

Item Cost

Section Cost

\$ 141,757,000 x 10% = \$ 14,175,700
(Subtotal Sections 1 thru 5)

TOTAL MINOR ITEMS \$ 14,175,700

Section 7 Roadway Mobilization & TRO

Time Related Overhead (TRO) \$ 155,932,700 x 5% = \$ 7,796,635
(Subtotal Sections 1 thru 6)

Mobilization \$ 155,932,700 x 10% = \$ 15,593,270
(Subtotal Sections 1 thru 5)

TOTAL ROADWAY MOBILIZATION + TRO \$ 23,389,905

Section 8 Roadway Additions

Supplemental Work

\$ 179,322,605 x 10% = \$ 17,932,261
(Subtotal Sections 1 thru 7)

Contingencies

\$ 179,322,605 x 20% = \$ 33,852,883
(Subtotal Sections 1 thru 7)

TOTAL ROADWAY ADDITIONS \$ 51,785,144

TOTAL ROADWAY ITEMS \$ 231,107,749
(Subtotal Sections 1 thru 8)

Estimate Prepared By Brandon Rock
(Print Name)

Phone# (925) 938-0383

Date 10/22/2012

Estimate Checked By Michael Lohman
(Print Name)

Phone# (925) 938-0383

Date 10/22/2012

District-County-Route 04-Sol-12/60/680

PM: I-80 10.9-13.5; I-680 10.7-13.1

SR12 West R1.7-R2.8

SR12 East L2.4-R4.3

EA 0A5300

II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)
Bridge Name	<u>Complex</u>	<u>Simple</u>	<u>Bridge</u>
Structure Type	<u>structures</u>	<u>structures</u>	<u>Removal</u>
Width (out to out) - (ft)	<u></u>	<u></u>	<u></u>
Span Lengths - (ft)	<u></u>	<u></u>	<u></u>
Total Area - (ft2)	<u>663,997</u>	<u>9,000</u>	<u></u>
Footing Type (pile/spread)	<u></u>	<u></u>	<u></u>
Cost Per ft2	<u></u>	<u></u>	<u></u>
(incl. 10% mobilization and 20% contingency)	<u>\$ 240</u>	<u>\$ 175</u>	<u>\$</u>
Total Cost for Structure	<u>\$ 159,400,000</u>	<u>\$ 1,600,000</u>	<u>\$ 830,000</u>
SUBTOTAL STRUCTURES ITEMS			<u>\$ 161,830,000</u>
(Sum of Total Cost for Structures)			
Railroad Related Costs:	<u>Rebuild UPRR Cordelia Underpass structure</u>		<u>\$ 5,700,000</u>
	<u>Rebuild UPRR Underpass Approaches</u>		<u>\$ 5,000,000</u>
	<u></u>		<u>\$</u>
SUBTOTAL RAILROAD ITEMS			<u>\$ 10,700,000</u>
Time Related Overhead (TRO)	\$ 172,530,000	5%	<u>8,626,500</u>
TOTAL STRUCTURES ITEMS			<u>\$ 181,156,500</u>
(Sum of Structures Items plus Railroad Items)			

Estimate Prepared By Brandon Rock
(Print Name)

Phone# (925) 938-0383

Date 10/22/2012

District-County-Route 04-Sol-12/60/680

PM: I-80 10.9-13.5; I-680 10.7-13.1

SR12 West R1.7-R2.8

SR12 East L2.4-R4.3

EA 0A5300

III. RIGHT OF WAY ITEMS

NON-ESCALATED VALUE

A. Acquisition, including excess lands,
damages to remainder(s) and Goodwill

\$ 79,245,000

B. Utility Relocation (State share)

\$ 33,800,000

C. Relocation Assistance

\$ 1,940,000

D. Clearance/Demolition

\$ 150,000

E. Title and Escrow Fees

\$ 915,000

F. Easements

\$ 4,100,000

TOTAL RIGHT OF WAY ITEMS \$ 120,150,000

(Non-Escalated Value)

Anticipated Date of Right of Way Certification

Year 2012 thru 2015

(Date to which Values are Escalated)

F. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work *

\$

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

ENVIRONMENTAL MITIGATION ITEMS

Farmland

LS

\$ 1,100,000

\$ 1,100,000

Mitigations for Biological Impacts (Including monitoring where applicable):

Woodlands

LS

\$ 800,000

Wetlands

LS

\$ 100,000

Vernal Pools (Shrimp habitat) & Goldfields Replanting

LS

\$ 300,000

Burrowing Owls

LS

\$ 300,000

Valley Elderberry Longhorn Beetle

LS

\$ 100,000

California Red Legged Frog

LS

\$ 200,000

Swainson's Hawks Foraging

\$ 2,100,000

Subtotal: Biological

\$ 3,900,000

Cultural

LS

\$ 300,000

\$ 300,000

TOTAL ENVIRONMENTAL MITIGATION ITEMS \$ 5,300,000

Estimate Prepared By Brandon Rock
(Print Name)

Phone# (925) 938-0383

Date 10/22/2012

ATTACHMENT E

Final Environmental Document:
Title Page and Summary
(Under Separate Cover)

ATTACHMENT F

Storm Water Data Report Cover Sheet

Dist-County-Route: 04 Sol 12/80/680
Post Mile Limits: 12W 1.7-2.8
12E 1.8-4.8 I-80 10.8-17.0 I-680 10.0-13.1
Project Type: Freeway/Interchange Reconstruction
EA: 04-0A5300
RU: 264
Program Identification: Regional Measure 2

Phase: ☐PID ☒PA/ED ☐PS&E

Regional Water Quality Control Board(s): San Francisco Bay Area RWQCB Region #2

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: Approximately 470 acres

Estimated Construction Start Date: 2012 Construction Completion Date: TBD

Notification of Construction (NOC) Date to be submitted: TBD

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

Separate Dewatering Permit (if Yes, permit number) ☒Yes Permit #: TBD ☐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.

John Wm Mountin March 25, 2010
John Wm Mountin, Registered Project Engineer Date

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

Nicolas Endrawos 4/21/2010
Nicolas Endrawos, Project Manager Date

Robert W. Braga 4/20/10
Bob Braga, Designated Maintenance Representative Date

David Yam 4/14/10
David Yam, Designated Landscape Architect Representative Date

Norman Gonsalves 04/14/2010
Norman Gonsalves, District/Regional SW Coordinator or Designee Date

ATTACHMENT G

Right of Way Data Sheet for
Alternative C and
Alternative C-1

To: District Office Chief
R/W Local Public Agency Services

Attention: Beth Perrill, Senior Right of Way Agent
Local Public Agency Services

Date: October 4, 2012

Co. Solano Rte. I-680/I-80/SR12
PM I-80 10.7/17.0 PM I-680 10.0/13.1
PM SR12W R1.7/R2.8 PM SR12E L1.8/R4.6
Expense Authorization: 04-0A5330

Subject: **RIGHT OF WAY DATA SHEET- LOCAL PUBLIC AGENCY SERVICES**

Project Description: I-680/I-80/SR-12 Interchange, Alternative C (Preferred Project Alternative)

Right of way necessary for the subject project will be the responsibility of the project sponsor under executed Cooperative Agreement.

The information in this data sheet was developed by Mark Thomas & Company, Inc.

I. **Right of Way Engineering**

Will right of way engineering be required for this project?

- No
- Yes X

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

II. **Engineering Surveys**

I. Is any surveying or photogrammetric mapping required?

No Yes X (Complete the following)

II. **Datum Requirements**

Yes X Project will adhere to the following criteria.

- Horizontal - datum policy is NAD 83, CA-HPGN, EPOCH 1991.35.
- Vertical - datum policy is NAVD 88.
- Units - English is required.

No Provide an explanation on additional page.

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

Yes X

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 X (Complete the following)

	Part Take	Full Take	Estimate \$
A. Number of Vacant Land Parcels	<u>36</u>	<u>3</u>	\$ <u>22,120,000</u>
B. Number of Single Family Residential Units	<u>3</u>	<u>0</u>	\$ <u>575,000</u>
C. Number of Multi-Family Residential Units	<u>1</u>	<u>0</u>	\$ <u>85,000</u>
D. Number of Commercial/Industrial Parcels	<u>45</u>	<u>13</u>	\$ <u>70,350,000</u>
E. Number of Farm/Agricultural Parcels	<u>12</u>	<u>0</u>	\$ <u>6,730,000</u>
F. Permanent and/or Temporary Easements	<u>0</u>	<u>0</u>	\$ <u>5,200,000</u>
G. Other Parcels (define in "Remarks" section)	<u>15</u>	<u>19</u>	\$ <u>5,115,000</u>
Totals	<u>112</u>	<u>35</u>	\$ <u>110,175,000</u>

The parcels required include a mix of variously zoned, vacant and improved properties. Most of the improved properties consist of commercial uses such as light and heavy industrial, sales and service, offices and retail. Other uses include agricultural and a small amount of residential. Most of the vacant parcels required are typically zoned for or have potential for future commercial uses. "Other Parcels" consist of government (state, city, or local districts) or utility (railroad, PG&E) owned properties, and are typically vacant.

IV. **Dedications**

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

No X Yes _____ (Complete the following)

Number of dedicated parcels N/A

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

V. **Excess Lands / Relinquishments**

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

No _____ Yes X (Refer to XIII – Remarks section.)

VI. **Relocation Information**

Are relocation displacements anticipated?

No _____ Yes X (Complete the following)

A. Number of Single Family Residential Units	<u>1</u>	
Estimated RAP Payments		\$ <u>100,000</u>
B. Number of Multi-Family Residential Units	<u>0</u>	
Estimated RAP Payments		\$ <u>0</u>
C. Number of Business/Nonprofit	<u>49</u>	
Estimated RAP Payments		\$ <u>2,470,000</u>
D. Number of Farms	<u>1</u>	
Estimated RAP Payments		\$ <u>120,000</u>
E. Other (define in the "Remarks" section)	<u>0</u>	
Estimated RAP Payments		\$ <u>0</u>
Totals	<u>51</u>	\$ <u>2,690,000</u>

VII. **Utility Relocation Information**

Anticipate any utility facilities or utility rights of way to be affected?

No _____ Yes X (Complete the following)

		Estimated Relocation Expense		
Facility	Owner	State Obligation	Local Obligation	Utility Owner Obligation
A. Water	City of Fairfield	\$ 0	\$ 2,100,000	\$ 0
B. Water	City of Vallejo	\$ 0	\$ 6,800,000	\$ 0
C. Water	City of Benicia	\$ 0	\$ 4,300,000	\$ 0
D. Water	Department of Water Resources (North Bay Aqueduct)	\$ 0	\$ 8,300,000	\$ 0
E. Water	Suisun Solano Water Authority	\$ 0	\$ 300,000	\$ 0
F. Irrigation and Non Potable Water and Agricultural Drains	Solano Irrigation District (SID)	\$ 0	\$ 300,000	\$ 0
G. Electrical Transmission (115KV)	PG&E	\$ 0	\$ 7,700,000	\$ 2,600,000
H. Electrical Distribution (above & below ground)	PG&E	\$ 0	\$ 700,000	\$ 800,000
I. Gas Transmission	PG&E	\$ 0	\$ 13,900,000	\$ 3,500,000
J. Gas Distribution	PG&E	\$ 0	\$ 800,000	\$ 300,000
K. Cable and Fiber	Comcast	\$ 0	\$ 100,000	\$ 0
L. Cable and Fiber	Qwest	\$ 0	\$ 200,000	\$ 0
M. Telephone	The New AT&T	\$ 0	\$ 3,800,000	\$ 3,900,000
N. Sewer	City of Fairfield	\$ 0	\$ 0	\$ 0
O. Sewer	Fairfield-Suisun Sanitary District	\$ 0	\$ 4,400,000	\$ 0
P. Liquid Fuels	Kinder Morgan	\$ 0	\$ 900,000	\$ 0
Totals		\$ 0	\$ 54,600,000	\$ 11,100,000
Number of facilities			187	

* Escalation amount is based on a 3.5% annual increase over a three year period.

Additional information concerning utility involvement on this project? See Attachments.

VIII. **Rail Information**

Are railroad facilities or railroad rights of way affected?

No _____ Yes X (Complete the following)

Describe railroad facilities or railroad rights of way affected.

Owner's Name	Transverse Crossing	Longitudinal Encroachment
A. Union Pacific Railroad	2 new roadways plus 3 connectors at I-680 interchange	1 replacement skew crossing plus 2 connectors at I-680 interchange

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

The new roadway and connector crossings will require new easements and construction and maintenance agreements. The replacement of the existing Cordelia Underpass will require a construction and maintenance agreement and potentially a design review agreement.

IX. **Clearance Information**

Are there improvements that require clearance?

No ____ Yes X (Complete the following)

A. Number of Structures to be Demolished 22 \$ 330,000
 Estimated Cost of Demolition

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 X (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 X (Explain in the "Remarks" section)

XI. **Project Scheduling**

	Proposed lead time	Completion date
Preliminary Engineering, Surveys	<u>3</u> (months)	March 2047
R/W Engineering Submittals	<u>6</u> (months)	March 2049
R/W Appraisals/Acquisition	<u>19</u> (months)	September 2050
Proposed Environmental Clearance		November 2012
Proposed R/W Certification		December 2050

XII. **Proposed Funding**

	Local ⁺⁺	State ⁺⁺	Federal ⁺⁺	Other
Acquisition	\$110,175,000*	\$	\$	\$
Utilities	\$ 54,600,000	\$	\$	\$
Relocation Assistance Program	\$ 2,690,000	\$	\$	\$
Clearance Costs	\$ 330,000	\$	\$	\$
R/W Support Cost	\$ 2,205,000	\$	\$	\$

⁺⁺ Proposed funding for Right of Way as shown is for current value and has not been escalated.

* See comments under Section III – Parcel information.

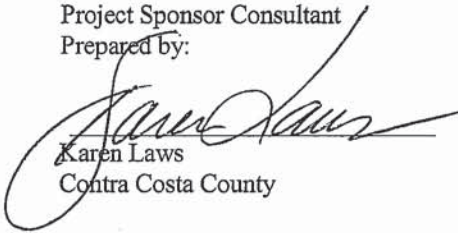
XIII. *Remarks*

V. The existing portion of Interstate 680 from north of the proposed Red Top Road Interchange to the end of the route is proposed to be relinquished to local control for use as an arterial.

VIII. A. The Union Pacific Underpass at I-80 is proposed to be reconstructed, along with approximately 1000 LF of track. Also proposed are five Overhead highway structures at the new I-680/I-80/SR12 (West) interchange, two of which are longitudinal encroachments and three of which are approximately perpendicular and new local road overheads at Red Top Road and a new local road in Suisun City (both of which will be transverse).

X. It is anticipated that the some of the properties to be acquired which had prior agricultural use will contain herbicides and pesticides. It is anticipated that some of the properties to be acquired will have underground contamination either from leaking tanks on their properties or from other properties in the vicinity. As a minimum some parcels do contain existing underground fuel storage tanks that might have to be removed but that are not identified as leaking. It is also anticipated that required areas adjacent to I-680, I-880 and SR 12 may contain elevated levels of aurally deposited lead. Currently a Phase II Site Investigation is underway to confirm the absence or presence of these materials.


Project Sponsor Consultant
Prepared by:


Karen Laws
Contra Costa County

October 4, 2012

Date

Project Sponsor
Reviewed and Approved by:

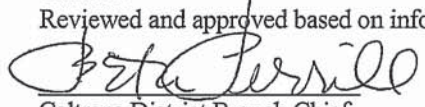

Janet Adams
Solano Transportation Authority

October 4, 2012

Date

Caltrans

Reviewed and approved based on information provided to date:


Caltrans District Branch Chief
Local Public Agency Services
Division of Right of Way


Date

To: District Office Chief
R/W Local Public Agency Services

Attention: Beth Perrill, Senior Right of Way Agent
Local Public Agency Services

Date: October 4, 2012

Co. Solano Rte. I-680/I-80/SR12
PM I-80 10.7/17.0 PM I-680 10.0/13.1
PM SR12W R1.7/R2.8 PM SR12E L1.8/R4.6
Expense Authorization: 04-0A5330

Subject: **RIGHT OF WAY DATA SHEET- LOCAL PUBLIC AGENCY SERVICES**

Project Description: I-680/I-80/SR-12 Interchange, Alternative C, Phase 1 (Fundable First Phase of Preferred Project Alternative)

Right of way necessary for the subject project will be the responsibility of the project sponsor under executed Cooperative Agreement.

The information in this data sheet was developed by Mark Thomas & Company, Inc.

I. **Right of Way Engineering**

Will right of way engineering be required for this project?

- No
- Yes X

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

II. **Engineering Surveys**

1. Is any surveying or photogrammetric mapping required?

No Yes X (Complete the following)

2. **Datum Requirements**

Yes X Project will adhere to the following criteria.

- Horizontal - datum policy is NAD 83, CA-HPGN, EPOCH 1991.35.
- Vertical - datum policy is NAVD 88.
- Units - English is required.

No Provide an explanation on additional page.

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

Yes X

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 X (Complete the following)

	Part Take	Full Take	Estimate \$
A. Number of Vacant Land Parcels	<u>16</u>	<u>1</u>	\$ <u>12,475,000</u>
B. Number of Single Family Residential Units	<u>1</u>	<u>0</u>	\$ <u>545,000</u>
C. Number of Multi-Family Residential Units	<u>0</u>	<u>0</u>	\$ <u>0</u>
D. Number of Commercial/Industrial Parcels	<u>20</u>	<u>7</u>	\$ <u>58,256,000</u>
E. Number of Farm/Agricultural Parcels	<u>2</u>	<u>0</u>	\$ <u>4,715,000</u>
F. Permanent and/or Temporary Easements	<u>0</u>	<u>0</u>	\$ <u>4,100,000</u>
G. Other Parcels (define in "Remarks" section)	<u>8</u>	<u>7</u>	\$ <u>3,254,000</u>
Totals	<u>47</u>	<u>15</u>	\$ <u>83,345,000</u>

The parcels required include a mix of variously zoned, vacant and improved properties. Most of the improved properties consist of commercial uses such as light and heavy industrial, sales and service, offices and retail. Other uses include agricultural and residential. Most of the vacant parcels required are typically zoned for or have potential for future commercial uses. "Other Parcels" consist of government (state, city, or local districts) or utility (railroad, PG&E) owned properties, and are typically vacant.

IV. **Dedications**

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

No X Yes _____ (Complete the following)

Number of dedicated parcels N/A

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

V. **Excess Lands / Relinquishments**

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

No _____ Yes X (Refer to XIII – Remarks section.)

VI. **Relocation Information**

Are relocation displacements anticipated?

No _____ Yes X (Complete the following)

A. Number of Single Family Residential Units	<u>0</u>	
Estimated RAP Payments		\$ <u>0</u>
B. Number of Multi-Family Residential Units	<u>0</u>	
Estimated RAP Payments		\$ <u>0</u>
C. Number of Business/Nonprofit	<u>22</u>	
Estimated RAP Payments		\$ <u>1,940,000</u>
D. Number of Farms	<u>0</u>	
Estimated RAP Payments		\$ <u>0</u>
E. Other (define in the "Remarks" section)	<u>0</u>	
Estimated RAP Payments		\$ <u>0</u>
Totals	<u>22</u>	\$ <u>1,940,000</u>

VII. **Utility Relocation Information**

Anticipate any utility facilities or utility rights of way to be affected?

No _____ Yes X (Complete the following)

		Estimated Relocation Expense		
Facility	Owner	State Obligation	Local Obligation	Utility Owner Obligation
A. Water	City of Fairfield	\$ 0	\$ 1,600,000	\$ 0
B. Water	City of Vallejo	\$ 0	\$ 4,400,000	\$ 0
C. Water	City of Benicia	\$ 0	\$ 4,300,000	\$ 0
D. Water	Department of Water Resources (North Bay Aqueduct)	\$ 0	\$ 0	\$ 0
E. Water	Suisun Solano Water Authority	\$ 0	\$ 0	\$ 0
F. Irrigation and Non Potable Water and Agricultural Drains	Solano Irrigation District	\$ 0	\$ 0	\$ 0
G. Electrical Transmission (115KV)	PG&E	\$ 0	\$ 5,800,000	\$ 2,000,000
H. Electrical Distribution (above & below ground)	PG&E	\$ 0	\$ 800,000	\$ 400,000
I. Gas Transmission	PG&E	\$ 0	\$ 11,000,000	\$ 1,900,000
J. Gas Distribution	PG&E	\$ 0	\$ 800,000	\$ 100,000
K. Cable and Fiber	Comcast	\$ 0	\$ 0	\$ 0
L. Cable and Fiber	Qwest	\$ 0	\$ 200,000	\$ 0
M. Telephone	The New AT&T	\$ 0	\$ 2,900,000	\$ 2,800,000
N. Sewer	City of Fairfield	\$ 0	\$ 0	\$ 0
O. Sewer	Fairfield-Suisun Sanitary District	\$ 0	\$ 2,000,000	\$ 0
P. Liquid Fuels	Kinder Morgan	\$ 0	\$ 0	\$ 0
Totals*		\$ 0	\$ 33,800,000	\$ 7,200,000
Number of facilities			109	

* Escalation added separately.

Utility impacts are in the process of being estimated at this time.

Additional information concerning utility involvement on this project? See Attachments.

VIII. **Rail Information**

Are railroad facilities or railroad rights of way affected?

No _____ Yes X (Complete the following)

Describe railroad facilities or railroad rights of way affected.

Owner's Name	Transverse Crossing	Longitudinal Encroachment
A. Union Pacific Railroad	2 new roadway plus 3 connectors at I-680 interchange	1 replacement skew crossing plus 2 connector at I-680 interchange

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

The new roadway and connector crossings will require new easements and construction and maintenance agreements. The replacement of the existing Cordelia Underpass will require a construction and maintenance agreement and potentially a design review agreement.

IX. **Clearance Information**

Are there improvements that require clearance?

No ____ Yes X (Complete the following)

A. Number of Structures to be Demolished 11 \$ 150,000
Estimated Cost of Demolition

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 X (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 X (Explain in the "Remarks" section)

XI. **Project Scheduling**

	Proposed lead time	Completion date	
Preliminary Engineering, Surveys	<u>3</u> (months)	November 2009*	June 2016**
R/W Engineering Submittals	<u>6</u> (months)	August 2011*	June 2017**
R/W Appraisals/Acquisition	<u>19</u> (months)	September 2012*	July 2017**
Proposed Environmental Clearance		November 2012	
Proposed R/W Certification		December 2012*	September 2017**

*These dates are for the first construction package.

** These dates are for the last of the seven planned construction packages.

XII. **Proposed Funding**

	Local ⁺⁺	State ⁺⁺	Federal ⁺⁺	Other
Acquisition	<u>\$83,345,000*</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Utilities	<u>\$33,800,000</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Relocation Assistance Program	<u>\$ 1,940,000</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Clearance Costs	<u>\$ 150,000</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
R/W Support Cost	<u>\$ 915,000</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>

⁺⁺ Proposed funding for Right of Way as shown is for current value and has not been escalated.

* See comments under Section III – Parcel information.

Remarks

V. The existing portion of Interstate 680 from north of the proposed Red Top Road Interchange to the end of the route is proposed to be relinquished to local control for use as an arterial.

VIII. A. The Union Pacific Underpass at I-80 is proposed to be reconstructed, along with approximately 1000 LF of track. Also proposed are five Overhead highway structures at the new I-680/I-80/SR12 (West) interchange, two of which are longitudinal encroachments and three of which are approximately perpendicular and a new transverse local road overhead at Red Top Road

X. It is anticipated that the some of the properties to be acquired which had prior agricultural use will contain herbicides and pesticides. It is anticipated that some of the properties to be acquired will have underground contamination either from leaking tanks on their properties or from other properties in the vicinity. As a minimum some parcels do contain existing underground fuel storage tanks that might have to be removed but that are not identified as leaking. It is also anticipated that required areas adjacent to I-680, I-880 and SR 12 may contain elevated levels of aerially deposited lead. Currently a Phase II Site Investigation is underway to confirm the absence or presence of these materials.

Project Sponsor Consultant

Prepared by:


Karen Laws
Contra Costa County

Project Sponsor

Reviewed and Approved by:

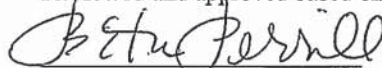

Janet Adams
Solano Transportation Authority

October 4, 2012
Date

October 4, 2012
Date

Caltrans

Reviewed and approved based on information provided to date:


Caltrans District Branch Chief
Local Public Agency Services
Division of Right of Way

Oct 9, 2012
Date

ATTACHMENT H

Transportation Management Plan Data Sheet

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

04-SOL-80/680/12
Interchange
Alternative C, Phase 1
PM I-80 10.8-17.0
PM I-680 10.0 – 13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8 – R4.8

Co/Rte/PM _____ EA 0A5300 Project Engineer Roni Boukhalil

Route	From		To	
	Post Mile	Description	Post Mile	Description
I-80	10.8	0.7 mile west of Red Top Road undercrossing	17.0	0.8 mi east of the Abernathy Road overcrossing
I-680	10.0	Northerly ramp ends at Gold Hill Road interchange	13.1	Junction w/ I-80
SR12 West	R1.7	0.7 mile west of the Red Top Road intersection	R2.8	Junction w/ I-80
SR12 East	L1.8	Junction w/ I-80	R4.8	Overhead at the UPRR between Fairfield and Suisun City

Project Limit _____

Project Description 80/680/12 Interchange

1) Public Information

- ☒ a. Brochures and Mailers \$50,000
- ☒ b. Press Release
- ☒ c. Paid Advertising \$100,000
- ☐ d. Public Information Center/Kiosk \$
- ☒ e. Public Meeting/Speakers Bureau
- ☐ f. Telephone Hotline
- ☒ g. Internet, E-mail
- ☒ h. Notification to impacted groups
(i.e. bicycle users, pedestrians with disabilities, others...)
- ☒ i. Others \$

2) Traveler Information Strategies

- ☒ a. Changeable Message Signs (Fixed) (Use Existing) \$
- ☒ b. Changeable Message Signs (Portable) \$700,000
- ☒ c. Ground Mounted Signs \$300,000
- ☒ d. Highway Advisory Radio \$200,000
- ☒ e. Caltrans Highway Information Network (CHIN)
- ☒ f. Detour maps (i.e. bicycle, vehicle, pedestrian...etc)
- ☐ g. Revised Transit Schedules/maps
- ☒ h. Bicycle community information
- ☐ i. Others

3) Incident Management

<input checked="" type="checkbox"/> a. Construction Zone Enhanced Enforcement Program (COZEEP)	\$1,500,000
<input checked="" type="checkbox"/> b. Freeway Service Patrol	\$ 150,000
<input type="checkbox"/> c. Traffic Management Team	
<input type="checkbox"/> d. Helicopter Surveillance	\$
<input type="checkbox"/> e. Traffic Surveillance Stations (Loop Detector and CCTV)	\$
<input type="checkbox"/> f. Others	\$

4) Construction Strategies

<input checked="" type="checkbox"/> a. Lane Closure Chart	
<input type="checkbox"/> b. Reversible Lanes	
<input checked="" type="checkbox"/> c. Total Facility Closure	
<input type="checkbox"/> d. Contra Flow	
<input type="checkbox"/> e. Truck Traffic Restrictions	\$
<input checked="" type="checkbox"/> f. Reduced Speed Zone	\$
<input checked="" type="checkbox"/> g. Connector and Ramp Closures	
<input type="checkbox"/> h. Incentive and Disincentive	\$
<input type="checkbox"/> i. Moveable Barrier	\$
<input type="checkbox"/> j. Others	
<input type="checkbox"/> k. Others	\$

5) Demand Management

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

6) Alternate Route Strategies

<input type="checkbox"/> a. Add Capacity to Freeway Connector	\$
<input type="checkbox"/> b. Street Improvement (widening, traffic signal... etc)	\$
<input type="checkbox"/> c. Traffic Control Officers	\$
<input type="checkbox"/> d. Parking Restrictions	
<input type="checkbox"/> e. Others	\$

7) Other Strategies

<input type="checkbox"/> a. Application of New Technology	\$
<input type="checkbox"/> e. Others	\$

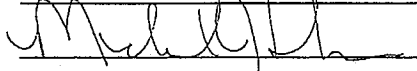
TOTAL ESTIMATED COST OF TMP ELEMENTS = \$3,000,000
(For Alt C, Phase 1)

*Please note that any change in project scope, schedule or cost will require resubmittal of the TMP Data Sheet Request.

PREPARED BY

Michael J. Lohman

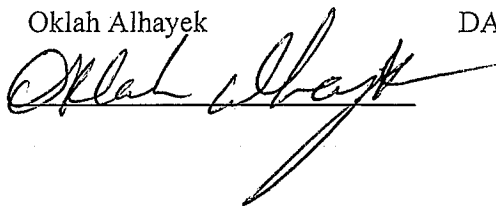
DATE 5/14/2012



APPROVAL RECOMMENDED BY

Oklah Alhayek

DATE



5/15/12

ATTACHMENT I

Risk Management Plan

RISK MANAGEMENT RESPONSE PLAN																		
Identification					Qualitative Analysis					Quantitative Analysis			88			Monitoring and Control		
Status	ID #	Date Identified	Threat/Opportunity Event	SMART Column	Type	Probability	Impact	Risk Matrix	Priority	Probability (%)	Impact or days	Effect (\$ or days)	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Active	1	4/19/2007	Traffic study may be a vulnerable element in the EIR/EIS (land development/growth inducement)	Lawsuits on environmental documents for transportation improvements oftentimes focus on perceived growth-inducing effects. Such a risk exists on this project.	Schedule Cost	Low	Medium	Probability H M L L M H Impact	Low	10%	90 days	9 days	Mitigation	The probability of this risk is rated as low because of the current level of congestion and documented safety issues in the region. The strategy will be to include discussion of impacts due to growth inducement in the ED.	WBS 180 Prepare and Approve Project Report and Final Environmental Document	Traffic	Circulation of DED Completion of Final ED	
Active	2	4/19/2007	Green Valley & Cordelia Faults may create significant geotechnical risks / hazards or delay approval of structural design of certain bridges if they cross one of the faults.	Depending on where faults are located and whether they are determined to be "active" by Caltrans definition, it may be necessary to move one or more bridges, which could require redesign of certain alignments.	Cost Schedule	Low	Medium	Probability H M L L M H Impact	Medium	15%	\$100,000	\$15,000	Acceptance	The STA is pursuing a seismic fault investigation to identify and map fault traces on the Green Valley and Cordelia Faults and to determine whether the traces are "active". The focus will be on mapping faults that might affect bridges for Alternative C, as that is seen as the most likely Alternative to be selected. STA will coordinate with Caltrans throughout the process, in order to ensure CT's buy-in to the approach and methodology of the investigation and to facilitate eventual decision-making by CT Dept. of Structures.	WBS 180 Prepare and Approve Project Report and Final Environmental Document	Eng	Quarterly	
Active	3	4/19/2007	Utilities may cause design or construction problems -- unknown utilities; pipelines in proximity to faults; water line (NBA)	Try to get complete utility mapping as early as possible. Consider potholing prior to design, especially in areas of concern or that are critical to the design.	Schedule Cost	Low	Medium	Probability H M L L M H Impact	Medium	10%	\$300,000	\$60,000	Acceptance	Every effort will be made to obtain up-to-date mapping of all utilities during the early project development phases. As construction packages proceed to final design, potholing will be performed as necessary to help minimize "surprises" in the field.	WBS 270 Perform Construction Engineering and General Contract Administration	Eng	Completion of DPR Completion of Final PR	
Active	4	4/19/2007	Paleontological sites could be found within the project which would temporarily shut down construction.	If geological units are likely to be fossil-bearing, it will be documented in the report.	Schedule Cost	Low	Low	Probability H M L L M H Impact	Low	5%	\$30,000	\$4,500	Acceptance	Follow Caltrans standard protocol.	WBS 270 Perform Construction Engineering and General Contract Administration	Eng	Ongoing during construction	
Active	5	4/19/2007	Historic Structures may be present (sec. 106) - long approval process for cultural resources could affect schedule and design	Risk of direct effect on historic structures is fairly low--except within the proximity to Cordelia historic district. Initial assessment to be made after APE is developed.	Schedule	Low	Medium	Probability H M L L M H Impact	Medium	5%	60 days	3 days	Mitigation	Work closely with reviewers early on.	WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)	Env	Circulation of DED	
Active	6	4/19/2007	New requirements for air quality studies resulting from recent court cases, legislative actions (e.g., HRA and AB 32) and county requirements are not completely defined but will likely require additional analyses by CT.	Meet with CT staff in advance to determine new requirements and methods of study; coordinate with CT staff during tech study prep to ensure expectations are met prior to review of report.	Schedule Scope Cost	Medium	Low	Probability H M L L M H Impact	Medium	20%	30 days	6 days	Acceptance	Work closely with reviewers early on.	WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)	Env	Completion of AQ Report Circulation of DED Completion of Final ED	
Active	7	4/19/2007	NEPA 404 coordination process may be slow due to delegation of NEPA authority	Coordinate directly with CT on next steps and key interim decision making.	Schedule	Low	Medium	Probability H M L L M H Impact	Medium	10%	60 days	6 days	Acceptance	Work closely with reviewers early on.	WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)	Env	Monthly until Circulation of DED, then as needed until completion of Final ED	
Dormant	8	4/19/2007	RWQCB permits may be slow and require late design changes during PS&E	Coordinate with RB staff during EIS prep to determine mitigation expectations. In advance of permit applications.	Schedule Cost	Low	Medium	Probability H M L L M H Impact	Medium	5%	60 days	3 days	Acceptance	Work closely with reviewers early on.	WBS 205 Obtain Permits, Agreements, and Route Adoptions	Env/Eng	As needed when permit application is submitted	
Active	9	4/19/2007	Floodplain issues may require design modifications	Coordinate with CT, SCWA (and SID in area of Raines drain) to develop clear picture of floodplain issues early on.	Schedule Cost	Medium	Low	Probability H M L L M H Impact	Medium	10%	\$50,000	\$2,500	Mitigation	Develop 2-D hydrodynamic model early on to facilitate design.	WBS 160 Perform Preliminary Engineering Studies and Prepare Draft Project Report	Env/Eng	Monthly	
Active	10	4/19/2007	Response from/Coordination with USFWS and NOAA fisheries may be slow	JV staff to communicate directly with resource agency staff during BA prep and informal coordination. Coordinate with CT staff to help facilitate discussions as needed	Schedule	Low	Medium	Probability H M L L M H Impact	Medium	5%	45 days	3 days	Acceptance	Coordinate closely with agency early on.	WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)	Env	Monthly after reports are submitted	
Active	11	4/19/2007	Botany/wetlands/fairy shrimp/CC goldfields approvals can be slow; may affect design; survey protocols need to be agreed upon and can be slow	Seek agreements from CT/USFWS on approach to surveys, presence/absence of species. Clarify with design the extent of project limits.	Schedule	Low	Medium	Probability H M L L M H Impact	Low	10%	60 days	6 days			WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)	Env	Quarterly	
Active	12	4/19/2007	Response from/Coordination with USEPA may be slow	Work with CT D04 staff to reach out to US EPA staff intermittently and ensure communication during admin EIS prep	Schedule	Low	Low	Probability H M L L M H Impact	Low	5%	30 days	2 days	Acceptance	Coordinate closely with agency early on.	WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)	Env	Monthly after report is submitted	
Active	13	4/19/2007	Community issues, especially around noise or right of way impacts, may generate some local resistance to the project	CT staff likely to require meetings with area residents to disclose Soundwall study results and seek input from public per 23CFR772	Schedule	Low	Medium	Probability H M L L M H Impact	Medium	5%	60 days	3 days	Mitigation	Meet with stakeholders and other concerned individuals, provide information and try to develop cooperative relationship.	WBS 180 Prepare and Approve Project Report and Final Environmental Document	Env/Outreach	Circulation of DED Completion of Final ED	
Active	14	4/19/2007	Late design changes could slow overall project schedule (drainage, environmental, right of way)		Cost Schedule	Low	Low	Probability H M L L M H Impact	Low	10%	\$50,000	\$5,000	Avoidance	Close coordination and communication between team members should avoid this problem.	WBS 180 Prepare and Approve Project Report and Final Environmental Document WBS 270 Perform Construction Engineering and General Contract Administration	Eng/Env	Monthly	

RISK MANAGEMENT RESPONSE PLAN																		
Identification					Qualitative Analysis					Quantitative Analysis			88			Monitoring and Control		
Status	ID #	Date Identified	Threat/Opportunity Event	SMART Column	Type	Probability	Impact	Risk Matrix	Priority	Proba- bility (%)	Impact (\$ or days)	Effect (\$ or days)	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
Active	15	4/19/2007	Potential effects on special-status species and habitat could result in the need for mitigation sites for biological resources be identified before the PA/ED phase can be completed (i.e., before regulatory agencies issue the BO).	Coordinate with USFWS during BA/NES preparation on potential sites for mitigation	Cost Schedule	Low	Low	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div>X</div> <div></div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	15%	\$20,000	\$3,000	Acceptance	Need to identify Mitigation sites--existing and proposed or PA/ED may be delayed	WBS 180 Prepare and Approve Project Report and Final Environmental Document	Env/Eng	Quarterly	
Active	16	4/19/2007	Presence of hazardous materials-within existing or proposed right of way may increase project cost	Perform site investigation to identify any sites to identify risk and assess potential mitigation cost	Cost	Low	Low	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div>X</div> <div></div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Low	10%	\$50,000	\$5,000	Mitigation	Perform Phase II investigation on sites within Preferred Alternative prior to R.O.D. if allowed on site.	WBS 235 Mitigate Environmental Impacts and Clean-up Hazardous Waste	Env/Eng	Phase II Investigation	
Active	17	4/19/2007	Agricultural mitigation will likely be required and could add additional reviews		Schedule	Low	Low	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div>X</div> <div></div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Low	5%	30 days	2 days	Acceptance		WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document (DED)	Env	Quarterly until Circulation of DED, then as needed until completion of Final ED	
Active	18	4/19/2007	Legal challenge (successful or not) to final EIR/EIS could delay construction and be costly.	ensure EIR/EIS reflects current/new requirements that make document susceptible to challenge (e.g., AB 32 is addressed adequately)	Schedule Cost	Low	Medium	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div></div> <div>X</div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	10%	90 days	9 days	Mitigation	Maintain communication with opposing parties so there are no surprises. If possible, allow additional time in schedule to accommodate challenge & resolution.	WBS 180 Prepare and Approve Project Report and Final Environmental Document	Env / Outreach / Mgmt	Circulation of DED Completion of Final ED	
Active	19	4/19/2007	Project approval could go "stale" before a phase is fully funded, which could cause additional delay to prepare supplemental environmental documentation (e.g., "Re-evaluation" and/or Supplemental EIS)	Insert EIS Re-eval "trigger" in between each project planning milestone in PS&E/construction phases for every three yrs milestones are not achieved	Schedule Cost	Low	Low	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div>X</div> <div></div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Low	15%	30 days	5 days	Acceptance	Be prepared for re-validation effort as individual phases are funded. Initial construction package scheduled to start construction in late 2012.	WBS 180 Prepare and Approve Project Report and Final Environmental Document	Mgmt	Upon Programming or Receiving Funding for each Phase	
Active	20	4/19/2007	Right of Way certification process could be slow	Complete EIR/EIS as early as possible to begin R/W acquisition with enough lead time prior to construction. Consider using someone other than CT for R/W services.	Schedule	Low	Low	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div>X</div> <div></div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	15%	60 days	2 days			WBS 220 Perform Right of Way Engineering	Mgmt	Monthly	
Active	21	4/19/2007	Continuing development in the City of Fairfield could increase the cost of Right of Way	Complete EIR/EIS as early as possible to begin R/W acquisition before additional development can take place.	Cost	Medium	Medium	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div></div> <div>X</div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	10%	\$1,000,000	\$100,000		Get Environmental Document approved which allows City of Fairfield to acquire/preserve right of way in lieu of development.	WBS 220 Perform Right of Way Engineering	Mgmt	Quarterly	
Active	22	4/19/2007	Right of Way condemnation could be very slow	Consider using someone other than Caltrans for R/W services.	Schedule Cost	Low	Medium	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div></div> <div>X</div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	15%	90 days	5 days			WBS 265 Advertise, Open Bids, Award, and Approve Contract	Mgmt	Monthly, once it starts	
Active	23	4/19/2007	Too few bids at time of construction could drive up project cost	Plan and execute a robust contractor outreach program.	Cost	Low	Medium	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div></div> <div>X</div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Low	5%	\$1,000,000	\$50,000	Mitigation	Major contractor outreach effort is generally effective, particularly if economy remains depressed.	WBS 265 Advertise, Open Bids, Award, and Approve Contract	Env / Outreach / Mgmt	Prior to and during advertisement	
Active	24	4/19/2007	Construction staging to provide acceptable traffic flow will be a challenge	Consider detours and staging during design.	Scope Schedule	Low	Low	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div>X</div> <div></div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	5%	30 days	2 days	Acceptance	Consider staging in the process of developing individual construction packages.	WBS 260 Prepare Contract Documents	Eng	Quarterly	
Active	25	4/19/2007	Cost estimate may fluctuate significantly prior to bid because cost and availability of materials is hard to estimate this far out	Stay current on construction cost data and trends. Include appropriate contingencies throughout design.	Cost	Medium	Medium	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div></div> <div>X</div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	10%	\$2,000,000	\$200,000	Mitigation	Continue to monitor trends in construction pricing and update estimates as necessary and appropriate.	WBS 265 Advertise, Open Bids, Award, and Approve Contract	Eng	Quarterly	
Active	26	4/19/2007	Failure to adequately plan for staging & phasing of utilities could cause delays before and during construction	Consider utilities early on and look for opportunities to begin relocations as soon as possible.	Schedule Cost	Low	Medium	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div></div> <div>X</div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	5%	60 days	3 days	Avoidance	Begin utility relocation as early as possible.	WBS 200 Coordinate Utilities	Eng	Quarterly prior to Bid Opening	
Active	27	4/19/2007	Short construction seasons may overly constrain project construction	Identify construction packages that have logical balances of work.	Schedule Cost	Low	Medium	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div></div> <div>X</div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	10%	90 days	9 days	Acceptance	Consider adjusting cost estimate to allow contractor to work more than 5-day weeks or 8-hour days.	WBS 270 Perform Construction Engineering and General Contract Administration	Eng/Env	Ongoing during construction	
Active	28	4/19/2007	Not phasing effectively for funding and logical order of construction could reduce potential benefit/cost	Consider respective benefit when developing construction packages.	Cost	Low	Low	<div> <div>Probability</div> <div> <div>H</div> <div>M</div> <div>L</div> </div> <div> <div>X</div> <div></div> <div></div> </div> <div> <div></div> <div>M</div> <div>H</div> </div> </div>	Medium	5%	\$100,000	\$5,000	Mitigation	Get input on operations when selecting specific improvements for individual construction packages.	WBS 100 Project Management	Eng/Mgmt	Upon Programming or Receiving Funding for each Phase	

RISK MANAGEMENT RESPONSE PLAN																		
Identification					Qualitative Analysis					Quantitative Analysis			88			Monitoring and Control		
Status	ID #	Date Identified	Threat/Opportunity Event	SMART Column	Type	Proba-bility	Impact	Risk Matrix	Priority	Proba-bility (%)	Impact (\$ or days)	Effect (\$ or days)	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
Active	29	4/19/2007	Design could be delayed if standards change during project development	Plan to seek exemptions from any significant changes that would delay project.	Schedule Cost	Low	Low	Probability H M L Impact L M H X	Low	5%	30 days	2 days	Avoidance	Monitor upcoming changes in standard and be prepared to seek exceptions/exemptions if consequences appear to cause significant delay or cost increase.	WBS 260 Prepare Contract Documents	Mgmt/Eng	Monthly	
Active	30	4/19/2007	Right of Way closeout could be delayed if locals have limited resources to accept relinquishment of 680 on Alt C	Begin working with Fairfield and/or county to strategize for relinquishment early on.	Schedule	Low	Low	Probability H M L Impact L M H X	Low	5%	60 days	3 days	Mitigation	Work closely with City and County throughout project development process and facilitate relinquishment discussions between them and Caltrans.	WBS 300 Perform Final Right of Way Engineering Activities	Mgmt	Quarterly	
Active	31	8/4/2009	Unmapped archaeological sites may exist within the project limits, causing construction delays if encountered.	Follow the MOA and provide construction monitoring.	Schedule	Low	Medium	Probability H M L Impact L M H X	Low	15%	30 days	5 days	Mitigation	There will be a treatment plan implemented by a Memorandum of Agreement (MOA) between Caltrans, SHPO, and any other appropriate agencies. The MOA will address historic properties, known archaeological sites and unanticipated discoveries.	WBS 270 Perform Construction Engineering and General Contract Administration	Mgmt/Eng	Ongoing during construction	
Active	32	3/15/2010	Expected funding may be restricted in future. Phase 1 has been _____to conform.	Develop a prioritized list of projects. Identify a fundable Phase 1.	Schedule Cost	Low	High	Probability H M L Impact L M H X	Medium	10%	1,000 days	100 days	Mitigation	Scuplt project definitions and phasing to be able to react to changing funding priorities over time, while working towards a long term goal.	WBS 100 Project Management	Eng/Mgmt	g or Receiving Fundi	

ATTACHMENT J

Cooperative Agreements

COOPERATIVE AGREEMENT

THIS AGREEMENT, ENTERED INTO EFFECTIVE ON June 13, 2002, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "STATE", and

SOLANO TRANSPORTATION AUTHORITY (STA), a public entity, referred to herein as "AUTHORITY".

RECITALS

1. STATE and AUTHORITY, pursuant to Streets and Highways Code Section 114 are authorized to enter into a Cooperative Agreement for proposed improvements to State highways within the County of Solano.
2. STATE and AUTHORITY are public agencies authorized under Section 14556 et seq. of the Government Code (The Traffic Congestion Relief Act of 2000) to take immediate steps to relieve congestion on State of California transportation systems.
3. STATE is prepared to authorize AUTHORITY to assist in planning studies for proposed improvements consisting of freeway widening, new ramp connectors, relocation and braiding of on-ramps and off-ramps, realignment and new construction of local parallel arterials on Interstate Route 80 in Fairfield, referred to herein as "STUDY".
4. STUDY is included in Government Code Section 14556.40 (a) (25) to be funded up to a total of \$9,000,000 using Traffic Congestion Relief (TCR) funds and \$400,000 using State Transportation Improvement Program (STIP) funds to be expended on Phase 1 of Route 80/680/12 Interchange (Project 25.3), referred to herein as "PROJECT". PROJECT is to be jointly funded by STATE and AUTHORITY. (See Exhibit A, attached and made part of this Agreement.)
5. The California Transportation Commission (CTC) approved the application for PROJECT submitted by AUTHORITY at its December 12, 2001 meeting and directed STATE to allocate to AUTHORITY the amount of \$9,400,000 less an amount equal to 10% of TCR funds and STIP funds to be retained by STATE to cover STATE's cost to fulfill STATE's quality assurance activities to be expended in Phase 1 for PROJECT (engineering studies, environmental review and approval, and permits). The CTC also approved an advance payment of \$400,000 from those funds in said application for PROJECT.
6. AUTHORITY desires to prepare STUDY as part of its role in planning and developing regional transportation facilities and in order to bring about the earliest possible construction of the desired State transportation improvements.

7. STATE and AUTHORITY mutually desire to cooperate in STUDY and desire to specify herein the terms and conditions under which STUDY is to be prepared and financed.

SECTION I

AUTHORITY AGREES:

1. To carry out STUDY with AUTHORITY forces or private consultants. STUDY is to be prepared in accordance with STATE's laws, rules, regulations, policies, procedures, manuals, standard plans and specifications, and other standards, including, but not limited to, all applicable Federal Highway Administration (FHWA) requirements and materials provided pursuant to Articles 2 and 3 of Section II of this Agreement. STUDY is subject to ongoing review and the draft final report shall require prior review and approval by both STATE and FHWA as applicable. AUTHORITY shall not incorporate in STUDY or in the documents for STUDY any materials or equipment of single or sole source origin without the prior written approval of STATE.
2. Prior to commencing work on STUDY, to furnish STATE with a proposed time schedule acceptable to STATE to complete STUDY.
3. To furnish STATE with written quarterly progress reports during the period while STUDY is being prepared.
4. To have the final study documents and drawings of civil, structural, mechanical, electrical, architectural, or other engineering features of STUDY prepared by or under the direction of engineers or architects registered and licensed in the applicable professional field in the State of California. Any engineering reports, and each engineering map, drawing or plan shall bear the professional seal, certificate number, registration classification, expiration date of certificate, and signature of the professional engineer responsible for their preparation. To have environmental technical studies prepared by AUTHORITY forces or private consultants meeting the minimum professional qualifications identified by STATE.
5. To pay one hundred percent (100%) of all actual allowable costs of STUDY that exceeds STATE's total contribution of \$9,400,000, which includes the 10% set aside to be expended by STATE for costs associated with providing quality assurance activities shown in Exhibit A.
6. To submit to STATE signed itemized invoices monthly, in triplicate, with specific details of all costs using TCR funds and STIP funds incurred during the period of the invoice. Invoices will meet format and content requirements specified by STATE. Each invoice shall be submitted to STATE's Project Coordinator for approval and forwarding to the appropriate Accounting Office for payment.
7. To submit a final report of expenditures in the same format as the aforementioned invoice detail within ninety (90) days after completion of STUDY.
8. To retain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred, including support data for cost proposals, and make such materials available at the respective offices of AUTHORITY at all reasonable times during the contract period and for three (3) years from the date of final payment under this Agreement. STATE, FHWA, or any duly authorized representative of the Federal Government shall have access to any books, records, and documents of AUTHORITY that

are pertinent to this Agreement for audits, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.

SECTION II

STATE AGREES:

1. To pay one hundred percent (100%) of all actual allowable costs of STUDY to AUTHORITY, up to the amount of \$8,460,000, as specified in Article 4 of Section III of this Agreement.
2. To provide AUTHORITY with necessary regulations, policies, procedures, manuals, standard plans and specifications, and other standards that define the scope of work which includes some, but not all, of the obligations and responsibilities of STATE and AUTHORITY for the preparation of STUDY. Scope of Work is shown on Exhibit B, attached and made part of this Agreement.
3. To work with AUTHORITY to assure that required State and Federal procedures are followed and approvals obtained.
4. To provide prompt reviews and approvals as appropriate of submittals by AUTHORITY and to cooperate in timely processing of STUDY.
5. To deposit with AUTHORITY within thirty (30) days of execution of this Agreement, the amount of \$400,000, which figure represents the advance deposit amount approved by the CTC in the application for PROJECT. STATE will thereafter reimburse AUTHORITY within thirty (30) days after receipt of each monthly billing, STATE's share of the actual allowable costs for any work on STUDY by AUTHORITY and contractor forces until the sum of monthly reimbursements plus the advance deposit equals the amounts specified in Article 4 of Section III of this Agreement. AUTHORITY will also submit invoices to verify the expenditure of the advance deposit. Allowable costs include non-salary expenses, and actual and direct labor costs plus fringe benefits and overhead and actual acceptable contractor payments. In any case, all expenses reimbursed shall be based on actual costs incurred by AUTHORITY.
6. To provide, at no cost to AUTHORITY, all necessary rights of entry and permits to enter onto the State highway right of way to perform work related to STUDY, including, but not limited to, those permits required for design investigations and environmental surveys.

SECTION III

IT IS MUTUALLY AGREED:

1. All obligations of STATE under the terms of this Agreement are subject to the appropriation of resources by the Legislature and allocation of funds by the CTC to STATE for the purposes of fulfilling STATE's obligations herein.
2. Any costs for STUDY incurred by AUTHORITY prior to CTC approval of AUTHORITY's application for STUDY shall not be reimbursed by STATE. Costs incurred by AUTHORITY for STUDY, prior to said CTC allocation of funds but after CTC approval of the application for STUDY, may be reimbursed retroactively after allocation only if the CTC so provides within its funding approval.

3. After receiving an allocation, AUTHORITY shall make diligent and timely progress toward completing STUDY as described in the submitted application. If timely progress is not achieved, the CTC may review the status of STUDY. If CTC finds that AUTHORITY is not pursuing work for STUDY diligently, the CTC reserves the right to direct STATE to terminate this Agreement and will reallocate those funds to another project or projects.
4. The total amount STATE may reimburse AUTHORITY for STATE's share of the actual costs incurred in the performance of STUDY, using Traffic Congestion Relief (TCR) funds and STIP funds encumbered under this Agreement, shall not exceed \$8,460,000, as set forth in Article 4 of Section III of this Agreement. If it becomes apparent that the maximum amount of STATE's contribution \$8,460,000 is about to be reached or exceeded, AUTHORITY shall complete STUDY using its own or other resources and funding. Any TCR funds and STIP funds remaining on deposit with AUTHORITY for work by AUTHORITY forces that has not been expended shall be returned to STATE within thirty (30) days after completion and acceptance of STUDY by STATE.
5. Costs to STATE to fulfill its quality assurance responsibilities for STUDY as set forth in Article 3 of Section II and Exhibit B of this Agreement will be charged to TCR funds and STIP funds allocated for STUDY. STATE will retain an amount equal to ten percent (10%) from TCR funds and STIP funds allocated to AUTHORITY for STUDY to cover said costs for said quality assurance activities. AUTHORITY acknowledges that STATE funds available for AUTHORITY work on STUDY will be 10% less than the allocated amounts shown in the CTC-approved application. If it becomes apparent at any time that funds will be insufficient to cover work contemplated by this Agreement, AUTHORITY shall be responsible for identification of funding sources which may be needed to cover potential added costs of STUDY.
6. Any hazardous material or contamination of the HM-1 category found within the existing State highway right of way requiring remedy or remedial action, as defined in Division 20, Chapter 6.8 et seq. of the Health and Safety Code shall be the responsibility of STATE, at STATE's expense. For the purpose of this Agreement, any hazardous material or contamination of the HM-1 category is defined as hazardous material which STATE or Federal regulatory control agencies having jurisdiction have determined must be remediated regardless of whether disturbed by PROJECT or not. STATE shall sign the manifest and if STATE's cost for remedy or remedial action is increased due to PROJECT, the additional cost shall be borne by AUTHORITY. STATE will exert every effort to fund the remedy or remedial action for which STATE is responsible. In the event STATE is unable to provide funding, AUTHORITY will have the option to either delay PROJECT until STATE is able to provide funding or proceed with the remedy or remedial action at AUTHORITY expense without any subsequent assurance of reimbursement by STATE.
7. Any hazardous material or contamination of the HM-2 category found within the existing State highway right of way shall be the responsibility of AUTHORITY, at AUTHORITY expense, if AUTHORITY decides to proceed with PROJECT. For the purposes of this Agreement, any hazardous material or contamination of the HM-2 category is defined as material which said regulatory control agencies would have not regulated or would have allowed to remain in place if undisturbed or otherwise protected in place should PROJECT not proceed. AUTHORITY and STATE shall jointly sign the manifest. If AUTHORITY decides to not proceed with PROJECT, there will be no obligation to either AUTHORITY or STATE.
8. Locations subject to remedy or remedial action and/or protection include utility relocation work required for PROJECT. Costs for remedy and remedial action and/or protection shall include but not be limited to, the identification, treatment, removal, packaging, transportation, storage, and disposal of such material.

015387

9. If hazardous material or contamination of either HM-1 or HM-2 category is found on new State highway right of way to be acquired for PROJECT, AUTHORITY shall be responsible, at AUTHORITY expense, for all required remedy or remedial action and/or protection and assure STATE that said new right of way is clean prior to transfer of title to STATE. The property owner, whether a private entity or a local public agency, shall sign the manifest.
10. Actual costs reimbursed, direct and indirect, shall be in conformance with procedures set forth in the Cost Principles and Procedures, Chapter 1, Part 31, CFR 48. AUTHORITY also agrees to comply with Federal procedures in accordance with CFR 49, Part 18, Uniform Administrative Requirement for Grants and Cooperative Agreements to State and Local Governments.
11. STATE shall designate a Project Coordinator to represent STATE and AUTHORITY shall designate a representative through whom all communications between the two agencies shall be channeled. STATE's Project Coordinator shall review the work of AUTHORITY during performance of STUDY.
12. AUTHORITY will furnish STATE all necessary copies of the planning studies to complete the review and approval process. Upon completion of all work under this Agreement, ownership and title to all planning reports, documents, plans, and estimates produced for delivery to STATE as part of STUDY will automatically be vested in STATE and no further agreement will be necessary to transfer ownership to STATE.
13. Nothing in the provisions of this Agreement is intended to create duties or obligations to or rights in third parties to this Agreement or affect the legal liability of either party to the Agreement by imposing any standard of care with respect to the development, design, construction, operation and maintenance of State highways and public facilities different from the standard of care imposed by law.
14. Neither STATE nor any officer or employee thereof is responsible for any damage or liability occurring by reason of anything done or omitted to be done by AUTHORITY under or in connection with any work, authority or jurisdiction delegated to AUTHORITY under this Agreement. It is understood and agreed that, pursuant to Government Code Section 895.4, AUTHORITY shall fully defend, indemnify and save harmless STATE and all its officers and employees from all claims, suits or actions of every name, kind and description brought for or on account of injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by AUTHORITY under or in connection with any work, authority or jurisdiction delegated to AUTHORITY under this Agreement.
15. Neither AUTHORITY nor any officer or employee thereof is responsible for any damage or liability occurring by reason of anything done or omitted to be done by STATE under or in connection with any work, authority or jurisdiction delegated to STATE under this Agreement. It is understood and agreed that, pursuant to Government Code Section 895.4, STATE shall fully defend, indemnify and save harmless AUTHORITY from all claims, suits or actions of every name, kind and description brought for or on account of injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by STATE under or in connection with any work, authority or jurisdiction delegated to STATE under this Agreement.
16. No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties hereto and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.
17. STATE reserves the right to terminate this Agreement upon written notice to AUTHORITY. At the time of termination AUTHORITY will be paid only for work accomplished and

015387

delivered in accordance with the terms of this Agreement and all planning documents for STUDY, including raw data and draft plans, prepared up to the time of termination shall become property of STATE.

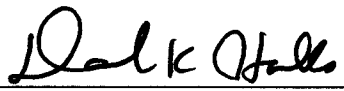
18. This Agreement shall terminate upon STATE's final approval of the completion of STUDY or on January 1, 2008, whichever is earlier in time, unless all parties agree to an extension of time in an amendment to this Agreement.

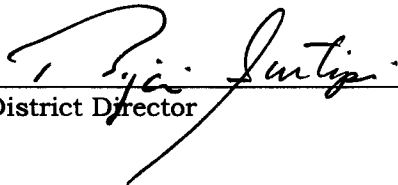
IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized officers.

STATE OF CALIFORNIA
Department of Transportation

SOLANO TRANSPORTATION
AUTHORITY (STA)

JEFF MORALES
Director of Transportation

By: 
Executive Director (STA)

By: 
Deputy District Director

Attest: 
Clerk of the Board

Approved as to form and procedure:


Attorney (Department of Transportation)

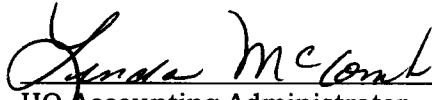
Approved as to form:


Attorney (STA)

Certified as to budgeting of funds:


District Budget Manager

Certified as to financial terms and
conditions:


HQ Accounting Administrator

015387

EXHIBIT A**STUDY COST ESTIMATE BREAKDOWN:**

<u>DESCRIPTION</u>	<u>TOTAL ESTIMATED COST</u>	<u>STATE (TCR) FUNDS</u>	<u>STATE (STIP) FUNDS</u>
Planning Phase: (TCRP Phase 1) Studies & ED	\$8,460,000	◀ \$8,100,000	\$360,000
STATE Quality Assurance *	<u>940,000</u>	<u>900,000</u>	<u>40,000</u>
Total Estimated COST:	\$9,400,000	\$9,000,000	\$400,000

Notes:

1. In the above table, some of the values may have been rounded off to simplify the presentation. Wherever percentages are shown, they shall prevail over the dollar amounts derived therefrom.
2. ◀ indicates Funds to be transferred to AUTHORITY in accordance with this Agreement.
3. * STATE will retain from STATE funds in accordance with Article 5 of Section III of this Agreement.
4. The CTC approved an advance payment of \$400,000 in the TCRP application for PROJECT.
5. RTIP funds are included in the 2000 STIP. STA is the sponsor.

015387

EXHIBIT B

SCOPE OF WORK:

This Scope of Work outlines the specific areas of responsibility for various planning studies for the proposed State highway improvements consisting of freeway widening, new ramp connectors, relocation and braiding of on-ramps and off-ramps, realignment and new construction of local parallel arterials on Interstate Route 80 in Fairfield.

1. STATE will be the Lead Agency and AUTHORITY will be a Responsible Agency for CEQA. AUTHORITY will prepare the Environmental Document (ED) to meet the requirements of CEQA and NEPA. The draft and final ED will require STATE review and approval prior to public circulation. AUTHORITY will provide all data for and prepare the Draft Project Report (DPR) and Project Report (PR). STATE will review and process the reports and request approval of the PROJECT and ED by the Federal Highway Administration (FHWA). AUTHORITY will be responsible for the public hearing process.
2. AUTHORITY and STATE concur that the project is a Category 3 as defined in STATE's Project Development Procedures Manual.
3. AUTHORITY will submit drafts of environmental technical reports and individual sections of the draft environmental documents to STATE, as they are developed, for review and comment. Traffic counts and projections to be used in the various reports shall be supplied by STATE, if available, or by AUTHORITY. Existing traffic data shall be furnished by AUTHORITY. AUTHORITY shall provide to STATE and the CTC the Notice of Preparation/Notice of Intent (NOP/NOI), the draft environmental documents and the final environmental document for PROJECT.
4. STATE will review, monitor, and approve all project development reports, studies, and plans, and provide all necessary implementation activities.
5. STATE will prepare the revised Freeway Agreement and obtain approval of the new public road from the California Transportation Commission, as necessary.
6. All phases of PROJECT, from inception through construction, whether done by AUTHORITY or STATE, will be developed in accordance with all policies, procedures, practices, and standards that STATE would normally follow.
7. Detailed steps in the project development process are set forth in Attachment 1 of this Scope of Work. These Attachments are intended as a guide to STATE's and AUTHORITY's staff, herein incorporated and made part of this Agreement.

015387

ATTACHMENT 1**PLANNING PHASE ACTIVITIES:** (TCRP Phase 1)**RESPONSIBILITY:**
STATE AUTHORITY**1. ENVIRONMENTAL ANALYSIS & DOCUMENT PREPARATION**

Start and Maintain Project History File	X	X
Establish Project Development Team (PDT)	X	X
Approve PDT	X	
Project Category Determination	X	
Prepare Preliminary Environmental Assessment.....		X
Identify Preliminary Alternatives and Costs.....		X
Prepare and Submit Environmental Studies and Reports		X
Review and Approve Environmental Studies and Reports	X	
Prepare and Submit Draft Environmental Document (DED).....		X
Review DED in District	X	

2. PROJECT GEOMETRICS DEVELOPMENT

Apply for Encroachment Permit for Surveying on Site.....		X
Issue Encroachment Permit.....	X	
Prepare Existing Traffic Analysis.....		X
Prepare Future Traffic Volumes for Alternatives		X
Prepare Project Geometrics and Profiles		X
Prepare Layouts and Estimates for Alternatives.....		X
Prepare Operational Analysis for Alternatives.....		X
Review and Approve Project Geometrics and Operational Analysis	X	

3. PROJECT APPROVAL

Lead Agency for Environment Compliance Certifies		
ED in Accordance With Its Procedures.....	X	
Prepare Draft Project Report (DPR)		X
Review and Approve DPR.....	X	
Finalize and Submit Project Report with Certified ED for Approval.....		X
Approve Project Report	X	

RESOLUTION NO. 2002-09**RESOLUTION AUTHORIZING THE EXECUTIVE DIRECTOR TO ENTER
INTO A COOPERATIVE AGREEMENT WITH THE STATE OF CALIFORNIA
FOR TRAFFIC CONGESTION RELIEF ACT FUNDS
FOR THE ROUTE 80/680/12 INTERCHANGE PROJECT**

WHEREAS, the Traffic Congestion Relief Act of 2000 ("TCRA") established the Traffic Congestion Relief Program which provides for projects throughout the State of California to reduce traffic congestion, provide for safe and efficient movement of goods, and provide system connectivity; and

WHEREAS, the State of California ("STATE") and the Solano Transportation Authority ("AUTHORITY") are public agencies authorized under TCRA to take immediate steps to relieve congestion on the State of California transportation systems; and

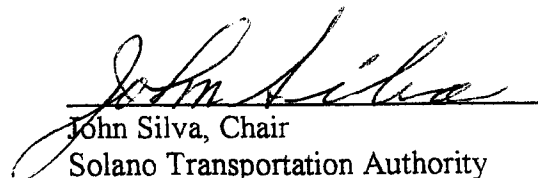
WHEREAS, the AUTHORITY submitted a project application to receive TCRA funds for the Project Report/Environmental Document ("STUDY") for the Route 80/680/12 Interchange Project ("PROJECT"); and

WHEREAS, the California Transportation Commission (CTC) approved the application for TCRA funds at its December 12, 2001 meeting and directed STATE to allocate to AUTHORITY the amount of \$9,000,000 to be expended in Phase 1 for PROJECT (engineering studies, environmental review and approval, and permits); and

WHEREAS, the AUTHORITY desires to prepare STUDY as part of its role in planning and developing regional transportation facilities in order to bring about the earliest possible construction of the desired State transportation improvements; and

WHEREAS, to receive TCRA funding for the STUDY, the AUTHORITY must enter into a Cooperative Agreement with the State of California, Department of Transportation.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the Solano Transportation Authority, that the AUTHORITY authorizes acceptance of the Traffic Congestion Relief Act funds from the State of California and further authorizes the Executive Director to enter into a Cooperative Agreement (District Agreement No. 4-1905-C) between the State of California and the Solano Transportation Authority, to take all necessary and appropriate actions to administer the responsibilities required of the AUTHORITY as defined in the Cooperative Agreement, and to execute any further documents required to receive the allocated TCRA funds.


John Silva, Chair
Solano Transportation Authority

015387

I, Daryl K. Halls, the Solano Transportation Authority Executive Director, do hereby certify that the above and foregoing resolution was regularly introduced, passed, and adopted by said STA at a regular meeting thereof held this 13th day of June 2002.

A handwritten signature in cursive script, appearing to read "Daryl K. Halls", written in dark ink.

Daryl K. Halls, Executive Director
Solano Transportation Authority

AMENDMENT NO. 1 TO AGREEMENT

THIS AMENDMENT NO. 1 TO AGREEMENT, ENTERED INTO EFFECTIVE ON December 31, 2007, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "STATE," and the

SOLANO TRANSPORTATION AUTHORITY, a public entity, referred to herein as "AUTHORITY."

RECITALS

1. The parties hereto entered into an Agreement (District Agreement No. 4-1905-C) on June 13, 2002, defining the terms and conditions of studies intended for development of the Project Approval and Environmental Documentation (PA&ED) phase of the project for proposed improvements consisting of freeway widening, new ramp connectors, relocation and braiding of on-ramps and off-ramps, realignment and new construction of local parallel arterials at the Route 80/680/12 Interchange in Fairfield.
2. The purpose of this Amendment No. 1 is to extend the termination date of the original Agreement. An extension is needed because PROJECT is not likely to be completed by January 1, 2008 and the original Cooperative Agreement, if not amended, will terminate on January 1, 2008. Additionally, the indemnification articles of the original Agreement need to be amended to reflect the current approved revisions.

IT IS THEREFORE MUTUALLY AGREED:

1. The termination date specified in Section III, Article 18 of the original Agreement shall now be January 1, 2011, instead of January 1, 2008.
2. Article 14 of Section III of the original Agreement (District Agreement No. 4-1905-C) is hereby replaced in its entirety to read as follows:
 14. *Neither STATE 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 AUTHORITY under or in connection with any work, authority or jurisdiction conferred upon AUTHORITY and arising under this Agreement. It is understood and agreed that AUTHORITY shall fully defend, indemnify and save harmless STATE 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 and other theories or assertions of liability occurring by reason of anything done or omitted to be done by AUTHORITY under this Agreement.*

3. Article 15 of Section III of the original Agreement (District Agreement No. 4-1905-C) is hereby replaced in its entirety to read as follows:

15. Neither AUTHORITY 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 STATE under or in connection with any work, authority or jurisdiction conferred upon STATE and arising under this Agreement. It is understood and agreed that STATE shall fully defend, indemnify and save harmless AUTHORITY 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 and other theories or assertions of liability occurring by reason of anything done or omitted to be done by STATE under this Agreement.

4. The other terms and conditions of said Agreement (District Agreement No. 4-1905-C) shall remain in full force and effect.
5. This Amendment No. 1 to Agreement is hereby deemed to be a part of District Agreement No. 4-1905-C.

STATE OF CALIFORNIA
Department of Transportation

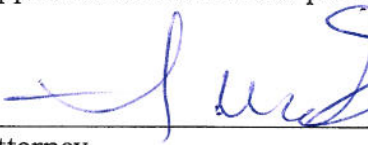
SOLANO TRANSPORTATION AUTHORITY
(STA)

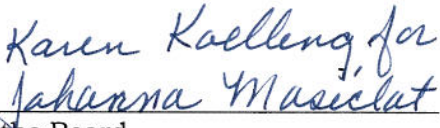

WILL KEMPTON
Director

By: 
Deputy District Director

By: 
Executive Director (STA)

Approved as to form and procedure:

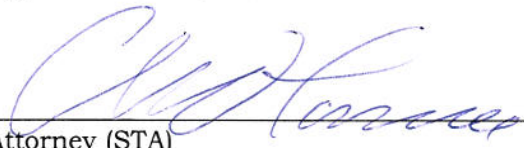

Attorney
Department of Transportation


Attest: 
Clerk of the Board


Certified as to funds:


District Budget Manager

Approved as to form:


Attorney (STA)

Certified as to financial terms and
policies:


Accounting Administrator

**SOLANO TRANSPORTATION AUTHORITY
RESOLUTION No. 2007-10**

**RESOLUTION OF THE SOLANO TRANSPORTATION AUTHORITY
AUTHORIZING THE EXECUTIVE DIRECTOR TO SIGN
AGREEMENTS/DOCUMENTS WITH OR FOR THE
CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) AND THE
FEDERAL HIGHWAY ADMINISTRATION
TO RECEIVE FUNDING AND TO DELIVER TRANSPORTATION PROJECTS**

WHEREAS, the Solano Transportation Authority is eligible to receive Federal and/or State funding for certain transportation projects, through the California Department of Transportation (CALTRANS) and the Federal Highway Administration (FHWA); and

WHEREAS, Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, need to be executed with CALTRANS or FHWA before such funds could be claimed; and

WHEREAS, the Solano Transportation Authority, pursuant to Streets and Highways Code Section 114 is authorized to enter into Cooperative Agreements for implementing the delivery of proposed improvements to State highways within the County of Solano; and

WHEREAS, various Cooperative Agreements need to be executed and Right-of-Way Certifications signed for implementing the delivery of said proposed improvements to State Highways within the County of Solano; and

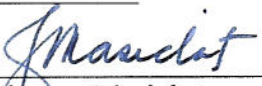
WHEREAS, the Solano Transportation Authority wishes to delegate authorization to execute these agreements/documents and any amendments thereto to the Executive Director or the Acting Executive Director following Project approval by the STA Board whether through project-specific action of the Board or through approval of the STA Budget which Budget includes projects and their funding.

NOW, THEREFORE BE IT RESOLVED that the Executive Director or Acting Executive Director be authorized to execute all Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, Cooperative Agreements, Right-of-Way Certifications and any amendments thereto with or for CALTRANS or FHWA following approval by the STA Board through either project-specific action of the Board or approval of the STA Budget which Budget includes or references projects and their funding.

I HEREBY CERTIFY that the foregoing resolution was introduced and passed at a regular meeting of the Board of the Solano Transportation Authority, held on the 10th day October, 2007, by the following vote:

Ayes: 8
No's: 0
Absent: 0
Abstain: 0

Attest by: _____


Johanna Masiclat
Clerk of the Board


Anthony Intintoli, Chair
Solano Transportation Authority

I, Daryl K. Halls, the Solano Transportation Authority Executive Director, do hereby certify that the above and foregoing resolution was introduced, passed, and adopted by said Authority at a regular meeting thereof held this the day of October 10, 2007.


Daryl K. Halls, Executive Director
Solano Transportation Authority

AMENDMENT NO. 2 TO AGREEMENT

THIS AMENDMENT NO. 2 TO AGREEMENT, ENTERED INTO EFFECTIVE ON September 23, 2010, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "STATE," and the

SOLANO TRANSPORTATION AUTHORITY
(STA), a public entity, referred to herein as
"AUTHORITY."

RECITALS

1. The parties hereto entered into a Cooperative Agreement (District Agreement No. 4-1905-C) on June 13, 2002, defining the terms and conditions under which to cooperate on the Project Approval and Environmental Documentation (PA&ED) phase of a project (PROJECT) for improvements consisting of freeway widening, new ramp connectors, relocation and braiding of on-ramps and off-ramps, realignment and new construction of local parallel arterials at the Route 80/680/12 Interchange in the City of Fairfield, in Solano County. The Agreement was set to terminate on January 1, 2008.
2. The parties hereto entered into Amendment No. 1 to Agreement (District Agreement No. 4-1905-A1) on December 31, 2007, to extend the termination date of the original Agreement until January 1, 2011. An extension was needed because it was determined that PROJECT could not be completed by January 1, 2008. Additionally, the indemnification articles of the original Agreement were amended to reflect the current approved revisions.
3. The parties hereto now wish to enter into Amendment No. 2 to Agreement (District Agreement No. 4-1905-A2) stipulating that STATE will be reimbursed by AUTHORITY for STATE's actual costs in connection with obtaining the US Fish and Wildlife Service (FWS) biological opinion and approval for PROJECT. Additionally, the termination date will be extending to January 1, 2012.

IT IS THEREFORE MUTUALLY AGREED:

1. Exhibit A of the original Agreement is hereby replaced in its entirety with Revised Exhibit A (Revised 1-7-10), attached herewith and made a part of District Agreement No. 4-1905-C.
2. A new Article 9 of Section I, Authority Agrees, of the original Agreement is hereby added to read as follows:

9. *Upon execution of this Agreement, AUTHORITY Agrees to reimburse STATE's actual costs, within thirty (30) days of receipt of billing, for*


a not-to-exceed amount of \$50,000 from AUTHORITY's RM2 funds for STATE's expense for obtaining the US FWS approval for PROJECT, as shown in Revised Exhibit A (Revised 1-7-10).

3. A new Article 7 of Section II, State Agrees, of the original Agreement is hereby added to read as follows:
 7. *STATE agrees to obtain the necessary US FWS approval for PROJECT at a cost not to exceed \$50,000 payable by AUTHORITY. STATE will submit to AUTHORITY a bill, with appropriate backup, for actual costs within twenty-five (25) days of the execution of this Agreement.*
4. The termination date of the Agreement, as amended by Amendment No. 1 (District Agreement No. 4-1905-A1), shall now be January 1, 2012, instead of January 1, 2011.
5. All other terms and conditions of the Agreement, as amended by Amendment No. 1 (District Agreement No. 4-1905-A1), shall remain in full force and effect.
6. This Amendment No. 2 to Agreement is hereby deemed to be a part of District Agreement No. 4-1905-C.

STATE OF CALIFORNIA
Department of Transportation

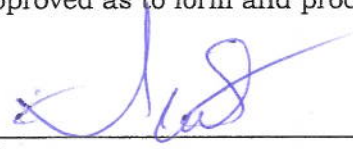
SOLANO TRANSPORTATION AUTHORITY
(STA)


CINDY MCKIM
Director

By: 
Deputy District Director

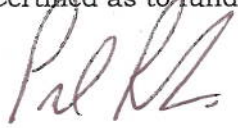
By: 
Executive Director (STA)

Approved as to form and procedure:



Attorney
Department of Transportation

Attest: 
Clerk of the Board

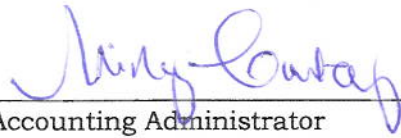
Certified as to funds:


District Budget Manager

Approved as to form:


Attorney (STA)

Certified as to financial terms and
policies:


Accounting Administrator

REVISED EXHIBIT A (Revised 1-7-10)**STUDY COST ESTIMATE BREAKDOWN**

DESCRIPTION	ESTIMATED COST	STATE (TCR) FUNDS	STATE (STIP) FUNDS	AUTHORITY (RM2) FUNDS
Planning Phase: (TCRP Phase 1) Studies & ED	\$8,460,000	◀\$8,100,000	\$360,000	-
STATE Quality Assurance *	\$940,000	\$900,000	\$40,000	-
US FWS Approval	\$50,000	-	-	\$50,000
Total Estimated Cost	\$9,450,000	\$9,000,000	\$400,000	\$50,000

Notes:

1. In the above table, some of the values may have been rounded off to simplify the presentation. Wherever percentages are shown, they shall prevail over the dollar amounts derived therefrom.
2. ◀ indicates Funds to be transferred to AUTHORITY in accordance with this Agreement.
3. * STATE will retain from STATE funds in accordance with Article 5 of Section III of this Agreement.
4. The CTC approved an advance payment of \$400,000 in the TCRP application for PROJECT.
5. RTIP funds are included in the 2000 STIP. STA is the sponsor.

**SOLANO TRANSPORTATION AUTHORITY
RESOLUTION No. 2007-10**

**RESOLUTION OF THE SOLANO TRANSPORTATION AUTHORITY
AUTHORIZING THE EXECUTIVE DIRECTOR TO SIGN
AGREEMENTS/DOCUMENTS WITH OR FOR THE
CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) AND THE
FEDERAL HIGHWAY ADMINISTRATION
TO RECEIVE FUNDING AND TO DELIVER TRANSPORTATION PROJECTS**

WHEREAS, the Solano Transportation Authority is eligible to receive Federal and/or State funding for certain transportation projects, through the California Department of Transportation (CALTRANS) and the Federal Highway Administration (FHWA); and

WHEREAS, Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, need to be executed with CALTRANS or FHWA before such funds could be claimed; and

WHEREAS, the Solano Transportation Authority, pursuant to Streets and Highways Code Section 114 is authorized to enter into Cooperative Agreements for implementing the delivery of proposed improvements to State highways within the County of Solano; and

WHEREAS, various Cooperative Agreements need to be executed and Right-of-Way Certifications signed for implementing the delivery of said proposed improvements to State Highways within the County of Solano; and

WHEREAS, the Solano Transportation Authority wishes to delegate authorization to execute these agreements/documents and any amendments thereto to the Executive Director or the Acting Executive Director following Project approval by the STA Board whether through project-specific action of the Board or through approval of the STA Budget which Budget includes projects and their funding.

NOW, THEREFORE BE IT RESOLVED that the Executive Director or Acting Executive Director be authorized to execute all Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, Cooperative Agreements, Right-of-Way Certifications and any amendments thereto with or for CALTRANS or FHWA following approval by the STA Board through either project-specific action of the Board or approval of the STA Budget which Budget includes or references projects and their funding.

I HEREBY CERTIFY that the foregoing resolution was introduced and passed at a regular meeting of the Board of the Solano Transportation Authority, held on the 10th day October, 2007, by the following vote:

Ayes: 8
No's: 0
Absent: 0
Abstain: 0

Attest by:


Johanna Masiclat
Clerk of the Board


Anthony Intintoli, Chair

Solano Transportation Authority

I, Daryl K. Halls, the Solano Transportation Authority Executive Director, do hereby certify that the above and foregoing resolution was introduced, passed, and adopted by said Authority at a regular meeting thereof held this the day of October 10, 2007.



Daryl K. Halls, Executive Director
Solano Transportation Authority

AMENDMENT NO. 3 TO AGREEMENT

THIS AMENDMENT NO. 3 TO AGREEMENT, ENTERED INTO EFFECTIVE ON January 1, 2012, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "STATE," and the

SOLANO TRANSPORTATION AUTHORITY
(STA), a public entity, referred to herein as
"AUTHORITY."

RECITALS

1. The parties hereto entered into a Cooperative Agreement (District Agreement No. 4-1905-C) on June 13, 2002, defining the terms and conditions under which to cooperate on the Project Approval and Environmental Documentation (PA&ED) phase of a project (PROJECT) for improvements consisting of freeway widening, new ramp connectors, relocation and braiding of on-ramps and off-ramps, realignment and new construction of local parallel arterials at the Route 80/680/12 Interchange in the City of Fairfield, in Solano County. The Agreement was set to terminate on January 1, 2008.
2. The parties hereto entered into Amendment No. 1 to Agreement (District Agreement No. 4-1905-A1) on December 31, 2007, to extend the termination date of the original Agreement until January 1, 2011. An extension was needed because it was determined that PROJECT could not be completed by January 1, 2008. Additionally, the indemnification articles of the original Agreement were amended to reflect the current approved revisions.
3. The parties hereto also entered into Amendment No. 2 to Agreement (District Agreement No. 4-1905-A2) on September 23, 2010, setting forth the stipulation that STATE would be reimbursed by AUTHORITY for STATE's actual costs in connection with obtaining the US Fish and Wildlife Service (FWS) biological opinion and approval for PROJECT. Additionally, the termination date was extended under this Amendment until January 1, 2012, to allow sufficient time for completion of the PA&ED phase of PROJECT.
4. STATE has estimated, and AUTHORITY concurs, that completing the effort related to obtaining the US FWS biological opinion/approval will need an additional \$62,000 in RM2 funds.
5. The parties hereto now wish to enter into Amendment No. 3 to Agreement (District Agreement No. 4-1905-A3) to (a) increase the budget for obtaining the US FWS biological opinion/approval by \$62,000 in RM2 funds and (b) extend the termination date of the Agreement another year until January 1, 2013, to allow sufficient time for completion of the remaining PA&ED activities on PROJECT.


IT IS THEREFORE MUTUALLY AGREED:

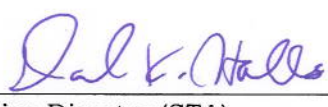
1. Exhibit A of the original Agreement is hereby replaced in its entirety with Revised Exhibit A (Revised 11-30-11), attached herewith and made a part of District Agreement No. 4-1905-C.
2. Article 9, Section I, Authority Agrees, of the Agreement, as amended under Amendment 2, is hereby revised in its entirety to read as follows:
 9. *AUTHORITY Agrees to reimburse STATE, within thirty (30) days of receipt of billing, an additional amount of \$62,000 from AUTHORITY's RM2 funds for STATE's actual expense for obtaining the US FWS approval for PROJECT. Exhibit A (Revised 11-30-11), attached herewith and made a part of the Agreement, updates AUTHORITY's RM2 funds from \$50,000 to \$112,000 to reflect this increase.*
3. Article 7, Section II, State Agrees, of the Agreement, as amended under Amendment 2, is hereby revised in its entirety to read as follows:
 7. *STATE agrees to obtain the necessary US FWS approval for PROJECT at an additional cost not to exceed \$62,000 payable by AUTHORITY. STATE will submit to AUTHORITY a bill, with appropriate backup, for actual costs within twenty-five (25) days of the execution of this Agreement. Exhibit A (Revised 11-30-11), attached herewith and made a part of the Agreement, updates AUTHORITY's RM2 funds from \$50,000 to \$112,000 to reflect this increase.*
4. The termination date of the Agreement, as amended by Amendment No. 2 (District Agreement No. 4-1905-A2), shall now be January 1, 2013, instead of January 1, 2012.
5. All other terms and conditions of the Agreement, as amended by Amendment No. 1 and 2 (District Agreement No. 4-1905-A1 and 4-1905-A2), shall remain in full force and effect.
6. This Amendment No. 3 to Agreement is hereby deemed to be a part of District Agreement No. 4-1905-C.

STATE OF CALIFORNIA
Department of Transportation


SOLANO TRANSPORTATION AUTHORITY
(STA)


MALCOLM DOUGHERTY
Acting Director

By: 
Deputy District Director


By: 
Executive Director (STA)

Approved as to form and procedure:

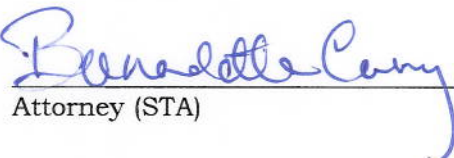

Attorney
Department of Transportation

Attest: 
Clerk of the Board

Certified as to funds:


District Budget Manager

Approved as to form:


Attorney (STA)

Certified as to financial terms and
policies:


Angie Veloria
Maria Villa ferto
Accounting Administrator

REVISED EXHIBIT A (Revised 11-30-11)**STUDY COST ESTIMATE BREAKDOWN**

DESCRIPTION	ESTIMATED COST	STATE (TCR) FUNDS	STATE (STIP) FUNDS	AUTHORITY (RM2) FUNDS
Planning Phase: (TCRP Phase 1) Studies & ED	\$8,460,000	◀\$8,100,000	\$360,000	-
STATE Quality Assurance *	\$940,000	\$900,000	\$40,000	-
US FWS Approval	\$112,000	-	-	\$112,000
Total Estimated Cost	\$9,512,000	\$9,000,000	\$400,000	\$112,000

Notes:

1. In the above table, some of the values may have been rounded off to simplify the presentation. Wherever percentages are shown, they shall prevail over the dollar amounts derived therefrom.
2. ◀ indicates Funds to be transferred to AUTHORITY in accordance with this Agreement.
3. * STATE will retain from STATE funds in accordance with Article 5 of Section III of this Agreement.
4. The CTC approved an advance payment of \$400,000 in the TCRP application for PROJECT.
5. RTIP funds are included in the 2000 STIP. STA is the sponsor.
6. \$50,000 of AUTHORITY's RM2 funds were payable to STATE upon execution of Amendment 2 to the Agreement. The additional \$62,000 RM2 funds are due STATE upon execution of this Amendment 3.

**SOLANO TRANSPORTATION AUTHORITY
RESOLUTION No. 2007-10**

**RESOLUTION OF THE SOLANO TRANSPORTATION AUTHORITY
AUTHORIZING THE EXECUTIVE DIRECTOR TO SIGN
AGREEMENTS/DOCUMENTS WITH OR FOR THE
CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) AND THE
FEDERAL HIGHWAY ADMINISTRATION
TO RECEIVE FUNDING AND TO DELIVER TRANSPORTATION PROJECTS**

WHEREAS, the Solano Transportation Authority is eligible to receive Federal and/or State funding for certain transportation projects, through the California Department of Transportation (CALTRANS) and the Federal Highway Administration (FHWA); and

WHEREAS, Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, need to be executed with CALTRANS or FHWA before such funds could be claimed; and

WHEREAS, the Solano Transportation Authority, pursuant to Streets and Highways Code Section 114 is authorized to enter into Cooperative Agreements for implementing the delivery of proposed improvements to State highways within the County of Solano; and

WHEREAS, various Cooperative Agreements need to be executed and Right-of-Way Certifications signed for implementing the delivery of said proposed improvements to State Highways within the County of Solano; and


WHEREAS, the Solano Transportation Authority wishes to delegate authorization to execute these agreements/documents and any amendments thereto to the Executive Director or the Acting Executive Director following Project approval by the STA Board whether through project-specific action of the Board or through approval of the STA Budget which Budget includes projects and their funding.

NOW, THEREFORE BE IT RESOLVED that the Executive Director or Acting Executive Director be authorized to execute all Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, Cooperative Agreements, Right-of-Way Certifications and any amendments thereto with or for CALTRANS or FHWA following approval by the STA Board through either project-specific action of the Board or approval of the STA Budget which Budget includes or references projects and their funding.

I HEREBY CERTIFY that the foregoing resolution was introduced and passed at a regular meeting of the Board of the Solano Transportation Authority, held on the 10th day October, 2007, by the following vote:

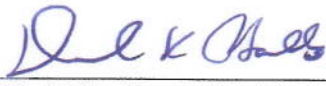
Ayes: 8
No's: 0
Absent: 0
Abstain: 0

Attest by: _____


Johanna Masiclat
Clerk of the Board


Anthony Intintoli, Chair
Solano Transportation Authority

I, Daryl K. Halls, the Solano Transportation Authority Executive Director, do hereby certify that the above and foregoing resolution was introduced, passed, and adopted by said Authority at a regular meeting thereof held this the day of October 10, 2007.


Daryl K. Halls, Executive Director
Solano Transportation Authority

COOPERATIVE AGREEMENT

This agreement, effective on April 15, 2011, is between the State of California, acting through its Department of Transportation, referred to as CALTRANS, and:

Solano Transportation Authority, a political subdivision of the State of California, referred to as STA.

For the purpose of this agreement, the term PARTNERS collectively refers to CALTRANS and STA (all signatory parties to this agreement). The term PARTNER refers to any one of those signatory parties individually.

RECITALS

1. California Streets and Highways Code sections 114 and 130 authorize PARTNERS to enter into a cooperative agreement for performance of work within the State Highway System (SHS) right of way.
2. This agreement outlines the terms and conditions of cooperation between PARTNERS to complete the PS&E and R/W components of PROJECT for the new Interstate 80 (I-80) westbound to State Route 12 (SR12) westbound connector.

For the purpose of this agreement, the new Interstate 80 (I-80) westbound to State Route 12 (SR12) westbound connector will be referred to as PROJECT. All responsibilities assigned in this agreement to complete the PS&E and R/W components of PROJECT will be referred to as OBLIGATIONS.

3. This agreement is separate from and does not modify or replace any other cooperative agreement or memorandum of understanding between PARTNERS regarding PROJECT.
4. Prior to this agreement, STA developed the Project Initiation Document and STA developed the Project Report (Cooperative Agreement No. 4-1905-C).
5. STA prepared the environmental documentation for PROJECT.
6. The estimated date for OBLIGATION COMPLETION is December 31, 2014.
7. In this agreement capitalized words represent defined terms and acronyms. The Definitions section contains a complete definition for each capitalized term.
8. From this point forward, PARTNERS define in this agreement the terms and conditions under which they will accomplish OBLIGATIONS.

RESPONSIBILITIES

9. STA is SPONSOR for 100% of PROJECT.
10. CALTRANS will provide IQA for the portions of WORK within existing and proposed SHS right of way. CALTRANS retains the right to reject noncompliant WORK, protect public safety, preserve property rights, and ensure that all WORK is in the best interest of the SHS.
11. STA may provide IQA for the portions of WORK outside existing and proposed SHS right of way.
12. STA is the only FUNDING PARTNER for this agreement. STA's funding commitment is defined in the FUNDING SUMMARY.
13. CALTRANS is the CEQA lead agency for PROJECT.
14. CALTRANS is the NEPA lead agency for PROJECT.
15. STA is IMPLEMENTING AGENCY for PS&E and R/W.

SCOPE

Scope: General

16. PARTNERS will perform all OBLIGATIONS in accordance with federal and California laws, regulations, and standards; FHWA STANDARDS; and CALTRANS STANDARDS.
17. IMPLEMENTING AGENCY for a PROJECT COMPONENT will provide a Quality Management Plan (QMP) for that component as part of the PROJECT MANAGEMENT PLAN.
18. Any PARTNER may, at its own expense, have representatives observe any OBLIGATIONS performed by another PARTNER. Observation does not constitute authority over those OBLIGATIONS.
19. Each PARTNER will ensure that all of its personnel participating in OBLIGATIONS are appropriately qualified, and if necessary licensed, to perform the tasks assigned to them.
20. PARTNERS will invite each other to participate in the selection and retention of any consultants who participate in OBLIGATIONS.
21. If WORK is done under contract (not completed by a PARTNER's own employees) and is governed by the California Labor Code's definition of a "public work" (section

1720(a)(a)), that PARTNER will conform to sections 1720 – 1815 of the California Labor Code and all applicable regulations and coverage determinations issued by the Director of Industrial Relations.

22. IMPLEMENTING AGENCY for each PROJECT COMPONENT included in this agreement will be available to help resolve problems generated by that component for the entire duration of PROJECT.
23. CALTRANS will issue, upon proper application, the encroachment permits required for WORK within SHS right of way.

Contractors and/or agents, and utility owners will not perform WORK without an encroachment permit issued in their name.

24. If any PARTNER discovers unanticipated cultural, archaeological, paleontological, or other protected resources during WORK, all WORK in that area will stop and that PARTNER will notify all PARTNERS within 24 hours of discovery. WORK may only resume after a qualified professional has evaluated the nature and significance of the discovery and a plan is approved for its removal or protection.
25. PARTNERS will hold all administrative draft and administrative final reports, studies, materials, and documentation relied upon, produced, created, or utilized for PROJECT in confidence to the extent permitted by law. Where applicable, the provisions of California Government Code section 6254.5(e) will govern the disclosure of such documents in the event that PARTNERS share said documents with each other.

PARTNERS will not distribute, release, or share said documents with anyone other than employees, agents, and consultants who require access to complete PROJECT without the written consent of the partner authorized to release them, unless required or authorized to do so by law.

26. If any PARTNER receives a public records request, pertaining to OBLIGATIONS, that PARTNER will notify PARTNERS within five (5) working days of receipt and make PARTNERS aware of any disclosed public records. PARTNERS will consult with each other prior to the release of any public documents related to the PROJECT.
27. If HM-1 or HM-2 is found during a PROJECT COMPONENT, IMPLEMENTING AGENCY for that PROJECT COMPONENT will immediately notify PARTNERS.
28. CALTRANS, independent of PROJECT, is responsible for any HM-1 found within the existing SHS right of way. CALTRANS will undertake HM MANAGEMENT ACTIVITIES related to HM-1 with minimum impact to PROJECT schedule.
29. If HM-1 is found within PROJECT limits and outside the existing SHS right of way, responsibility for such HM-1 rests with the owner(s) of the parcel(s) on which the HM-1 is found. STA, in concert with the local agency having land use jurisdiction over the

parcel(s), will ensure that HM MANAGEMENT ACTIVITIES related to HM-1 are undertaken with minimum impact to PROJECT schedule.

30. If HM-2 is found within PROJECT limits, the public agency responsible for the advertisement, award, and administration (AAA) of the PROJECT construction contract will be responsible for HM MANAGEMENT ACTIVITIES related to HM-2.
31. CALTRANS' acquisition or acceptance of title to any property on which any HM-1 or HM-2 is found will proceed in accordance with CALTRANS' policy on such acquisition.
32. PARTNERS will comply with all of the commitments and conditions set forth in the environmental documentation, environmental permits, approvals, and applicable agreements as those commitments and conditions apply to each PARTNER's responsibilities in this agreement.
33. IMPLEMENTING AGENCY for each PROJECT COMPONENT will furnish PARTNERS with written monthly progress reports during the implementation of OBLIGATIONS in that component.
34. Upon OBLIGATION COMPLETION, ownership or title to all materials and equipment constructed or installed for the operations and/or maintenance of the SHS within SHS right of way as part of WORK become the property of CALTRANS.

CALTRANS will not accept ownership or title to any materials or equipment constructed or installed outside SHS right of way. IMPLEMENTING AGENCY for a PROJECT COMPONENT will accept, reject, compromise, settle, or litigate claims of any non-agreement parties hired to do WORK in that component.

35. PARTNERS will confer on any claim that may affect OBLIGATIONS or PARTNERS' liability or responsibility under this agreement in order to retain resolution possibilities for potential future claims. No PARTNER will prejudice the rights of another PARTNER until after PARTNERS confer on claim.
36. PARTNERS will maintain, and will ensure that any party hired by PARTNERS to participate in OBLIGATIONS will maintain, a financial management system that conforms to Generally Accepted Accounting Principles (GAAP), and that can properly accumulate and segregate incurred PROJECT costs, and provide billing and payment support.
37. PARTNERS will comply with the appropriate federal cost principles and administrative requirements outlined in the Applicable Cost Principles and Administrative Requirements table below. These principles and requirements apply to all funding types included in this agreement.

Applicable Cost Principles and Administration Requirements		
The federal cost principles and administrative requirements associated with each organization type apply to that organization.		
Organization Type	Cost Principles	Administrative Requirements
Federal Governments	2 CFR Part 225	OMB A-102
State and Local Government	2 CFR, Part 225	49 CFR, Part 18
Educational Institutions	2 CFR, Part 220	2 CFR, Part 215
Non-Profit Organizations	2 CFR, Part 230	2 CFR, Part 215
For Profit Organizations	48 CFR, Chapter 1, Part 31	49 CFR, Part 18
CFR (Code of Federal Regulations)		
OMB (Office of Management and Budget)		
Related URLs:		
• Various OMB Circular:	http://www.whitehouse.gov/omb/grants_circulars	
• Code of Federal Regulations:	http://www.gpoaccess.gov/CFR	

38. PARTNERS will maintain and make available to each other all OBLIGATIONS-related documents, including financial data, during the term of this agreement.
39. PARTNERS will retain all OBLIGATIONS-related records for three (3) years after the final voucher.
40. PARTNERS have the right to audit each other in accordance with generally accepted governmental audit standards.

CALTRANS, the state auditor, FHWA, and STA will have access to all OBLIGATIONS-related records of each PARTNER, and any party hired by a PARTNER to participate in OBLIGATIONS, for audit, examination, excerpt, or transcription.

The examination of any records will take place in the offices and locations where said records are generated and/or stored and will be accomplished during reasonable hours of operation. The auditing PARTNER will be permitted to make copies of any OBLIGATIONS-related records needed for the audit.

The audited PARTNER will review the draft audit, findings, and recommendations, and provide written comments within 30 calendar days of receipt.

Upon completion of the final audit, PARTNERS have 30 days to refund or invoice as necessary in order to satisfy the obligation of the audit.

Any audit dispute not resolved by PARTNERS is subject to dispute resolution. Any costs arising out of the dispute resolution process will be paid within 30 calendar days of the final audit or dispute resolution findings.

41. If state or federal funds are used, any PARTNER that hires another party to participate in OBLIGATIONS will conduct a pre-award audit of that party in accordance with the *Local Assistance Procedures Manual*.
42. PARTNERS will not incur costs beyond the funding commitments in this agreement. If IMPLEMENTING AGENCY anticipates that funding for WORK will be insufficient to complete WORK, IMPLEMENTING AGENCY will promptly notify SPONSOR.
- IMPLEMENTING AGENCY has no obligation to perform WORK if funds to perform WORK are unavailable.
43. If WORK stops for any reason, IMPLEMENTING AGENCY will place all facilities impacted by WORK in a safe and operable condition acceptable to CALTRANS.
44. If WORK stops for any reason, each PARTNER will continue to implement all of its applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements, or approvals that are in effect at the time that WORK stops, as they apply to each PARTNER's responsibilities in this agreement, in order to keep PROJECT in environmental compliance until WORK resumes.
45. Each PARTNER accepts responsibility to complete the activities that it selected on the SCOPE SUMMARY. Activities marked with "N/A" on the SCOPE SUMMARY are not included in the scope of this agreement.

Scope: Environmental Permits, Approvals and Agreements

46. Each PARTNER identified in the Environmental Permits table below accepts the responsibility to complete the assigned activities.

Environmental Permits						
Permit	Coordinate	Prepare	Obtain	Implement	Renew	Amend
404 USACOE	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS
401 RWQCB	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS
NPDES SWRCB	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS
FESA Section 7 USFWS	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS
1602 DFG	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS	CALTRANS

Scope: Plans, Specifications, and Estimate (PS&E)

47. STA will ensure that the engineering firm preparing the plans, specifications, and estimate will not be employed by or under contract to the PROJECT construction contractor.

STA will not employ the engineering firm preparing the plans, specifications, and estimate for construction management of PROJECT.

However, STA may retain the engineering firm during the construction PROJECT COMPONENT to check shop drawings, do soil foundation tests, test construction materials, and perform construction surveys.

48. STA will identify and locate all utility facilities within PROJECT area as part of PS&E responsibilities. The plans, specifications, and estimate for PROJECT will identify all utility facilities not relocated or removed in advance of the construction PROJECT COMPONENT.
49. STA will make all necessary arrangements with utility owners for the timely accommodation, protection, relocation, or removal of any existing utility facilities that conflict with construction of PROJECT or that violate CALTRANS' encroachment policy.
50. The responsibility to advertise, open bids, award, and approve the construction contract will be handled outside of this agreement.

Scope: Right of Way (R/W)

51. STA will provide a land surveyor licensed in the State of California to be responsible for surveying and right of way engineering. All survey and right of way engineering documents will bear the professional seal, certificate number, registration classification, expiration date of certificate, and signature of the responsible surveyor.
52. STA will provide CALTRANS-approved verification of its arrangements for the protection, relocation, or removal of all conflicting facilities and that such work will be completed prior to construction contract award or as otherwise stated in the PROJECT plans, specifications, and estimate. This verification must include references to all required SHS encroachment permits.
53. STA will utilize a public agency currently qualified by CALTRANS or a properly licensed consultant for all right of way activities. A qualified right of way agent will administer all right of way consultant contracts.

STA will submit a draft Right of Way Certification document to CALTRANS six weeks prior to the scheduled milestone date for review.

STA will submit a final Right of Way certification document to CALTRANS prior to PROJECT advertisement for approval.

54. All right of way conveyances must be completed prior to OBLIGATION COMPLETION.
55. CALTRANS' acceptance of right of way title is subject to review of an Updated Preliminary Title Report provided by STA verifying that the title is free and clear of all

encumbrances detrimental to CALTRANS' present and future uses. Upon acceptance, STA will provide CALTRANS with a Policy of Title Insurance in CALTRANS' name.

56. STA shall comply with Streets and Highways Code section 760 and shall obtain written approval from CALTRANS Division of Right of Way to adopt Resolutions of Necessity at the local level in accordance with the CALTRANS Right of Way Manual, Section 17.04.09.01.

COST

Cost: General

57. The cost of any awards, judgments, or settlements generated by OBLIGATIONS is an OBLIGATIONS COST.
58. CALTRANS, independent of PROJECT, will pay all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within the existing SHS right of way.
59. Independent of PROJECT, all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within PROJECT limits and outside the existing SHS right of way will be the responsibility of the owner(s) of the parcel(s) where the HM-1 is located.
60. HM MANAGEMENT ACTIVITIES costs related to HM-2 are CONSTRUCTION SUPPORT and CONSTRUCTION CAPITAL costs.
61. The cost to comply with and implement the commitments set forth in the environmental documentation is an OBLIGATIONS COST.
62. The cost to ensure that PROJECT remains in environmental compliance is an OBLIGATIONS COST.
63. The cost of any legal challenges to the CEQA or NEPA environmental process or documentation is an OBLIGATIONS COST.
64. Independent of OBLIGATIONS COST, CALTRANS will fund the cost of its own IQA for WORK done within existing or proposed future SHS right of way.
65. Independent of OBLIGATIONS COST, STA will fund the cost of its own IQA for WORK done outside existing or proposed future SHS right of way.
66. CALTRANS will provide encroachment permits to STA at no cost. CALTRANS will charge contractors, consultants, and agents the standard encroachment permit fees.
67. Fines, interest, or penalties levied against a PARTNER will be paid, independent of OBLIGATIONS COST, by the PARTNER whose actions or lack of action caused the levy. That PARTNER will indemnify and defend each other PARTNER.

68. Travel, per diem, and third-party contract reimbursements are an OBLIGATIONS COST only after those hired by PARTNERS to participate in OBLIGATIONS incur and pay those costs.

Payments for travel and per diem will not exceed the rates paid rank and file state employees under current California Department of Personnel Administration (DPA) rules current at the effective date of this agreement.

If STA invoices for rates in excess of DPA rates, STA will fund the cost difference and reimburse CALTRANS for any overpayment.

69. The cost of any engineering support performed by CALTRANS includes all direct and applicable indirect costs. CALTRANS calculates indirect costs based solely on the type of funds used to pay support costs. State and federal funds are subject the current Program Functional Rate. Local funds are subject to the current Program Functional Rate and the current Administration Rate. The Program Functional Rate and the Administration Rate are adjusted periodically.
70. If any PARTNER reimburses another PARTNER for any costs later determined to be unallowable, the PARTNER that received the reimbursement will reimburse those funds.
71. The cost to place PROJECT right of way in a safe and operable condition and meet all environmental commitments is an OBLIGATIONS COST.
72. Because IMPLEMENTING AGENCY is responsible for managing the scope, cost, and schedule of a project component, if there are insufficient funds available in this agreement to place the right of way in a safe and operable condition, the appropriate IMPLEMENTING AGENCY accepts responsibility to fund these activities until such time as PARTNERS amend this agreement.

That IMPLEMENTING AGENCY may request reimbursement for these costs during the amendment process.

73. If there are insufficient funds in this agreement to implement applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements, and/or approvals that are in effect at a time that WORK stops, each PARTNER implementing commitments or conditions accepts responsibility to fund these activities, as they apply to each PARTNER's responsibilities, until such time are PARTNERS amend this agreement.

Each PARTNER may request reimbursement for these costs during the amendment process.

74. PARTNERS will pay invoices within 30 calendar days of receipt of invoice.

Cost: Environmental Permits, Approvals and Agreements

75. The cost of coordinating, obtaining, complying with, implementing, and if necessary renewing and amending resource agency permits, agreements, and/or approvals is an OBLIGATIONS COST.

Cost: Plans, Specifications, and Estimate (PS&E)

76. STA will determine the cost to positively identify and locate, protect, relocate, or remove any utility facilities whether inside or outside SHS right of way in accordance with federal and California laws and regulations, and CALTRANS' policies, procedures, standards, practices, and applicable agreements including, but not limited to, Freeway Master Contracts.

SCHEDULE

77. PARTNERS will manage the schedule for OBLIGATIONS through the work plan included in the PROJECT MANAGEMENT PLAN.

GENERAL CONDITIONS

78. PARTNERS understand that this agreement is in accordance with and governed by the Constitution and laws of the State of California. This agreement will be enforceable in the State of California. Any PARTNER initiating legal action arising from this agreement will file and maintain that legal action in the Superior Court of the county in which the CALTRANS district office that is signatory to this agreement resides, or in the Superior Court of the county in which PROJECT is physically located
79. All OBLIGATIONS of CALTRANS under the terms of this agreement are subject to the appropriation of resources by the Legislature, the State Budget Act authority, and the allocation of funds by the California Transportation Commission.
80. Any PARTNER performing IQA does so for its own benefit. No one can assign liability to that PARTNER due to its IQA activities.
81. Neither STA 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 will fully defend, indemnify, and save harmless STA and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, 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.

82. 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 STA under or in connection with any work, authority, or jurisdiction conferred upon STA under this agreement.

It is understood and agreed that STA will fully defend, indemnify, and save harmless CALTRANS and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, 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 STA under this agreement.

83. PARTNERS do not intend this agreement to create a third party beneficiary or define duties, obligations, or rights in parties not signatory to this agreement. PARTNERS do not intend this agreement to affect their legal liability by imposing any standard of care for fulfilling OBLIGATIONS different from the standards imposed by law.
84. PARTNERS will not assign or attempt to assign OBLIGATIONS to parties not signatory to this agreement.
85. PARTNERS will not interpret any ambiguity contained in this agreement against each other. PARTNERS waive the provisions of California Civil Code section 1654.
86. A waiver of a PARTNER's performance under this agreement will not constitute a continuous waiver of any other provision. An amendment made to any article or section of this agreement does not constitute an amendment to or negate all other articles or sections of this agreement.
87. A delay or omission to exercise a right or power due to a default does not negate the use of that right or power in the future when deemed necessary.
88. If any PARTNER defaults in its OBLIGATIONS, a non-defaulting PARTNER will request in writing that the default be remedied within 30 calendar days. If the defaulting PARTNER fails to do so, the non-defaulting PARTNER may initiate dispute resolution.
89. PARTNERS will first attempt to resolve agreement disputes at the PROJECT team level. If they cannot resolve the dispute themselves, the CALTRANS district director and the executive officer of STA will attempt to negotiate a resolution. If PARTNERS do not reach a resolution, PARTNERS' legal counsel will initiate mediation. PARTNERS agree to participate in mediation in good faith and will share equally in its costs.

Neither the dispute nor the mediation process relieves PARTNERS from full and timely performance of OBLIGATIONS in accordance with the terms of this agreement.

However, if any PARTNER stops fulfilling OBLIGATIONS, any other PARTNER may seek equitable relief to ensure that OBLIGATIONS continue.

Except for equitable relief, no PARTNER may file a civil complaint until after mediation, or 45 calendar days after filing the written mediation request, whichever occurs first.

PARTNERS will file any civil complaints in the Superior Court of the county in which the CALTRANS district office signatory to this agreement resides. The prevailing PARTNER will be entitled to an award of all costs, fees, and expenses, including reasonable attorney fees as a result of litigating a dispute under this agreement or to enforce the provisions of this article including equitable relief.

90. PARTNERS maintain the ability to pursue alternative or additional dispute remedies if a previously selected remedy does not achieve resolution.
91. If any provisions in this agreement are deemed to be, or are in fact, illegal, inoperative, or unenforceable, those provisions do not render any or all other agreement provisions invalid, inoperative, or unenforceable, and PARTNERS will automatically sever those provisions from this agreement.
92. PARTNERS intend this agreement to be their final expression and supersede any oral understanding or writings pertaining to OBLIGATIONS.
93. If during performance of WORK additional activities or environmental documentation is necessary to keep PROJECT in environmental compliance, PARTNERS will amend this agreement to include completion of those additional tasks.
94. PARTNERS will execute a formal written amendment if there are any changes to OBLIGATIONS.
95. This agreement will terminate upon OBLIGATION COMPLETION or an amendment to terminate this agreement, whichever occurs first.

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

96. The following documents are attached to, and made an express part of this agreement: SCOPE SUMMARY, FUNDING SUMMARY.

DEFINITIONS

CALTRANS – The California Department of Transportation

CALTRANS STANDARDS – CALTRANS policies and procedures, including, but not limited to, the guidance provided in the *Guide to Capital Project Delivery Workplan Standards*

(previously known as WBS Guide) available at
<http://www.dot.ca.gov/hq/projmgmt/guidance.htm>.

CEQA (California Environmental Quality Act) – The act (California Public Resources Code, sections 21000 et seq.) that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those significant impacts, if feasible.

CFR (Code of Federal Regulations) – The general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government

COOPERATIVE AGREEMENT CLOSURE STATEMENT – A document signed by PARTNERS that verifies the completion of all OBLIGATIONS included in this agreement and in all amendments to this agreement.

COST – The responsibility for cost responsibilities in this agreement can take one of three assignments:

- **OBLIGATIONS COST** – A cost associated with fulfilling OBLIGATIONS that will be funded as part of this agreement. The responsibility is defined by the funding commitments in this agreement.
- **PROJECT COST** – A cost associated with PROJECT that can be funded outside of OBLIGATIONS. A PROJECT COST may not necessarily be part of this agreement. This responsibility is defined by the PARTNERS' funding commitments at the time the cost is incurred.
- **PARTNER COST** – A cost that is the responsibility of a specific PARTNER, independent of PROJECT.

FHWA – Federal Highway Administration

FHWA STANDARDS – FHWA regulations, policies and procedures, including, but not limited to, the guidance provided at www.fhwa.dot.gov/topics.htm.

FUNDING PARTNER – A PARTNER that commits a defined dollar amount to fulfill OBLIGATIONS. Each FUNDING PARTNER accepts responsibility to provide the funds identified on the FUNDING SUMMARY under its name.

FUNDING SUMMARY – The table that designates an agreement's funding sources, types of funds, and the PROJECT COMPONENT in which the funds are to be spent. Funds listed on the FUNDING SUMMARY are "not-to-exceed" amounts for each FUNDING PARTNER.

GAAP (Generally Accepted Accounting Principles) – Uniform minimum standards and guidelines for financial accounting and reporting issued by the Federal Accounting Standards Advisory Board that serve to achieve some level of standardization. See <http://www.fasab.gov/accepted.html>.

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

HM-2 – 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.

HM MANAGEMENT ACTIVITIES – Management activities related to either HM-1 or HM-2 including, without limitation, any necessary manifest requirements and disposal facility designations.

IMPLEMENTING AGENCY – The PARTNER responsible for managing the scope, cost, and schedule of a PROJECT COMPONENT to ensure the completion of that component.

IQA (Independent Quality Assurance) – Ensuring that IMPLEMENTING AGENCY's quality assurance activities result in WORK being developed in accordance with the applicable standards and within an established Quality Management Plan (QMP). IQA does not include any work necessary to actually develop or deliver WORK or any validation by verifying or rechecking work performed by another partner.

NEPA (National Environmental Policy Act of 1969) – The federal act that establishes a national policy for the environment and a process to disclose the adverse impacts of projects with a federal nexus.

OBLIGATION COMPLETION – PARTNERS have fulfilled all OBLIGATIONS included in this agreement, and all amendments to this agreement, and have signed a COOPERATIVE AGREEMENT CLOSURE STATEMENT.

OBLIGATIONS – All responsibilities included in this agreement.

OBLIGATIONS COST – See COST.

OMB (Office of Management and Budget) – The federal office that oversees preparation of the federal budget and supervises its administration in Executive Branch agencies.

PARTNER – Any individual signatory party to this agreement.

PARTNERS – The term that collectively references all of the signatory agencies to this agreement. This term only describes the relationship between these agencies to work together to achieve a mutually beneficial goal. It is not used in the traditional legal sense in which one PARTNER's individual actions legally bind the other partners.

PROJECT – The undertaking to the new Interstate 80 (I-80) westbound to State Route 12 (SR12) westbound connector.

PROJECT COMPONENT – A distinct portion of the planning and project development process of a capital project as outlined in California Government Code, section 14529(b).

- **PID (Project Initiation Document)** – The activities required to deliver the project initiation document for PROJECT.
- **PA&ED (Project Approval and Environmental Document)** – The activities required to deliver the project approval and environmental documentation for PROJECT.
- **PS&E (Plans, Specifications, and Estimate)** – The activities required to deliver the plans, specifications, and estimate for PROJECT.
- **R/W (Right of Way) SUPPORT** – The activities required to obtain all property interests for PROJECT
- **R/W (Right of Way) CAPITAL** – The funds for acquisition of property rights for PROJECT.
- **CONSTRUCTION SUPPORT** – The activities required for the administration, acceptance, and final documentation of the construction contract for PROJECT.
- **CONSTRUCTION CAPITAL** – The funds for the construction contract.

PROJECT COST – See COST.

PROJECT MANAGEMENT PLAN – A group of documents used to guide a project’s execution and control throughout that project’s lifecycle.

PS&E (Plans, Specifications, and Estimate) – See PROJECT COMPONENT.

QMP (Quality Management Plan) – An integral part of the Project Management Plan that describes IMPLEMENTING AGENCY’s quality policy and how it will be used.

R/W (Right of Way) CAPITAL – See PROJECT COMPONENT.

R/W (Right of Way) SUPPORT – See PROJECT COMPONENT.

SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SCOPE SUMMARY – The attachment in which each PARTNER designates its commitment to specific scope activities within each PROJECT COMPONENT as outlined by the *Guide to Capital Project Delivery Workplan Standards* (previously known as WBS Guide) available at <http://www.dot.ca.gov/hq/projmgmt/guidance.htm>.

SHS (State Highway System) – All highways, right of way, and related facilities acquired, laid out, constructed, improved, or maintained as a state highway pursuant to constitutional or legislative authorization.

SPONSOR – Any PARTNER that accepts the responsibility to establish scope of PROJECT and the obligation to secure financial resources to fund PROJECT. SPONSOR is responsible for adjusting the PROJECT scope to match committed funds or securing additional funds to fully fund the PROJECT scope. If a PROJECT has more than one SPONSOR, funding adjustments will be made by percentage (as outlined in Responsibilities). Scope adjustments must be

developed through the project development process and must be approved by CALTRANS as the owner/operator of the SHS.

WORK – All scope activities included in this agreement.

CONTACT INFORMATION

The information provided below indicates the primary contact data for each PARTNER to this agreement. PARTNERS will notify each other in writing of any personnel or location changes. Contact information changes do not require an amendment to this agreement.

The primary agreement contact person for CALTRANS is:

James Hsiao, Project Manager

111 Grand Avenue

Oakland, California 94612

Office Phone: (510) 622-0114

Mobile Phone: (510) 290-0470

Email: james_hsiao@dot.ca.gov

The primary agreement contact person for STA is:

Janet Adams, Director of Projects

One Harbor Center, Suite 130

Suisun City, California 94585

Office Phone: (707) 424-6010

Email: jadams@sta-snci.com


SIGNATURES

PARTNERS declare that:

1. Each PARTNER is an authorized legal entity under California state law.
2. Each PARTNER has the authority to enter into this agreement.
3. The people signing this agreement have the authority to do so on behalf of their public agencies.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

APPROVED

By: 
Helena (Lenka) Culik-Caro
Deputy District Director, Design

Date: _____


CERTIFIED AS TO FUNDS:

By: 
Maureen Rehs
District Budget Manager

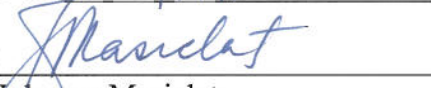
Date: _____

SOLANO TRANSPORTATION AUTHORITY

APPROVED

By: 
Daryl Halls
Executive Director

Date: 2/17/11

By: 
Johanna Masiclat
Clerk of the Board

Date: 2/17/11

APPROVED AS TO FORM AND PROCEDURE

By: 
Charles Lamoree
STA Legal Counsel

Date: 2/17/11

SCOPE SUMMARY

4	5	6	7	8	Description	CALTRANS	STA	N/A
3	185				Prepare Base Maps and Plan Sheets for PS&E Development		X	
4	195				Right of Way Property Management and Excess Land		X	
		40			Property Management		X	
		45			Excess Land		X	
4	200				Utility Relocation		X	
		15			Approved Utility Relocation Plan		X	
		20			Utility Relocation Package		X	
		25			Utility Relocation Management		X	
		30			Utility Close Out		X	
		99			Other Utility Relocation Products		X	
3	205				Permits, Agreements during PS&E Component	X	X	
		05			Required permits		X	
		10			NOTE: all permits under 3.205.10 are addressed in the text of this agreement.		X	
		15			Railroad Agreements		X	
		25			Agreement for Material Sites		X	
		30			Executed Maintenance Agreement		X	
		45			MOU From Tribal Employment Rights Office (TERO)		X	
		55			NEPA Delegation	X		
4	220				RIGHT OF WAY ENGINEERING		X	
4	225				Obtain Right of Way Interests for Project Right of Way Certification		X	
3	230				Prepare Draft Plans, Specifications, and Estimates	X	X	
		05			Draft Roadway Plans		X	
		10			Draft Highway Planting Plans		X	
		15			Draft Traffic Plans		X	
		20			Transportation Management Plan		X	
		25			Draft Utility Plans		X	
		30			Draft Drainage Plans		X	
		35			Draft Specifications		X	
		40			Draft Plans, Specifications, and Estimates Quantities and Estimates		X	
		55			Structures Draft Plans, Specifications, and Estimates Incorporation		X	
		60			Updated Project Information for Plans, Specifications, and Estimates Package		X	
		90			NEPA Delegation	X		
		99			Other Draft Plans, Specifications, and Estimates Products		X	

3	235			Mitigate Environmental Impacts and Clean Up Hazardous Waste	X	X	
		05		Environmental Mitigation		X	
		10		Detailed Site Investigation for Hazardous Waste		X	
		15		Hazardous Waste Management Plan		X	
		20		Hazardous Waste Plans, Specifications, and Estimates		X	
		25		Hazardous Waste Clean-Up		X	
		30		Hazardous Substances Disclosure Document (HSDD)		X	
		35		Long Term Mitigation Monitoring		X	
		40		Updated Environmental Commitments Record		X	
		45		NEPA Delegation	X		
3	240			Draft Structures Plans, Specifications, and Estimates		X	
4	245			Post Right of Way Certification Work		X	
		50		Parcel and Project Documentation		X	
		60		Right of Way Appraisals		X	
		65		Right of Way Acquisition		X	
		70		Right of Way Relocation Assistance		X	
		75		Right of Way Clearance		X	
		80		Right of Way Condemnation		X	
3	250			FINAL STRUCTURES PS&E PACKAGE		X	
3	255			Circulate, Review, and Prepare Final District Plans, Specifications, and Estimates Package	X	X	
		05		Circulated and Reviewed Draft District Plans, Specifications, and Estimates Package		X	
		10		Updated Plans, Specifications, and Estimates Package		X	
		15		Environmental Re-Evaluation	X		
		20		Final District Plans, Specifications, and Estimates Package		X	
		25		Geotechnical Information Handout		X	
		30		Materials Information Handout		X	
		35		Construction Staking Package and Control		X	
		40		Resident Engineer's Pending File		X	
		45		NEPA Delegation	X		
		50		Secured Lease for Resident Engineer Office Space or Trailer		X	
		55		Contractor Outreach		X	
		65		Right of Way Certification Document		X	
		70		Right of Way Engineering Products		X	
		75		Upgraded/Updated Right of Way Certification Document		X	
		95		Right of Way Certification Activity		X	
3	260			Contract Bid Documents Ready to List		X	
		50		Project Submittal Ready to Process (PS&E)		X	
		60		Draft Contract Comments (DCC)		X	
		70		Draft Contract Comment Response (DR)		X	
		75		Environmental Certification at Ready to List		X	
		80		Draft Contract Ready		X	
		90		Ready to List		X	
3	265			Awarded and Approved Construction Contract			X

FUNDING SUMMARY

Funding Source	Funding Partner	Fund Type	PS&E	R/W Capital	R/W Support	Subtotal Support	Subtotal Capital	Subtotal Funds Type
LOCAL	STA	LOCAL (Bridge Tolls)	\$9,480,000	\$22,480,000	\$680,000	\$10,160,000	\$22,480,000	\$32,640,000
		Subtotals by Component	\$9,480,000	\$22,480,000	\$680,000	\$10,160,000	\$22,480,000	\$32,640,000

**SOLANO TRANSPORTATION AUTHORITY
RESOLUTION No. 2007-10**

**RESOLUTION OF THE SOLANO TRANSPORTATION AUTHORITY
AUTHORIZING THE EXECUTIVE DIRECTOR TO SIGN
AGREEMENTS/DOCUMENTS WITH OR FOR THE
CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) AND THE
FEDERAL HIGHWAY ADMINISTRATION
TO RECEIVE FUNDING AND TO DELIVER TRANSPORTATION PROJECTS**

WHEREAS, the Solano Transportation Authority is eligible to receive Federal and/or State funding for certain transportation projects, through the California Department of Transportation (CALTRANS) and the Federal Highway Administration (FHWA); and

WHEREAS, Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, need to be executed with CALTRANS or FHWA before such funds could be claimed; and

WHEREAS, the Solano Transportation Authority, pursuant to Streets and Highways Code Section 114 is authorized to enter into Cooperative Agreements for implementing the delivery of proposed improvements to State highways within the County of Solano; and

WHEREAS, various Cooperative Agreements need to be executed and Right-of-Way Certifications signed for implementing the delivery of said proposed improvements to State Highways within the County of Solano; and


WHEREAS, the Solano Transportation Authority wishes to delegate authorization to execute these agreements/documents and any amendments thereto to the Executive Director or the Acting Executive Director following Project approval by the STA Board whether through project-specific action of the Board or through approval of the STA Budget which Budget includes projects and their funding.

NOW, THEREFORE BE IT RESOLVED that the Executive Director or Acting Executive Director be authorized to execute all Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, Cooperative Agreements, Right-of-Way Certifications and any amendments thereto with or for CALTRANS or FHWA following approval by the STA Board through either project-specific action of the Board or approval of the STA Budget which Budget includes or references projects and their funding.

I HEREBY CERTIFY that the foregoing resolution was introduced and passed at a regular meeting of the Board of the Solano Transportation Authority, held on the 10th day October, 2007, by the following vote:


Ayes: 8
No's: 0
Absent: 0
Abstain: 0

Attest by: _____


Johanna Masiclat
Clerk of the Board


Anthony Intintoli, Chair
Solano Transportation Authority

I, Daryl K. Halls, the Solano Transportation Authority Executive Director, do hereby certify that the above and foregoing resolution was introduced, passed, and adopted by said Authority at a regular meeting thereof held this the day of October 10, 2007.


Daryl K. Halls, Executive Director
Solano Transportation Authority

COOPERATIVE AGREEMENT

This agreement, effective on October 21, 2011, is between the State of California, acting through its Department of Transportation, referred to as CALTRANS, and:

Solano Transportation Authority, a political subdivision of the State of California, referred to as STA.

For the purpose of this agreement, the term PARTNERS collectively refers to CALTRANS and STA (all signatory parties to this agreement). The term PARTNER refers to any one of those signatory parties individually.

RECITALS

1. California Streets and Highways Code sections 114 and 130 authorize PARTNERS to enter into a cooperative agreement for performance of work within the State Highway System (SHS) right of way.
2. This agreement outlines the terms and conditions of cooperation between PARTNERS to complete the PS&E component of PROJECT for the new westbound Interstate 80 (I-80) connector to southbound Interstate 680 (I-680) in Solano County.

For the purpose of this agreement, the new westbound Interstate 80 (I-80) connector to southbound Interstate 680 (I-680) in Solano County will be referred to as PROJECT. All responsibilities assigned in this agreement to complete the PS&E component of PROJECT will be referred to as OBLIGATIONS.

3. This agreement is separate from and does not modify or replace any other cooperative agreement or memorandum of understanding between PARTNERS regarding PROJECT.
4. Prior to this agreement, STA developed the Project Initiation Document and STA developed the Project Report (Cooperative Agreement No. 4-1905-C).
5. STA prepared the environmental documentation for PROJECT.
6. The estimated date for OBLIGATION COMPLETION is June 30, 2016.
7. In this agreement capitalized words represent defined terms and acronyms. The Definitions section contains a complete definition for each capitalized term.

8. From this point forward, PARTNERS define in this agreement the terms and conditions under which they will accomplish OBLIGATIONS.

RESPONSIBILITIES

9. STA is SPONSOR for 100% of PROJECT.
10. CALTRANS will provide IQA for the portions of WORK within existing and proposed SHS right of way. CALTRANS retains the right to reject noncompliant WORK, protect public safety, preserve property rights, and ensure that all WORK is in the best interest of the SHS.
11. STA may provide IQA for the portions of WORK outside existing and proposed SHS right of way.
12. STA is the only FUNDING PARTNER for this agreement. STA's funding commitment is defined in the FUNDING SUMMARY.
13. CALTRANS is the CEQA lead agency for PROJECT.
14. CALTRANS is the NEPA lead agency for PROJECT.
15. STA is IMPLEMENTING AGENCY for PS&E.

SCOPE

Scope: General

16. PARTNERS will perform all OBLIGATIONS in accordance with federal and California laws, regulations, and standards; FHWA STANDARDS; and CALTRANS STANDARDS.
17. IMPLEMENTING AGENCY for a PROJECT COMPONENT will provide a Quality Management Plan (QMP) for that component as part of the PROJECT MANAGEMENT PLAN.
18. Any PARTNER may, at its own expense, have representatives observe any OBLIGATIONS performed by another PARTNER. Observation does not constitute authority over those OBLIGATIONS.
19. Each PARTNER will ensure that all of its personnel participating in OBLIGATIONS are appropriately qualified, and if necessary licensed, to perform the tasks assigned to them.
20. PARTNERS will invite each other to participate in the selection and retention of any consultants who participate in OBLIGATIONS.

21. If WORK is done under contract (not completed by a PARTNER's own employees) and is governed by the California Labor Code's definition of "public works" (section 1720(a)(a)), that PARTNER will conform to sections 1720 – 1815 of the California Labor Code and all applicable regulations and coverage determinations issued by the Director of Industrial Relations.
22. IMPLEMENTING AGENCY for each PROJECT COMPONENT included in this agreement will be available to help resolve problems generated by that component for the entire duration of PROJECT.
23. CALTRANS will issue, upon proper application, the encroachment permits required for WORK within SHS right of way.

Contractors and/or agents, and utility owners will not perform WORK without an encroachment permit issued in their name.

24. If any PARTNER discovers unanticipated cultural, archaeological, paleontological, or other protected resources during WORK, all WORK in that area will stop and that PARTNER will notify all PARTNERS within 24 hours of discovery. WORK may only resume after a qualified professional has evaluated the nature and significance of the discovery and a plan is approved for its removal or protection.
25. PARTNERS will hold all administrative draft and administrative final reports, studies, materials, and documentation relied upon, produced, created, or utilized for PROJECT in confidence to the extent permitted by law. Where applicable, the provisions of California Government Code section 6254.5(e) will govern the disclosure of such documents in the event that PARTNERS share said documents with each other.

PARTNERS will not distribute, release, or share said documents with anyone other than employees, agents, and consultants who require access to complete PROJECT without the written consent of the PARTNER authorized to release them, unless required or authorized to do so by law.

26. If any PARTNER receives a public records request, pertaining to OBLIGATIONS, that PARTNER will notify PARTNERS within five (5) working days of receipt and make PARTNERS aware of any disclosed public records. PARTNERS will consult with each other prior to the release of any public documents related to the PROJECT.
27. If HM-1 or HM-2 is found during a PROJECT COMPONENT, IMPLEMENTING AGENCY for that PROJECT COMPONENT will immediately notify PARTNERS.
28. CALTRANS, independent of PROJECT, is responsible for any HM-1 found within the existing SHS right of way. CALTRANS will undertake HM MANAGEMENT ACTIVITIES related to HM-1 with minimum impact to PROJECT schedule.

29. If HM-1 is found within PROJECT limits and outside the existing SHS right of way, responsibility for such HM-1 rests with the owner(s) of the parcel(s) on which the HM-1 is found. STA, in concert with the local agency having land use jurisdiction over the parcel(s), will ensure that HM MANAGEMENT ACTIVITIES related to HM-1 are undertaken with minimum impact to PROJECT schedule.
30. If HM-2 is found within PROJECT limits, the public agency responsible for the advertisement, award, and administration (AAA) of the PROJECT construction contract will be responsible for HM MANAGEMENT ACTIVITIES related to HM-2.
31. CALTRANS' acquisition or acceptance of title to any property on which any HM-1 or HM-2 is found will proceed in accordance with CALTRANS' policy on such acquisition.
32. PARTNERS will comply with all of the commitments and conditions set forth in the environmental documentation, environmental permits, approvals, and applicable agreements as those commitments and conditions apply to each PARTNER's responsibilities in this agreement.
33. IMPLEMENTING AGENCY for each PROJECT COMPONENT will furnish PARTNERS with written monthly progress reports during the implementation of OBLIGATIONS in that component.
34. Upon OBLIGATION COMPLETION, ownership or title to all materials and equipment constructed or installed for the operations and/or maintenance of the SHS within SHS right of way as part of WORK become the property of CALTRANS.

CALTRANS will not accept ownership or title to any materials or equipment constructed or installed outside SHS right of way.
35. IMPLEMENTING AGENCY for a PROJECT COMPONENT will accept, reject, compromise, settle, or litigate claims of any non-agreement parties hired to do WORK in that component.
36. PARTNERS will confer on any claim that may affect OBLIGATIONS or PARTNERS' liability or responsibility under this agreement in order to retain resolution possibilities for potential future claims. No PARTNER will prejudice the rights of another PARTNER until after PARTNERS confer on claim.
37. PARTNERS will maintain, and will ensure that any party hired by PARTNERS to participate in OBLIGATIONS will maintain, a financial management system that conforms to Generally Accepted Accounting Principles (GAAP), and that can properly accumulate and segregate incurred PROJECT costs, and provide billing and payment support.
38. PARTNERS will comply with the appropriate federal cost principles and administrative requirements outlined in the Applicable Cost Principles and Administrative Requirements

table below. These principles and requirements apply to federal and state funding types included in this agreement.

Applicable Cost Principles and Administration Requirements		
The federal cost principles and administrative requirements associated with each organization type apply to that organization.		
Organization Type	Cost Principles	Administrative Requirements
Federal Governments	2 CFR Part 225	OMB A-102
State and Local Government	2 CFR, Part 225	49 CFR, Part 18
Educational Institutions	2 CFR, Part 220	2 CFR, Part 215
Non-Profit Organizations	2 CFR, Part 230	2 CFR, Part 215
For Profit Organizations	48 CFR, Chapter 1, Part 31	49 CFR, Part 18
CFR (Code of Federal Regulations)		
OMB (Office of Management and Budget)		
Related URLs:		
<ul style="list-style-type: none"> • Various OMB Circular: http://www.whitehouse.gov/omb/grants_circulars • Code of Federal Regulations: http://www.gpoaccess.gov/CFR 		

39. PARTNERS will maintain and make available to each other all OBLIGATIONS-related documents, including financial data, during the term of this agreement.
40. PARTNERS will retain all OBLIGATIONS-related records for three (3) years after the final voucher.
41. PARTNERS have the right to audit each other in accordance with generally accepted governmental audit standards.

CALTRANS, the state auditor, FHWA, and STA will have access to all OBLIGATIONS-related records of each PARTNER, and any party hired by a PARTNER to participate in OBLIGATIONS, for audit, examination, excerpt, or transcription.

The examination of any records will take place in the offices and locations where said records are generated and/or stored and will be accomplished during reasonable hours of operation. The auditing PARTNER will be permitted to make copies of any OBLIGATIONS-related records needed for the audit.

The audited PARTNER will review the draft audit, findings, and recommendations, and provide written comments within 30 calendar days of receipt.

Upon completion of the final audit, PARTNERS have 30 days to refund or invoice as necessary in order to satisfy the obligation of the audit.

Any audit dispute not resolved by PARTNERS is subject to dispute resolution. Any costs arising out of the dispute resolution process will be paid within 30 calendar days of the final audit or dispute resolution findings.

42. If state or federal funds are used, any PARTNER that hires another party to participate in OBLIGATIONS will conduct a pre-award audit of that party in accordance with the *Local Assistance Procedures Manual*.
43. PARTNERS will not incur costs beyond the funding commitments in this agreement. If IMPLEMENTING AGENCY anticipates that funding for WORK will be insufficient to complete WORK, IMPLEMENTING AGENCY will promptly notify SPONSOR.

IMPLEMENTING AGENCY has no obligation to perform WORK if funds to perform WORK are unavailable.

44. If WORK stops for any reason, IMPLEMENTING AGENCY will place all facilities impacted by WORK in a safe and operable condition acceptable to CALTRANS.
45. If WORK stops for any reason, each PARTNER will continue to implement all of its applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements, or approvals that are in effect at the time that WORK stops, as they apply to each PARTNER's responsibilities in this agreement, in order to keep PROJECT in environmental compliance until WORK resumes.
46. Each PARTNER accepts responsibility to complete the activities that it selected on the SCOPE SUMMARY. Activities marked with "N/A" on the SCOPE SUMMARY are not included in the scope of this agreement.

Scope: Environmental Permits, Approvals and Agreements

47. Each PARTNER identified in the Environmental Permits table below accepts the responsibility to complete the assigned activities.

Environmental Permits						
Permit	Coordinate	Prepare	Obtain	Implement	Renew	Amend
404 USACOE	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
401 RWQCB	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
NPDES SWRCB	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
State Waste Discharge Requirements (Porter Cologne) RWQCB	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS

FESA Section 7 USFWS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
BO Section 7 USFWS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
FESA Section 7 NOAA/NMFS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
BO Section 7 NOAA/NMFS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
EFH - NOAA/NMFS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
BCDC Permit	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
Fed. Coastal Zone Mgt. Act – Consistency Determination BCDC	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
1602 DFG	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS

Scope: Plans, Specifications, and Estimate (PS&E)

48. STA will ensure that the engineering firm preparing the plans, specifications, and estimate will not be employed by or under contract to the PROJECT construction contractor.

STA will not employ the engineering firm preparing the plans, specifications, and estimate for construction management of PROJECT.

However, STA may retain the engineering firm during the construction PROJECT COMPONENT to check shop drawings, do soil foundation tests, test construction materials, and perform construction surveys.

49. STA will identify and locate all utility facilities within PROJECT area as part of PS&E responsibilities. The plans, specifications, and estimate for PROJECT will identify all utility facilities not relocated or removed in advance of the construction PROJECT COMPONENT.
50. STA will make all necessary arrangements with utility owners for the timely accommodation, protection, relocation, or removal of any existing utility facilities that conflict with construction of PROJECT or that violate CALTRANS' encroachment policy.
51. STA will provide CALTRANS a copy of conflict maps, Relocation Plan, proposed Notices to Owner, Report of Investigation, and Utility Agreement (if applicable) for CALTRANS' concurrence prior to issuing the Notices to Owner and executing the Utility Agreement. All utility conflicts will be fully addressed prior to R/W Certification and all arrangements for the protection, relocation, or removal of all conflicting facilities will be completed prior to construction contract award and included in the PROJECT plans, specifications, and estimate.

52. PARTNERS agree that PROJECT plans, specifications and estimate are incomplete without a CALTRANS approved Right of Way certification which is developed during the Right of Way PROJECT COMPONENT.
53. The responsibility to complete the Right of Way PROJECT COMPONENT and advertise, open bids, award, and approve the construction contract will be handled outside of this agreement.

COST

Cost: General

54. The cost of any awards, judgments, or settlements generated by OBLIGATIONS is an OBLIGATIONS COST.
55. CALTRANS, independent of PROJECT, will pay all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within the existing SHS right of way.
56. Independent of PROJECT, all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within PROJECT limits and outside the existing SHS right of way will be the responsibility of the owner(s) of the parcel(s) where the HM-1 is located.
57. HM MANAGEMENT ACTIVITIES costs related to HM-2 are CONSTRUCTION SUPPORT and CONSTRUCTION CAPITAL costs.
58. The cost to comply with and implement the commitments set forth in the environmental documentation is an OBLIGATIONS COST.
59. The cost to ensure that PROJECT remains in environmental compliance is an OBLIGATIONS COST.
60. The cost of any legal challenges to the CEQA or NEPA environmental process or documentation is an OBLIGATIONS COST.
61. Independent of OBLIGATIONS COST, CALTRANS will fund the cost of its own IQA for WORK done within existing or proposed future SHS right of way.
62. Independent of OBLIGATIONS COST, STA will fund the cost of its own IQA for WORK done outside existing or proposed future SHS right of way.
63. CALTRANS will provide encroachment permits to PARTNERS, their contractors, consultants and agents, at no cost.

64. Fines, interest, or penalties levied against a PARTNER will be paid, independent of OBLIGATIONS cost, by the PARTNER whose actions or lack of action caused the levy. That PARTNER will indemnify and defend each other PARTNER.
65. The cost of any engineering support performed by CALTRANS includes all direct and applicable indirect costs. CALTRANS calculates indirect costs based solely on the type of funds used to pay support costs. State and federal funds are subject the current Program Functional Rate. Local funds are subject to the current Program Functional Rate and the current Administration Rate. Caltrans periodically adjusts the Program Functional Rate and the Administration Rate.
66. The cost to place PROJECT right of way in a safe and operable condition and meet all environmental commitments is an OBLIGATIONS cost.
67. Because IMPLEMENTING AGENCY is responsible for managing the scope, cost, and schedule of a project component, if there are insufficient funds available in this agreement to place the right of way in a safe and operable condition, the appropriate IMPLEMENTING AGENCY accepts responsibility to fund these activities until such time as PARTNERS amend this agreement.

That IMPLEMENTING AGENCY may request reimbursement for these costs during the amendment process.

68. If there are insufficient funds in this agreement to implement applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements, and/or approvals that are in effect at a time that WORK stops, each PARTNER implementing commitments or conditions accepts responsibility to fund these activities, as they apply to each PARTNER's responsibilities, until such time as PARTNERS amend this agreement.

Each PARTNER may request reimbursement for these costs during the amendment process.

Cost: Environmental Permits, Approvals and Agreements

69. The cost of coordinating, obtaining, complying with, implementing, and if necessary renewing and amending resource agency permits, agreements, and/or approvals is an OBLIGATIONS COST.

Cost: Plans, Specifications, and Estimate (PS&E)

70. STA will determine the cost to positively identify and locate, protect, relocate, or remove any utility facilities whether inside or outside SHS right of way in accordance with federal and California laws and regulations, and CALTRANS' policies, procedures, standards, practices, and applicable agreements including, but not limited to, Freeway Master Contracts.

SCHEDULE

71. PARTNERS will manage the schedule for OBLIGATIONS through the work plan included in the PROJECT MANAGEMENT PLAN.

GENERAL CONDITIONS

72. PARTNERS understand that this agreement is in accordance with and governed by the Constitution and laws of the State of California. This agreement will be enforceable in the State of California. Any PARTNER initiating legal action arising from this agreement will file and maintain that legal action in the Superior Court of the county in which the CALTRANS district office that is signatory to this agreement resides, or in the Superior Court of the county in which PROJECT is physically located.
73. All OBLIGATIONS of CALTRANS under the terms of this agreement are subject to the appropriation of resources by the Legislature, the State Budget Act authority, and the allocation of funds by the California Transportation Commission.
74. Any PARTNER performing IQA does so for its own benefit. No one can assign liability to that PARTNER due to its IQA activities.
75. Neither STA 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 and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon CALTRANS under this agreement.

It is understood and agreed that CALTRANS will fully defend, indemnify, and save harmless STA and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, 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 and/or its agents under this agreement.

76. 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 STA and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon STA under this agreement.

It is understood and agreed that STA will fully defend, indemnify, and save harmless CALTRANS and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, 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 STA and/or its agents under this agreement.

77. PARTNERS do not intend this agreement to create a third party beneficiary or define duties, obligations, or rights in parties not signatory to this agreement. PARTNERS do not intend this agreement to affect their legal liability by imposing any standard of care for fulfilling OBLIGATIONS different from the standards imposed by law.
78. PARTNERS will not assign or attempt to assign OBLIGATIONS to parties not signatory to this agreement.
79. PARTNERS will not interpret any ambiguity contained in this agreement against each other. PARTNERS waive the provisions of California Civil Code section 1654.
80. A waiver of a PARTNER's performance under this agreement will not constitute a continuous waiver of any other provision. An amendment made to any article or section of this agreement does not constitute an amendment to or negate all other articles or sections of this agreement.
81. A delay or omission to exercise a right or power due to a default does not negate the use of that right or power in the future when deemed necessary.
82. If any PARTNER defaults in its OBLIGATIONS, a non-defaulting PARTNER will request in writing that the default be remedied within 30 calendar days. If the defaulting PARTNER fails to do so, the non-defaulting PARTNER may initiate dispute resolution.
83. PARTNERS will first attempt to resolve agreement disputes at the PROJECT team level. If they cannot resolve the dispute themselves, the CALTRANS district director and the executive officer of STA will attempt to negotiate a resolution. If PARTNERS do not reach a resolution, PARTNERS' legal counsel will initiate mediation. PARTNERS agree to participate in mediation in good faith and will share equally in its costs.

Neither the dispute nor the mediation process relieves PARTNERS from full and timely performance of OBLIGATIONS in accordance with the terms of this agreement. However, if any PARTNER stops fulfilling OBLIGATIONS, any other PARTNER may seek equitable relief to ensure that OBLIGATIONS continue.

Except for equitable relief, no PARTNER may file a civil complaint until after mediation, or 45 calendar days after filing the written mediation request, whichever occurs first.

PARTNERS will file any civil complaints in the Superior Court of the county in which the CALTRANS district office signatory to this agreement resides. The prevailing PARTNER will be entitled to an award of all costs, fees, and expenses, including reasonable attorney fees as a result of litigating a dispute under this agreement or to enforce the provisions of this article including equitable relief.

84. PARTNERS maintain the ability to pursue alternative or additional dispute remedies if a previously selected remedy does not achieve resolution.
85. If any provisions in this agreement are deemed to be, or are in fact, illegal, inoperative, or unenforceable, those provisions do not render any or all other agreement provisions invalid, inoperative, or unenforceable, and PARTNERS will automatically sever those provisions from this agreement.
86. PARTNERS intend this agreement to be their final expression and supersede any oral understanding or writings pertaining to OBLIGATIONS.
87. If during performance of WORK additional activities or environmental documentation is necessary to keep PROJECT in environmental compliance, PARTNERS will amend this agreement to include completion of those additional tasks.
88. PARTNERS will execute a formal written amendment if there are any changes to OBLIGATIONS.
89. This agreement will terminate upon OBLIGATION COMPLETION or an amendment to terminate this agreement, whichever occurs first.

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

90. The following documents are attached to, and made an express part of this agreement: SCOPE SUMMARY, FUNDING SUMMARY.

DEFINITIONS

CALTRANS – The California Department of Transportation

CALTRANS STANDARDS – CALTRANS policies and procedures, including, but not limited to, the guidance provided in the *Guide to Capital Project Delivery Workplan Standards* (previously known as WBS Guide) available at <http://www.dot.ca.gov/hq/projmgmt/guidance.htm>.

CEQA (California Environmental Quality Act) – The act (California Public Resources Code, sections 21000 et seq.) that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those significant impacts, if feasible.

CFR (Code of Federal Regulations) – The general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

COOPERATIVE AGREEMENT CLOSURE STATEMENT – A document signed by PARTNERS that verifies the completion of all OBLIGATIONS included in this agreement and in all amendments to this agreement.

COST – The responsibility for cost responsibilities in this agreement can take one of three assignments:

- **OBLIGATIONS COST** – A cost associated with fulfilling OBLIGATIONS that will be funded as part of this agreement. The responsibility is defined by the funding commitments in this agreement.
- **PROJECT COST** – A cost associated with PROJECT that can be funded outside of OBLIGATIONS. A PROJECT COST may not necessarily be part of this agreement. This responsibility is defined by the PARTNERS' funding commitments at the time the cost is incurred.
- **PARTNER COST** – A cost that is the responsibility of a specific PARTNER, independent of PROJECT.

FHWA – Federal Highway Administration

FHWA STANDARDS – FHWA regulations, policies and procedures, including, but not limited to, the guidance provided at www.fhwa.dot.gov/topics.htm.

FUNDING PARTNER – A PARTNER that commits a defined dollar amount to fulfill OBLIGATIONS. Each FUNDING PARTNER accepts responsibility to provide the funds identified on the FUNDING SUMMARY under its name.

FUNDING SUMMARY – The table that designates an agreement's funding sources, types of funds, and the PROJECT COMPONENT in which the funds are to be spent. Funds listed on the FUNDING SUMMARY are "not-to-exceed" amounts for each FUNDING PARTNER.

GAAP (Generally Accepted Accounting Principles) – Uniform minimum standards and guidelines for financial accounting and reporting issued by the Federal Accounting Standards Advisory Board that serve to achieve some level of standardization. See <http://www.fasab.gov/accepted.html>.

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

HM-2 – 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.

HM MANAGEMENT ACTIVITIES – Management activities related to either HM-1 or HM-2 including, without limitation, any necessary manifest requirements and disposal facility designations.

IMPLEMENTING AGENCY – The PARTNER responsible for managing the scope, cost, and schedule of a PROJECT COMPONENT to ensure the completion of that component.

IQA (Independent Quality Assurance) – Ensuring that IMPLEMENTING AGENCY's quality assurance activities result in WORK being developed in accordance with the applicable standards and within an established Quality Management Plan (QMP). IQA does not include any work necessary to actually develop or deliver WORK or any validation by verifying or rechecking work performed by another partner.

NEPA (National Environmental Policy Act of 1969) – The federal act that establishes a national policy for the environment and a process to disclose the adverse impacts of projects with a federal nexus.

OBLIGATION COMPLETION – PARTNERS have fulfilled all OBLIGATIONS included in this agreement, and all amendments to this agreement, and have signed a COOPERATIVE AGREEMENT CLOSURE STATEMENT.

OBLIGATIONS – All responsibilities included in this agreement.

OBLIGATIONS COST – See COST.

OMB (Office of Management and Budget) – The federal office that oversees preparation of the federal budget and supervises its administration in Executive Branch agencies.

PARTNER – Any individual signatory party to this agreement.

PARTNERS – The term that collectively references all of the signatory agencies to this agreement. This term only describes the relationship between these agencies to work together to achieve a mutually beneficial goal. It is not used in the traditional legal sense in which one PARTNER's individual actions legally bind the other partners.

PROJECT – The undertaking to the new westbound Interstate 80 (I-80) connector to southbound Interstate 680 (I-680) in Solano County.

PROJECT COMPONENT – A distinct portion of the planning and project development process of a capital project as outlined in California Government Code, section 14529(b).

- **PID (Project Initiation Document)** – The activities required to deliver the project initiation document for PROJECT.
- **PA&ED (Project Approval and Environmental Document)** – The activities required to deliver the project approval and environmental documentation for PROJECT.
- **PS&E (Plans, Specifications, and Estimate)** – The activities required to deliver the plans, specifications, and estimate for PROJECT.
- **R/W (Right of Way) SUPPORT** – The activities required to obtain all property interests for PROJECT.
- **R/W (Right of Way) CAPITAL** – The funds for acquisition of property rights for PROJECT.

- **CONSTRUCTION SUPPORT** – The activities required for the administration, acceptance, and final documentation of the construction contract for PROJECT.
- **CONSTRUCTION CAPITAL** – The funds for the construction contract.

PROJECT COST – See COST.

PROJECT MANAGEMENT PLAN – A group of documents used to guide a project's execution and control throughout that project's lifecycle.

PS&E (Plans, Specifications, and Estimate) – See PROJECT COMPONENT.

QMP (Quality Management Plan) – An integral part of the Project Management Plan that describes IMPLEMENTING AGENCY's quality policy and how it will be used.

R/W (Right of Way) SUPPORT – See PROJECT COMPONENT.

SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SCOPE SUMMARY – The attachment in which each PARTNER designates its commitment to specific scope activities within each PROJECT COMPONENT as outlined by the *Guide to Capital Project Delivery Workplan Standards* (previously known as WBS Guide) available at <http://www.dot.ca.gov/hq/projmgmt/guidance.htm>.

SHS (State Highway System) – All highways, right of way, and related facilities acquired, laid out, constructed, improved, or maintained as a state highway pursuant to constitutional or legislative authorization.

SPONSOR – Any PARTNER that accepts the responsibility to establish scope of PROJECT and the obligation to secure financial resources to fund PROJECT. SPONSOR is responsible for adjusting the PROJECT scope to match committed funds or securing additional funds to fully fund the PROJECT scope. If a PROJECT has more than one SPONSOR, funding adjustments will be made by percentage (as outlined in Responsibilities). Scope adjustments must be developed through the project development process and must be approved by CALTRANS as the owner/operator of the SHS.

WORK – All scope activities included in this agreement.

CONTACT INFORMATION

The information provided below indicates the primary contact data for each PARTNER to this agreement. PARTNERS will notify each other in writing of any personnel or location changes. Contact information changes do not require an amendment to this agreement.

The primary agreement contact person for CALTRANS is:

Nicolas Endrawos, Regional Project Manager

111 Grand Avenue

Oakland, California 94612

Office Phone: (510) 286-5123

Email: nicolas.endrawos@dot.ca.gov

The primary agreement contact person for STA is:

Janet Adams, Deputy Executive Director/Director of Projects

One Harbor Center, Suite 130

Suisun City, California 94585

Office Phone: (707) 424-6010

Email: jadams@sta-snci.com

SIGNATURES

PARTNERS declare that:


1. Each PARTNER is an authorized legal entity under California state law.
2. Each PARTNER has the authority to enter into this agreement.
3. The people signing this agreement have the authority to do so on behalf of their public agencies.


STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SOLANO TRANSPORTATION AUTHORITY

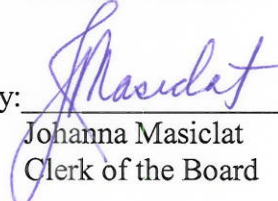
APPROVED


APPROVED

By: 
Helena (Lenka) Culik-Caro
Deputy District Director - Design

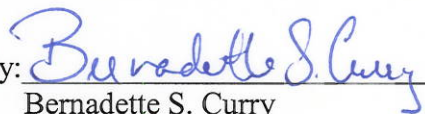
By: 
Daryl Halls
Executive Director

CERTIFIED AS TO FUNDS:

By: 
Johanna Masiclat
Clerk of the Board

By: 
Kevin M. Strough
District Budget Manager

APPROVED AS TO FORM AND PROCEDURE

By: 
Bernadette S. Curry
STA Legal Counsel

SCOPE SUMMARY

WBS Level					Description	CALTRANS	STA	N/A
4	5	6	7	8				
3	185				Prepare Base Maps and Plan Sheets for PS&E Development		X	
4	200				Utility Relocation		X	
3	205				Permits, Agreements during PS&E Component	X	X	
		05			Required permits		X	
		15			Railroad Agreements		X	
		25			Agreement for Material Sites		X	
		30			Executed Maintenance Agreement		X	
		45			MOU From Tribal Employment Rights Office (TERO)		X	
		55			NEPA Delegation	X		
3	230				Prepare Draft Plans, Specifications, and Estimates	X	X	
		05			Draft Roadway Plans		X	
		10			Draft Highway Planting Plans		X	
		15			Draft Traffic Plans		X	
		20			Transportation Management Plan		X	
		25			Draft Utility Plans		X	
		30			Draft Drainage Plans		X	
		35			Draft Specifications		X	
		40			Draft Plans, Specifications, and Estimates Quantities and Estimates		X	
		55			Structures Draft Plans, Specifications, and Estimates Incorporation		X	
		60			Updated Project Information for Plans, Specifications, and Estimates Package		X	
		90			NEPA Delegation	X		
		99			Other Draft Plans, Specifications, and Estimates Products		X	
3	235				Mitigate Environmental Impacts and Clean Up Hazardous Waste	X	X	
		05			Environmental Mitigation		X	
		10			Detailed Site Investigation for Hazardous Waste		X	
		15			Hazardous Waste Management Plan		X	
		20			Hazardous Waste Plans, Specifications, and Estimates		X	
		25			Hazardous Waste Clean-Up		X	
		30			Hazardous Substances Disclosure Document (HSDD)		X	
		35			Long Term Mitigation Monitoring		X	
		40			Updated Environmental Commitments Record		X	
		45			NEPA Delegation	X		
3	240				Draft Structures Plans, Specifications, and Estimates		X	

3	250				FINAL STRUCTURES PS&E PACKAGE		X	
3	255				Circulate, Review, and Prepare Final District Plans, Specifications, and Estimates Package	X	X	
		05			Circulated and Reviewed Draft District Plans, Specifications, and Estimates Package		X	
		10			Updated Plans, Specifications, and Estimates Package		X	
		15			Environmental Re-Evaluation	X		
		20			Final District Plans, Specifications, and Estimates Package		X	
		25			Geotechnical Information Handout		X	
		30			Materials Information Handout		X	
		35			Construction Staking Package and Control		X	
		40			Resident Engineer's Pending File		X	
		45			NEPA Delegation	X		
		50			Secured Lease for Resident Engineer Office Space or Trailer		X	
		55			Contractor Outreach		X	
		65			Right of Way Certification Document		X	
		70			Right of Way Engineering Products		X	
		75			Upgraded/Updated Right of Way Certification Document		X	
3	260				Contract Bid Documents Ready to List	X		
3	265				Awarded and Approved Construction Contract			X

FUNDING SUMMARY

Funding Source	Funding Partner	Fund Type	PS&E	Subtotal Support	Subtotal Capital	Subtotal Funds Type
LOCAL	STA	Local	\$10,220,000	\$10,220,000	\$0	\$10,220,000
		Subtotals by Component	\$10,220,000	\$10,220,000	\$0	\$10,220,000

**SOLANO TRANSPORTATION AUTHORITY
RESOLUTION No. 2007-10**

**RESOLUTION OF THE SOLANO TRANSPORTATION AUTHORITY
AUTHORIZING THE EXECUTIVE DIRECTOR TO SIGN
AGREEMENTS/DOCUMENTS WITH OR FOR THE
CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) AND THE
FEDERAL HIGHWAY ADMINISTRATION
TO RECEIVE FUNDING AND TO DELIVER TRANSPORTATION PROJECTS**

WHEREAS, the Solano Transportation Authority is eligible to receive Federal and/or State funding for certain transportation projects, through the California Department of Transportation (CALTRANS) and the Federal Highway Administration (FHWA); and

WHEREAS, Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, need to be executed with CALTRANS or FHWA before such funds could be claimed; and

WHEREAS, the Solano Transportation Authority, pursuant to Streets and Highways Code Section 114 is authorized to enter into Cooperative Agreements for implementing the delivery of proposed improvements to State highways within the County of Solano; and

WHEREAS, various Cooperative Agreements need to be executed and Right-of-Way Certifications signed for implementing the delivery of said proposed improvements to State Highways within the County of Solano; and

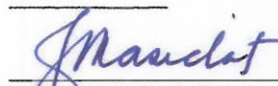
WHEREAS, the Solano Transportation Authority wishes to delegate authorization to execute these agreements/documents and any amendments thereto to the Executive Director or the Acting Executive Director following Project approval by the STA Board whether through project-specific action of the Board or through approval of the STA Budget which Budget includes projects and their funding.

NOW, THEREFORE BE IT RESOLVED that the Executive Director or Acting Executive Director be authorized to execute all Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, Cooperative Agreements, Right-of-Way Certifications and any amendments thereto with or for CALTRANS or FHWA following approval by the STA Board through either project-specific action of the Board or approval of the STA Budget which Budget includes or references projects and their funding.

I HEREBY CERTIFY that the foregoing resolution was introduced and passed at a regular meeting of the Board of the Solano Transportation Authority, held on the 10th day October, 2007, by the following vote:

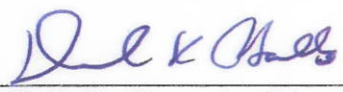
Ayes: 8
No's: 0
Absent: 0
Abstain: 0

Attest by:


Johanna Masiclat
Clerk of the Board


Anthony Intintoli, Chair
Solano Transportation Authority

I, Daryl K. Halls, the Solano Transportation Authority Executive Director, do hereby certify that the above and foregoing resolution was introduced, passed, and adopted by said Authority at a regular meeting thereof held this the day of October 10, 2007.


Daryl K. Halls, Executive Director
Solano Transportation Authority

COOPERATIVE AGREEMENT

This agreement, effective on December 1, 2011, is between the State of California, acting through its Department of Transportation, referred to as CALTRANS, and:

Solano Transportation Authority, a political subdivision of the State of California, referred to as STA.

For the purpose of this agreement, the term PARTNERS collectively refers to CALTRANS and STA (all signatory parties to this agreement). The term PARTNER refers to any one of those signatory parties individually.

RECITALS

1. California Streets and Highways Code sections 114 and 130 authorize PARTNERS to enter into a cooperative agreement for performance of work within the State Highway System (SHS) right of way.
2. This agreement outlines the terms and conditions of cooperation between PARTNERS to complete the PS&E and R/W components of the PROJECT for the new interchange on Interstate Route 680 (I-680) at Red Top Road along with the realignment of Lopes Road, Ramsey Road and Fermi Drive, in the County of Solano.

For the purpose of this agreement, the new interchange on Interstate Route 680 (I-680) at Red Top Road along with the realignment of Lopes Road, Ramsey Road and Fermi Drive, in the County of Solano will be referred to as PROJECT. All responsibilities assigned in this agreement to complete the PS&E and R/W components of the PROJECT will be referred to as OBLIGATIONS.

3. This agreement is separate from and does not modify or replace any other cooperative agreement or memorandum of understanding between PARTNERS regarding PROJECT.
4. Prior to this agreement, STA developed the Project Initiation Document and STA developed the Project Report (Cooperative Agreement No. 4-1905-C).
5. STA prepared the environmental documentation for PROJECT.
6. The estimated date for OBLIGATION COMPLETION is June 30, 2016.
7. In this agreement capitalized words represent defined terms and acronyms. The Definitions section contains a complete definition for each capitalized term.

8. From this point forward, PARTNERS define in this agreement the terms and conditions under which they will accomplish OBLIGATIONS.

RESPONSIBILITIES

9. STA is SPONSOR for 100% of PROJECT.
10. CALTRANS will provide IQA for the portions of WORK within existing and proposed SHS right of way. CALTRANS retains the right to reject noncompliant WORK, protect public safety, preserve property rights, and ensure that all WORK is in the best interest of the SHS.
11. STA may provide IQA for the portions of WORK outside existing and proposed SHS right of way.
12. STA is the only FUNDING PARTNER for this agreement. STA's funding commitment is defined in the FUNDING SUMMARY.
13. CALTRANS is the CEQA lead agency for PROJECT.
14. CALTRANS is the NEPA lead agency for PROJECT.
15. STA is IMPLEMENTING AGENCY for PS&E and R/W.

SCOPE

Scope: General

16. PARTNERS will perform all OBLIGATIONS in accordance with federal and California laws, regulations, and standards; FHWA STANDARDS; and CALTRANS STANDARDS.
17. IMPLEMENTING AGENCY for a PROJECT COMPONENT will provide a Quality Management Plan (QMP) for that component as part of the PROJECT MANAGEMENT PLAN.
18. Any PARTNER may, at its own expense, have representatives observe any OBLIGATIONS performed by another PARTNER. Observation does not constitute authority over those OBLIGATIONS.
19. Each PARTNER will ensure that all of its personnel participating in OBLIGATIONS are appropriately qualified, and if necessary licensed, to perform the tasks assigned to them.
20. PARTNERS will invite each other to participate in the selection and retention of any consultants who participate in OBLIGATIONS.

21. If WORK is done under contract (not completed by a PARTNER's own employees) and is governed by the California Labor Code's definition of "public works" (section 1720(a)(a)), that PARTNER will conform to sections 1720 – 1815 of the California Labor Code and all applicable regulations and coverage determinations issued by the Director of Industrial Relations.
22. IMPLEMENTING AGENCY for each PROJECT COMPONENT included in this agreement will be available to help resolve problems generated by that component for the entire duration of PROJECT.
23. CALTRANS will issue, upon proper application, the encroachment permits required for WORK within SHS right of way.

Contractors and/or agents, and utility owners will not perform WORK without an encroachment permit issued in their name.

24. If any PARTNER discovers unanticipated cultural, archaeological, paleontological, or other protected resources during WORK, all WORK in that area will stop and that PARTNER will notify all PARTNERS within 24 hours of discovery. WORK may only resume after a qualified professional has evaluated the nature and significance of the discovery and a plan is approved for its removal or protection.
25. PARTNERS will hold all administrative draft and administrative final reports, studies, materials, and documentation relied upon, produced, created, or utilized for PROJECT in confidence to the extent permitted by law. Where applicable, the provisions of California Government Code section 6254.5(e) will govern the disclosure of such documents in the event that PARTNERS share said documents with each other.

PARTNERS will not distribute, release, or share said documents with anyone other than employees, agents, and consultants who require access to complete PROJECT without the written consent of the PARTNER authorized to release them, unless required or authorized to do so by law.

26. If any PARTNER receives a public records request, pertaining to OBLIGATIONS, that PARTNER will notify PARTNERS within five (5) working days of receipt and make PARTNERS aware of any disclosed public records. PARTNERS will consult with each other prior to the release of any public documents related to the PROJECT.
27. If HM-1 or HM-2 is found during a PROJECT COMPONENT, IMPLEMENTING AGENCY for that PROJECT COMPONENT will immediately notify PARTNERS.
28. CALTRANS, independent of PROJECT, is responsible for any HM-1 found within the existing SHS right of way. CALTRANS will undertake HM MANAGEMENT ACTIVITIES related to HM-1 with minimum impact to PROJECT schedule.

29. If HM-1 is found within PROJECT limits and outside the existing SHS right of way, responsibility for such HM-1 rests with the owner(s) of the parcel(s) on which the HM-1 is found. STA, in concert with the local agency having land use jurisdiction over the parcel(s), will ensure that HM MANAGEMENT ACTIVITIES related to HM-1 are undertaken with minimum impact to PROJECT schedule.
30. If HM-2 is found within PROJECT limits, the public agency responsible for the advertisement, award, and administration (AAA) of the PROJECT construction contract will be responsible for HM MANAGEMENT ACTIVITIES related to HM-2.
31. CALTRANS' acquisition or acceptance of title to any property on which any HM-1 or HM-2 is found will proceed in accordance with CALTRANS' policy on such acquisition.
32. PARTNERS will comply with all of the commitments and conditions set forth in the environmental documentation, environmental permits, approvals, and applicable agreements as those commitments and conditions apply to each PARTNER's responsibilities in this agreement.
33. IMPLEMENTING AGENCY for each PROJECT COMPONENT will furnish PARTNERS with written monthly progress reports during the implementation of OBLIGATIONS in that component.
34. Upon OBLIGATION COMPLETION, ownership or title to all materials and equipment constructed or installed for the operations and/or maintenance of the SHS within SHS right of way as part of WORK become the property of CALTRANS.

CALTRANS will not accept ownership or title to any materials or equipment constructed or installed outside SHS right of way.
35. IMPLEMENTING AGENCY for a PROJECT COMPONENT will accept, reject, compromise, settle, or litigate claims of any non-agreement parties hired to do WORK in that component.
36. PARTNERS will confer on any claim that may affect OBLIGATIONS or PARTNERS' liability or responsibility under this agreement in order to retain resolution possibilities for potential future claims. No PARTNER will prejudice the rights of another PARTNER until after PARTNERS confer on claim.
37. PARTNERS will maintain, and will ensure that any party hired by PARTNERS to participate in OBLIGATIONS will maintain, a financial management system that conforms to Generally Accepted Accounting Principles (GAAP), and that can properly accumulate and segregate incurred PROJECT costs, and provide billing and payment support.
38. PARTNERS will comply with the appropriate federal cost principles and administrative requirements outlined in the Applicable Cost Principles and Administrative Requirements

table below. These principles and requirements apply to federal and state funding types included in this agreement.

Applicable Cost Principles and Administration Requirements		
The federal cost principles and administrative requirements associated with each organization type apply to that organization.		
Organization Type	Cost Principles	Administrative Requirements
Federal Governments	2 CFR Part 225	OMB A-102
State and Local Government	2 CFR, Part 225	49 CFR, Part 18
Educational Institutions	2 CFR, Part 220	2 CFR, Part 215
Non-Profit Organizations	2 CFR, Part 230	2 CFR, Part 215
For Profit Organizations	48 CFR, Chapter 1, Part 31	49 CFR, Part 18
CFR (Code of Federal Regulations)		
OMB (Office of Management and Budget)		
Related URLs:		
• Various OMB Circular:	http://www.whitehouse.gov/omb/grants_circulars	
• Code of Federal Regulations:	http://www.gpoaccess.gov/CFR	

39. PARTNERS will maintain and make available to each other all OBLIGATIONS-related documents, including financial data, during the term of this agreement.
40. PARTNERS will retain all OBLIGATIONS-related records for three (3) years after the final voucher.
41. PARTNERS have the right to audit each other in accordance with generally accepted governmental audit standards.

CALTRANS, the state auditor, FHWA, and STA will have access to all OBLIGATIONS-related records of each PARTNER, and any party hired by a PARTNER to participate in OBLIGATIONS, for audit, examination, excerpt, or transcription.

The examination of any records will take place in the offices and locations where said records are generated and/or stored and will be accomplished during reasonable hours of operation. The auditing PARTNER will be permitted to make copies of any OBLIGATIONS-related records needed for the audit.

The audited PARTNER will review the draft audit, findings, and recommendations, and provide written comments within 30 calendar days of receipt.

Upon completion of the final audit, PARTNERS have 30 days to refund or invoice as necessary in order to satisfy the obligation of the audit.

Any audit dispute not resolved by PARTNERS is subject to dispute resolution. Any costs arising out of the dispute resolution process will be paid within 30 calendar days of the final audit or dispute resolution findings.

42. If state or federal funds are used, any PARTNER that hires another party to participate in OBLIGATIONS will conduct a pre-award audit of that party in accordance with the *Local Assistance Procedures Manual*.
43. PARTNERS will not incur costs beyond the funding commitments in this agreement. If IMPLEMENTING AGENCY anticipates that funding for WORK will be insufficient to complete WORK, IMPLEMENTING AGENCY will promptly notify SPONSOR.

IMPLEMENTING AGENCY has no obligation to perform WORK if funds to perform WORK are unavailable.

44. If WORK stops for any reason, IMPLEMENTING AGENCY will place all facilities impacted by WORK in a safe and operable condition acceptable to CALTRANS.
45. If WORK stops for any reason, each PARTNER will continue to implement all of its applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements, or approvals that are in effect at the time that WORK stops, as they apply to each PARTNER's responsibilities in this agreement, in order to keep PROJECT in environmental compliance until WORK resumes.
46. Each PARTNER accepts responsibility to complete the activities that it selected on the SCOPE SUMMARY. Activities marked with "N/A" on the SCOPE SUMMARY are not included in the scope of this agreement.

Scope: Environmental Permits, Approvals and Agreements

47. Each PARTNER identified in the Environmental Permits table below accepts the responsibility to complete the assigned activities.

Environmental Permits						
Permit	Coordinate	Prepare	Obtain	Implement	Renew	Amend
404 USACOE	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
401 RWQCB	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
NPDES SWRCB	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
State Waste Discharge Requirements (Porter Cologne) RWQCB	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS

FESA Section 7 USFWS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
BO Section 7 USFWS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
FESA Section 7 NOAA/NMFS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
BO Section 7 NOAA/NMFS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
EFH - NOAA/NMFS	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
BCDC Permit	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
Fed. Coastal Zone Mgt. Act – Consistency Determination BCDC	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS
1602 DFG	CALTRANS	STA	CALTRANS	CALTRANS	CALTRANS	CALTRANS

Scope: Plans, Specifications, and Estimate (PS&E)

48. STA will ensure that the engineering firm preparing the plans, specifications, and estimate will not be employed by or under contract to the PROJECT construction contractor.

STA will not employ the engineering firm preparing the plans, specifications, and estimate for construction management of PROJECT.

However, STA may retain the engineering firm during the construction PROJECT COMPONENT to check shop drawings, do soil foundation tests, test construction materials, and perform construction surveys.

49. STA will identify and locate all utility facilities within PROJECT area as part of PS&E responsibilities. The plans, specifications, and estimate for PROJECT will identify all utility facilities not relocated or removed in advance of the construction PROJECT COMPONENT.
50. STA will make all necessary arrangements with utility owners for the timely accommodation, protection, relocation, or removal of any existing utility facilities that conflict with construction of PROJECT or that violate CALTRANS' encroachment policy.
51. The responsibility to advertise, open bids, award, and approve the construction contract will be handled outside of this agreement.

Scope: Right of Way (R/W)

52. STA will provide a land surveyor licensed in the State of California to be responsible for surveying and right of way engineering. All survey and right of way engineering documents will bear the professional seal, certificate number, registration classification, expiration date of certificate, and signature of the responsible surveyor.

53. STA will provide CALTRANS-approved verification of its arrangements for the protection, relocation, or removal of all conflicting facilities and that such work will be completed prior to construction contract award or as otherwise stated in the PROJECT plans, specifications, and estimate. This verification must include references to all required SHS encroachment permits.
54. STA will utilize a public agency currently qualified by CALTRANS or a properly licensed consultant for all right of way activities. A qualified right of way agent will administer all right of way consultant contracts.

STA will submit a draft Right of Way Certification document to CALTRANS six weeks prior to the scheduled milestone date for review.

STA will submit a final Right of Way certification document to CALTRANS prior to PROJECT advertisement for approval.

55. STA will prepare and provide to CALTRANS a Right of Way Certification prior to PROJECT advertisement.
56. All right of way conveyances must be completed prior to OBLIGATION COMPLETION.
57. CALTRANS' acceptance of right of way title is subject to review of an Updated Preliminary Title Report provided by STA verifying that the title is free of all encumbrances detrimental to CALTRANS' present and future uses. Upon acceptance, STA will provide CALTRANS with a Policy of Title Insurance in CALTRANS' name.
58. STA shall comply with Streets and Highways Code section 760 and shall obtain written approval from CALTRANS Division of Right of Way to adopt and hear Resolutions of Necessity at the local level in accordance with the CALTRANS Right of Way Manual, Section 17.04.09.01 to 17.04.09.09.

COST

Cost: General

59. The cost of any awards, judgments, or settlements generated by OBLIGATIONS is an OBLIGATIONS COST.
60. CALTRANS, independent of PROJECT, will pay all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within the existing SHS right of way.
61. Independent of PROJECT, all costs for HM MANAGEMENT ACTIVITIES related to HM-1 found within PROJECT limits and outside the existing SHS right of way will be the responsibility of the owner(s) of the parcel(s) where the HM-1 is located.

62. HM MANAGEMENT ACTIVITIES costs related to HM-2 are CONSTRUCTION SUPPORT and CONSTRUCTION CAPITAL costs.
63. The cost to comply with and implement the commitments set forth in the environmental documentation is an OBLIGATIONS COST.
64. The cost to ensure that PROJECT remains in environmental compliance is an OBLIGATIONS COST.
65. The cost of any legal challenges to the CEQA or NEPA environmental process or documentation is an OBLIGATIONS COST.
66. Independent of OBLIGATIONS COST, CALTRANS will fund the cost of its own IQA for WORK done within existing or proposed future SHS right of way.
67. Independent of OBLIGATIONS COST, STA will fund the cost of its own IQA for WORK done outside existing or proposed future SHS right of way.
68. CALTRANS will provide encroachment permits to PARTNERS, their contractors, consultants and agents, at no cost.
69. Fines, interest, or penalties levied against a PARTNER will be paid, independent of OBLIGATIONS cost, by the PARTNER whose actions or lack of action caused the levy. That PARTNER will indemnify and defend each other PARTNER.
70. The cost of any engineering support performed by CALTRANS includes all direct and applicable indirect costs. CALTRANS calculates indirect costs based solely on the type of funds used to pay support costs. State and federal funds are subject the current Program Functional Rate. Local funds are subject to the current Program Functional Rate and the current Administration Rate. Caltrans periodically adjusts the Program Functional Rate and the Administration Rate.
71. The cost to place PROJECT right of way in a safe and operable condition and meet all environmental commitments is an OBLIGATIONS cost.
72. Because IMPLEMENTING AGENCY is responsible for managing the scope, cost, and schedule of a project component, if there are insufficient funds available in this agreement to place the right of way in a safe and operable condition, the appropriate IMPLEMENTING AGENCY accepts responsibility to fund these activities until such time as PARTNERS amend this agreement.

That IMPLEMENTING AGENCY may request reimbursement for these costs during the amendment process.

73. If there are insufficient funds in this agreement to implement applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements,

and/or approvals that are in effect at a time that WORK stops, each PARTNER implementing commitments or conditions accepts responsibility to fund these activities, as they apply to each PARTNER's responsibilities, until such time as PARTNERS amend this agreement.

Each PARTNER may request reimbursement for these costs during the amendment process.

Cost: Environmental Permits, Approvals and Agreements

74. The cost of coordinating, obtaining, complying with, implementing, and if necessary renewing and amending resource agency permits, agreements, and/or approvals is an OBLIGATIONS COST.

Cost: Plans, Specifications, and Estimate (PS&E)

75. STA will determine the cost to positively identify and locate, protect, relocate, or remove any utility facilities whether inside or outside SHS right of way in accordance with federal and California laws and regulations, and CALTRANS' policies, procedures, standards, practices, and applicable agreements including, but not limited to, Freeway Master Contracts.

SCHEDULE

76. PARTNERS will manage the schedule for OBLIGATIONS through the work plan included in the PROJECT MANAGEMENT PLAN.

GENERAL CONDITIONS

77. PARTNERS understand that this agreement is in accordance with and governed by the Constitution and laws of the State of California. This agreement will be enforceable in the State of California. Any PARTNER initiating legal action arising from this agreement will file and maintain that legal action in the Superior Court of the county in which the CALTRANS district office that is signatory to this agreement resides, or in the Superior Court of the county in which PROJECT is physically located.
78. All OBLIGATIONS of CALTRANS under the terms of this agreement are subject to the appropriation of resources by the Legislature, the State Budget Act authority, and the allocation of funds by the California Transportation Commission.
79. Any PARTNER performing IQA does so for its own benefit. No one can assign liability to that PARTNER due to its IQA activities.

80. Neither STA 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 and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon CALTRANS under this agreement.

It is understood and agreed that CALTRANS will fully defend, indemnify, and save harmless STA and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, 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 and/or its agents under this agreement.

81. 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 STA and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon STA under this agreement.

It is understood and agreed that STA will fully defend, indemnify, and save harmless CALTRANS and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, 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 STA and/or its agents under this agreement.

82. PARTNERS do not intend this agreement to create a third party beneficiary or define duties, obligations, or rights in parties not signatory to this agreement. PARTNERS do not intend this agreement to affect their legal liability by imposing any standard of care for fulfilling OBLIGATIONS different from the standards imposed by law.
83. PARTNERS will not assign or attempt to assign OBLIGATIONS to parties not signatory to this agreement.
84. PARTNERS will not interpret any ambiguity contained in this agreement against each other. PARTNERS waive the provisions of California Civil Code section 1654.
85. A waiver of a PARTNER's performance under this agreement will not constitute a continuous waiver of any other provision. An amendment made to any article or section of this agreement does not constitute an amendment to or negate all other articles or sections of this agreement.
86. A delay or omission to exercise a right or power due to a default does not negate the use of that right or power in the future when deemed necessary.

87. If any PARTNER defaults in its OBLIGATIONS, a non-defaulting PARTNER will request in writing that the default be remedied within 30 calendar days. If the defaulting PARTNER fails to do so, the non-defaulting PARTNER may initiate dispute resolution.
88. PARTNERS will first attempt to resolve agreement disputes at the PROJECT team level. If they cannot resolve the dispute themselves, the CALTRANS district director and the executive officer of STA will attempt to negotiate a resolution. If PARTNERS do not reach a resolution, PARTNERS' legal counsel will initiate mediation. PARTNERS agree to participate in mediation in good faith and will share equally in its costs.

Neither the dispute nor the mediation process relieves PARTNERS from full and timely performance of OBLIGATIONS in accordance with the terms of this agreement. However, if any PARTNER stops fulfilling OBLIGATIONS, any other PARTNER may seek equitable relief to ensure that OBLIGATIONS continue.

Except for equitable relief, no PARTNER may file a civil complaint until after mediation, or 45 calendar days after filing the written mediation request, whichever occurs first.

PARTNERS will file any civil complaints in the Superior Court of the county in which the CALTRANS district office signatory to this agreement resides. The prevailing PARTNER will be entitled to an award of all costs, fees, and expenses, including reasonable attorney fees as a result of litigating a dispute under this agreement or to enforce the provisions of this article including equitable relief.

89. PARTNERS maintain the ability to pursue alternative or additional dispute remedies if a previously selected remedy does not achieve resolution.
90. If any provisions in this agreement are deemed to be, or are in fact, illegal, inoperative, or unenforceable, those provisions do not render any or all other agreement provisions invalid, inoperative, or unenforceable, and PARTNERS will automatically sever those provisions from this agreement.
91. PARTNERS intend this agreement to be their final expression and supersede any oral understanding or writings pertaining to OBLIGATIONS.
92. If during performance of WORK additional activities or environmental documentation is necessary to keep PROJECT in environmental compliance, PARTNERS will amend this agreement to include completion of those additional tasks.
93. PARTNERS will execute a formal written amendment if there are any changes to OBLIGATIONS.
94. This agreement will terminate upon OBLIGATION COMPLETION or an amendment to terminate this agreement, whichever occurs first.

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

95. The following documents are attached to, and made an express part of this agreement: SCOPE SUMMARY, FUNDING SUMMARY.

DEFINITIONS

CALTRANS – The California Department of Transportation

CALTRANS STANDARDS – CALTRANS policies and procedures, including, but not limited to, the guidance provided in the *Guide to Capital Project Delivery Workplan Standards* (previously known as WBS Guide) available at <http://www.dot.ca.gov/hq/projmgmt/guidance.htm>.

CEQA (California Environmental Quality Act) – The act (California Public Resources Code, sections 21000 et seq.) that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those significant impacts, if feasible.

CFR (Code of Federal Regulations) – The general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

COOPERATIVE AGREEMENT CLOSURE STATEMENT – A document signed by PARTNERS that verifies the completion of all OBLIGATIONS included in this agreement and in all amendments to this agreement.

COST – The responsibility for cost responsibilities in this agreement can take one of three assignments:

- **OBLIGATIONS COST** – A cost associated with fulfilling OBLIGATIONS that will be funded as part of this agreement. The responsibility is defined by the funding commitments in this agreement.
- **PROJECT COST** – A cost associated with PROJECT that can be funded outside of OBLIGATIONS. A PROJECT COST may not necessarily be part of this agreement. This responsibility is defined by the PARTNERS' funding commitments at the time the cost is incurred.
- **PARTNER COST** – A cost that is the responsibility of a specific PARTNER, independent of PROJECT.

FHWA – Federal Highway Administration

FHWA STANDARDS – FHWA regulations, policies and procedures, including, but not limited to, the guidance provided at www.fhwa.dot.gov/topics.htm.

FUNDING PARTNER – A PARTNER that commits a defined dollar amount to fulfill OBLIGATIONS. Each FUNDING PARTNER accepts responsibility to provide the funds identified on the FUNDING SUMMARY under its name.

FUNDING SUMMARY – The table that designates an agreement's funding sources, types of funds, and the PROJECT COMPONENT in which the funds are to be spent. Funds listed on the FUNDING SUMMARY are "not-to-exceed" amounts for each FUNDING PARTNER.

GAAP (Generally Accepted Accounting Principles) – Uniform minimum standards and guidelines for financial accounting and reporting issued by the Federal Accounting Standards Advisory Board that serve to achieve some level of standardization. See <http://www.fasab.gov/accepted.html>.

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

HM-2 – 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.

HM MANAGEMENT ACTIVITIES – Management activities related to either HM-1 or HM-2 including, without limitation, any necessary manifest requirements and disposal facility designations.

IMPLEMENTING AGENCY – The PARTNER responsible for managing the scope, cost, and schedule of a PROJECT COMPONENT to ensure the completion of that component.

IQA (Independent Quality Assurance) – Ensuring that IMPLEMENTING AGENCY's quality assurance activities result in WORK being developed in accordance with the applicable standards and within an established Quality Management Plan (QMP). IQA does not include any work necessary to actually develop or deliver WORK or any validation by verifying or rechecking work performed by another partner.

NEPA (National Environmental Policy Act of 1969) – The federal act that establishes a national policy for the environment and a process to disclose the adverse impacts of projects with a federal nexus.

OBLIGATION COMPLETION – PARTNERS have fulfilled all OBLIGATIONS included in this agreement, and all amendments to this agreement, and have signed a COOPERATIVE AGREEMENT CLOSURE STATEMENT.

OBLIGATIONS – All responsibilities included in this agreement.

OBLIGATIONS COST – See COST.

OMB (Office of Management and Budget) – The federal office that oversees preparation of the federal budget and supervises its administration in Executive Branch agencies.

PARTNER – Any individual signatory party to this agreement.

PARTNERS – The term that collectively references all of the signatory agencies to this agreement. This term only describes the relationship between these agencies to work together to achieve a mutually beneficial goal. It is not used in the traditional legal sense in which one PARTNER's individual actions legally bind the other partners.

PROJECT – The undertaking to the new interchange on Interstate Route 680 (I-680) at Red Top Road along with the realignment of Lopes Road, Ramsey Road and Fermi Drive, in the County of Solano.

PROJECT COMPONENT – A distinct portion of the planning and project development process of a capital project as outlined in California Government Code, section 14529(b).

- **PID (Project Initiation Document)** – The activities required to deliver the project initiation document for PROJECT.
- **PA&ED (Project Approval and Environmental Document)** – The activities required to deliver the project approval and environmental documentation for PROJECT.
- **PS&E (Plans, Specifications, and Estimate)** – The activities required to deliver the plans, specifications, and estimate for PROJECT.
- **R/W (Right of Way) SUPPORT** – The activities required to obtain all property interests for PROJECT.
- **R/W (Right of Way) CAPITAL** – The funds for acquisition of property rights for PROJECT.
- **CONSTRUCTION SUPPORT** – The activities required for the administration, acceptance, and final documentation of the construction contract for PROJECT.
- **CONSTRUCTION CAPITAL** – The funds for the construction contract.

PROJECT COST – See COST.

PROJECT MANAGEMENT PLAN – A group of documents used to guide a project's execution and control throughout that project's lifecycle.

PS&E (Plans, Specifications, and Estimate) – See PROJECT COMPONENT.

QMP (Quality Management Plan) – An integral part of the Project Management Plan that describes IMPLEMENTING AGENCY's quality policy and how it will be used.

R/W (Right of Way) CAPITAL – See PROJECT COMPONENT.

R/W (Right of Way) SUPPORT – See PROJECT COMPONENT.

SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SCOPE SUMMARY – The attachment in which each PARTNER designates its commitment to specific scope activities within each PROJECT COMPONENT as outlined by the *Guide to Capital Project Delivery Workplan Standards* (previously known as WBS Guide) available at <http://www.dot.ca.gov/hq/projmgmt/guidance.htm>.

SHS (State Highway System) – All highways, right of way, and related facilities acquired, laid out, constructed, improved, or maintained as a state highway pursuant to constitutional or legislative authorization.

SPONSOR – Any PARTNER that accepts the responsibility to establish scope of PROJECT and the obligation to secure financial resources to fund PROJECT. SPONSOR is responsible for adjusting the PROJECT scope to match committed funds or securing additional funds to fully fund the PROJECT scope. If a PROJECT has more than one SPONSOR, funding adjustments will be made by percentage (as outlined in Responsibilities). Scope adjustments must be developed through the project development process and must be approved by CALTRANS as the owner/operator of the SHS.

WORK – All scope activities included in this agreement.

CONTACT INFORMATION

The information provided below indicates the primary contact data for each PARTNER to this agreement. PARTNERS will notify each other in writing of any personnel or location changes. Contact information changes do not require an amendment to this agreement.

The primary agreement contact person for CALTRANS is:

Jason Mac, Project Manager
111 Grand Avenue
Oakland, California 94612
Office Phone: (510) 622-8891
Email: jason.mac@dot.ca.gov

The primary agreement contact person for STA is:

Janet Adams, Deputy Executive Director/Director of Projects
One Harbor Center, Suite 130
Suisun City, California 94585
Office Phone: (707) 424-6010
Email: jadams@sta-snci.com

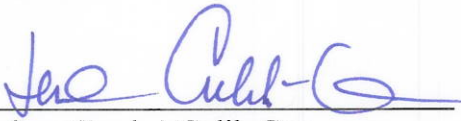
SIGNATURES

PARTNERS declare that:

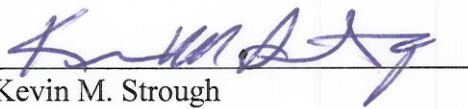
1. Each PARTNER is an authorized legal entity under California state law.
2. Each PARTNER has the authority to enter into this agreement.
3. The people signing this agreement have the authority to do so on behalf of their public agencies.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

APPROVED


By: 
Helena (Lenka) Culik-Caro
Deputy District Director - Design

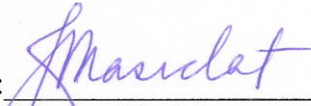
CERTIFIED AS TO FUNDS:

By: 
Kevin M. Strough
District Budget Manager

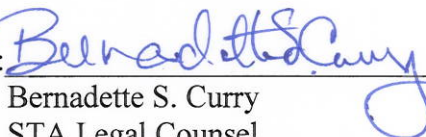
SOLANO TRANSPORTATION AUTHORITY

APPROVED

By: 
Daryl Halls
Executive Director

By: 
Johanna Masiclat
Clerk of the Board

APPROVED AS TO FORM AND PROCEDURE

By: 
Bernadette S. Curry
STA Legal Counsel

SCOPE SUMMARY

WBS Level					Description	CALTRANS	STA	N/A
4	5	6	7	8				
3	185				Prepare Base Maps and Plan Sheets for PS&E Development		X	
4	195				Right of Way Property Management and Excess Land		X	
4	200				Utility Relocation		X	
3	205				Permits, Agreements during PS&E Component	X	X	
		05			Required permits		X	
		15			Railroad Agreements		X	
		25			Agreement for Material Sites		X	
		30			Executed Maintenance Agreement		X	
		45			MOU From Tribal Employment Rights Office (TERO)		X	
		55			NEPA Delegation	X		
4	220				RIGHT OF WAY ENGINEERING		X	
4	225				Obtain Right of Way Interests for Project Right of Way Certification		X	
3	230				Prepare Draft Plans, Specifications, and Estimates	X	X	
		05			Draft Roadway Plans		X	
		10			Draft Highway Planting Plans		X	
		15			Draft Traffic Plans		X	
		20			Transportation Management Plan		X	
		25			Draft Utility Plans		X	
		30			Draft Drainage Plans		X	
		35			Draft Specifications		X	
		40			Draft Plans, Specifications, and Estimates Quantities and Estimates		X	
		55			Structures Draft Plans, Specifications, and Estimates Incorporation		X	
		60			Updated Project Information for Plans, Specifications, and Estimates Package		X	
		90			NEPA Delegation	X		
		99			Other Draft Plans, Specifications, and Estimates Products		X	
3	235				Mitigate Environmental Impacts and Clean Up Hazardous Waste	X	X	
		05			Environmental Mitigation		X	
		10			Detailed Site Investigation for Hazardous Waste		X	
		15			Hazardous Waste Management Plan		X	
		20			Hazardous Waste Plans, Specifications, and Estimates		X	
		25			Hazardous Waste Clean-Up		X	
		30			Hazardous Substances Disclosure Document (HSDD)		X	

		35		Long Term Mitigation Monitoring		X	
		40		Updated Environmental Commitments Record		X	
		45		NEPA Delegation	X		
3	240			Draft Structures Plans, Specifications, and Estimates		X	
4	245			Post Right of Way Certification Work		X	
3	250			FINAL STRUCTURES PS&E PACKAGE		X	
3	255			Circulate, Review, and Prepare Final District Plans, Specifications, and Estimates Package	X	X	
		05		Circulated and Reviewed Draft District Plans, Specifications, and Estimates Package		X	
		10		Updated Plans, Specifications, and Estimates Package		X	
		15		Environmental Re-Evaluation	X		
		20		Final District Plans, Specifications, and Estimates Package		X	
		25		Geotechnical Information Handout		X	
		30		Materials Information Handout		X	
		35		Construction Staking Package and Control		X	
		40		Resident Engineer's Pending File		X	
		45		NEPA Delegation	X		
		50		Secured Lease for Resident Engineer Office Space or Trailer		X	
		55		Contractor Outreach		X	
		65		Right of Way Certification Document		X	
		70		Right of Way Engineering Products		X	
		75		Upgraded/Updated Right of Way Certification Document		X	
3	260			Contract Bid Documents Ready to List	X		
3	265			Awarded and Approved Construction Contract			X

FUNDING SUMMARY

Funding Source	Funding Partner	Fund Type	PS&E	R/W Capital	R/W Support	Subtotal Support	Subtotal Capital	Subtotal Funds Type
LOCAL	STA	Local	\$4,793,000	\$2,500,000	\$150,000	\$4,943,000	\$2,500,000	\$7,443,000
		Subtotals by Component	\$4,793,000	\$2,500,000	\$150,000	\$4,943,000	\$2,500,000	\$7,443,000

**SOLANO TRANSPORTATION AUTHORITY
RESOLUTION No. 2007-10**

**RESOLUTION OF THE SOLANO TRANSPORTATION AUTHORITY
AUTHORIZING THE EXECUTIVE DIRECTOR TO SIGN
AGREEMENTS/DOCUMENTS WITH OR FOR THE
CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) AND THE
FEDERAL HIGHWAY ADMINISTRATION
TO RECEIVE FUNDING AND TO DELIVER TRANSPORTATION PROJECTS**

WHEREAS, the Solano Transportation Authority is eligible to receive Federal and/or State funding for certain transportation projects, through the California Department of Transportation (CALTRANS) and the Federal Highway Administration (FHWA); and

WHEREAS, Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, need to be executed with CALTRANS or FHWA before such funds could be claimed; and

WHEREAS, the Solano Transportation Authority, pursuant to Streets and Highways Code Section 114 is authorized to enter into Cooperative Agreements for implementing the delivery of proposed improvements to State highways within the County of Solano; and

WHEREAS, various Cooperative Agreements need to be executed and Right-of-Way Certifications signed for implementing the delivery of said proposed improvements to State Highways within the County of Solano; and

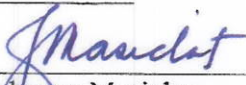
WHEREAS, the Solano Transportation Authority wishes to delegate authorization to execute these agreements/documents and any amendments thereto to the Executive Director or the Acting Executive Director following Project approval by the STA Board whether through project-specific action of the Board or through approval of the STA Budget which Budget includes projects and their funding.

NOW, THEREFORE BE IT RESOLVED that the Executive Director or Acting Executive Director be authorized to execute all Master Agreements, Program Supplemental Agreements, Fund Exchange Agreements, Fund Transfer Agreements, Cooperative Agreements, Right-of-Way Certifications and any amendments thereto with or for CALTRANS or FHWA following approval by the STA Board through either project-specific action of the Board or approval of the STA Budget which Budget includes or references projects and their funding.

I HEREBY CERTIFY that the foregoing resolution was introduced and passed at a regular meeting of the Board of the Solano Transportation Authority, held on the 10th day October, 2007, by the following vote:

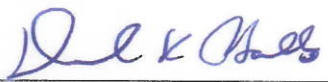
Ayes: 8
No's: 0
Absent: 0
Abstain: 0

Attest by:


Johanna Masiclat
Clerk of the Board


Anthony Intintoli, Chair
Solano Transportation Authority

I, Daryl K. Halls, the Solano Transportation Authority Executive Director, do hereby certify that the above and foregoing resolution was introduced, passed, and adopted by said Authority at a regular meeting thereof held this the day of October 10, 2007.


Daryl K. Halls, Executive Director
Solano Transportation Authority

ATTACHMENT K

Pavement Strategy Checklist

PAVEMENT STRATEGY CHECKLIST

Date: October 2, 2012

Project description and project elements: I-80/I-680/SR12 Interchange: Two ultimate alternatives (approximately \$2.2 billion each) with fundable Phase 1 alternatives of each ultimate alternative (about \$600 million each) will rebuild the connectors between I-80, I-680, SR12 West (Jameson Canyon) and SR12 East in Fairfield. The scope includes widening I-80 between Red Top Road and Abernathy Road to as many as 10 lanes in each direction, widening and realigning I-680 north of Gold Hill Road and widening SR12 East and adding interchanges to make it a freeway west of Suisun City. The work will include a new Cordelia Westbound Inspection Facility (Class B). The project will include the following improvements:

- Widening of I-80: Typically the new elevations for the right edge of travelled way will be similar to, but no lower than the existing right ETWs. The new pavement will typically be placed above the existing pavement. To promote cross drainage, there will also be a varying cross slope, 2% for the left most five lanes, increasing to 2.5% for the next three lanes and 3% for the right most two lanes.
- I-680 on existing alignment will be widened in the median.
- SR12 East will be widened on the outside.
- SR12 West will be reconstructed with a new profile within the project limits.
- Multiple ramps and connectors on new alignments at the freeway to freeway and local road interchanges within the project limits.

The preferred alternative will be constructed by a series of construction projects over a period of at least 10 years, as funding becomes available.

EA: 04-0A5300Project Manager: Nicolas EndrawosCo/Rte: SOL-80/680/12 Interchange

Office: _____

Project Engineer: Michael Lohman Initial MLProgram: HE11Design Senior: Roni Boukhalil

Initial _____

PM Limits:

PM I-80 10.6 – 16.5PM I-680 10.0 – 13.1PM SR12 (west) R1.7 – R2.8PM SR12 (east) L1.8 – R4.8Materials Engineer (8th floor) :TINU MISHRA

Signature

TINU MISHRA

This project is at the following phase (please check one):

☐ PID (PSSR, etc.) ☒ PR ☐ PS&E ☐ OTHER (DPR)

10-3-12

Describe existing structural section (e.g., shoulder, traveled way). Show limits if different sections are within the project:

I-80: There are varying sections both longitudinally and across I-80 within the project limits. The specifics will be determined for each construction package.

The entire project limits were rehabilitated by a SHOPP projects completed in 2009 that added: 0.10 AC (Type A), Pavement Reinforcing Fabric, 0.10 AC (Type A), 0.15 RAC (Type G) and 0.10 OGAC.

Representative underling sections are typically:

0.65 to 0.75 PCC, 0.35 to 0.50 Class A CTB, 0.35 to 0.60 Class 3 AB and 1.0 Class 2 PMB; or 0.65 to 0.75 PCC, 0.35 to 0.50 Class A CTB, 0.75 to 1.00 Class 4 AS; or

0.50 to 0.70 Class A AC, 0.70 to 0.80 Class A CTB, 0.005 Class 4 AS & 1.25 Class 3 PMB; or 0.50 to 0.70 Class A AC, 0.70 to 0.80 Class A CTB and 1.50 LTS

I-680: (Per 1960 Plans): 0.25AC, 0.67Class B RMCTB, 1.08AS & 1.0 Imported Borrow, Type B

SR12 East: (per 1988 plans): 0.06 OGAC, 0.50 AC Type B, 1.0 Class 2 AB, 1.7 Class 2 ASB and 0.20 ATB

What pavement types/structural sections does Materials propose for each segment (shoulders and traveled way)? (Per LCCA Prepared December 2010)

Facility	Resulting Indicated Alternative 1	Note
I-80 East of I-680, Inside Lanes	40 year design - Option 5: Rigid Pavement, 1.05' JPCP, 0.35' LCB, 0.70' AS, 0.65' LTS	40 year required (AADT > 150,000)
I-80 East of I-680, Outside Lanes	40 year design Option 5 Rigid Pavement,: 1.20' JPCP, 0.35' LCB, 0.70' AS, 0.65' LTS	40 year required (AADT > 150,000)
I-80 West of I-680, Inside Lanes	40 year design Rigid Pavement,: 1.00' JPCP, 0.35' LCB, 0.60' AS, 0.65' LTS	40 year rigid (Alternative 3) is warranted to be consistent with the outside lanes, see next item
I-80 West of I-680, Outside Lanes	40 year design Option 5 Rigid Pavement,: 1.15' JPCP, 0.35' LCB, 0.70' AS, 0.65' LTS	
I-680, Inside Lanes	40 year design Rigid Pavement,: 0.95' JPCP, 0.35' LCB, 0.60' AS	40 year rigid (Alternative 3) is warranted to be consistent with the outside lanes, see next item
I-680, Outside Lanes & mixed flow Connectors: NB 680 to EB80 & WB 80 to SB680	40 year design Rigid Pavement: 1.05' JPCP, 0.35' LCB, 0.70' AS	

Facility	Resulting Indicated Alternative 1	Note
SR 12 (West) & WB80 to WB12 & EB12 to EB80 connectors	20 year design Flexible Pavement w/ RHMA-G,: 0.10' OGFC, 0.20' RHMA-G, 0.4' HMA, 0.65' LCB, 1.60' AS	20 year Flexible Pavement with RHMA (Alternative 3) is warranted to be consistent in design with the Jameson Canyon Widening Project (State Route 12 West)
SR12 (East) widening	40 year design Rigid Pavement: 1.05' JPCP, 0.35' LCB, 0.70' AS, 0.65' LTS	
Green Valley Rd WB off and EB on Ramps on I-80, Low Volume connectors with I-680, and other ramps on I-80 east of I-680.	1)40 year Design Rigid Pavement: 0.85' JPCP, 0.35' LCB, 0.60' AS 2) 20 year design Flexible Pavement w/ RHMA-G,: 0.10 OGFC, 0.20' RHMA-G, 0.35' HMA, 0.75' AB, 0.90' AS	1)40 year Design Rigid Pavement (Alternative 2) required (Mainline AADT > 150,000, east of I-680) 2) For Ramps Connecting to State Route 12 West and the Jameson Canyon Project, Flexible Pavement Design (Alternative 1) is warranted to maintain pavement consistency in design.
Local Interchange Ramps on I-80 (west of IC), I-680 & SR12 (West)	20 year Flexible Pavement w RHMA-G: 0.10' OGFC, 0.2' RHMA-G, 0.35' HMA, 0.75' AB, 0.90' AS	

Pavement is involved in:

☒ Entire project OR ☐ Part of the project

Assumptions (Is future widening in Regional Transportation Plan? Yes or no?): Please provide information for all of the following items that apply to this project.

	Yes	No	Question
1.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are you implementing an innovative strategy (e.g., cold foam Hot-Mix Asphalt (HMA)), pre-cast concrete pavement, continuously reinforced pavement, etc)? If so, which are you implementing and why? If not, why not? We plan to use the new standard HMA specifications.

	Yes	No	Question
2.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Has Rapid Rehab strategy been considered (e.g., weekend closures and lane replacements)?</p> <p>Explain: Pavement Rehab is not a project purpose. This project typically replaces or raises the profiles of existing pavement, while adding pavement width. It is expected to take a decade to implement. I-80 within the project limits recently was rehabbed by a SHOPP project (2005), which was coordinated with a 2009 HOV widening; resulting in 20 year life pavement. Those projects specifically deferred using a 40 year life design in anticipation of this project, the 80/680/12 Interchange replacing the pavement section (see the Fact Sheet for EA 0A5311 signed in September 2007).</p>
3.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Are you using Rubberized Hot-Mix Asphalt (RHMA) in this project?</p> <p>If not, justify:</p>
4.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Was Life Cycle Analysis performed?</p> <p>Provide Life Cycle Analysis and results. See the recommendations listed above. They are based on the LCCA, the summary of which is attached.</p>
5.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Does existing pavement have a settlement problem?</p> <p>Explain:</p>
6.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>a) Is this project (or part of project) maintaining the grade profile?</p> <p>b) If not, explain how the profile change affects the pavement strategy choice (cut v. fill): New alignments will be on embankment and in cut (in varying types of materials). I-80 will be raised to maintain elevations while widening to 10 lanes each way.</p>
7.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will there be a new barrier?
8.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Is the proposed structural section on cut or fill or both? Provide limits of both, if applicable.</p> <ul style="list-style-type: none"> • Typical sections will be on fill. • Cuts will be required on SR12 West for both mainline improvements and the ramps for the proposed SR12 West/Red Top Road interchange • Cuts will also be required for the westbound connector from I-80 to westbound SR12 West. • Some shoulder widening for I-80 will require cuts in spots such as the base of Nelson Hill (between Dan Wilson and Suisun Creeks) and near the UPRR underpass. • The new I-80 Red Top Road westbound ramps will be in cut as will the extensions of Red Top Road and Business Center Drive (both local roads).
9.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are highly expansive basement soils present?

	Yes	No	Question
10.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are as-builts (including structural section information regarding edge drains, under drains, lime treatment, permeable blanket, etc.) available?
	<input type="checkbox"/>	<input type="checkbox"/>	If no, did you check map files and online?
			If yes, existing structural section was based on (check one): <input checked="" type="checkbox"/> as-built <input type="checkbox"/> actual boring
11.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Do the project limits have problems with groundwater (e.g., high water table, flow requirements, etc.)? If yes, explain:
12.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Has the availability of pavement materials (i.e., long haul distances from plants) been considered?
			If yes, how does material availability affect pavement type selection?
13.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will the existing pavement be rehabilitated?
	<input type="checkbox"/>	<input type="checkbox"/>	What are the age and condition of the existing adjacent lanes? Explain: Existing outside lane/shoulder were constructed as a part of the I-80 HOV lane project (EA 04-0A5314) in 2008/9. Pavement rehab of remainder of I-80 pavement was performed in 2006 and 2009. I-680 and SR12 East are not showing obvious signs of distress, though formal pavement evaluations should be performed.
14.	<input type="checkbox"/>	<input type="checkbox"/>	What is the type of pavement/structural section (corridor pavement type/structural section continuity) on upstream/downstream roadway? Explain if several: 30mm OGAC, 225 mm AC (Type A), 255 mm Class A CTB and 255 mm Class 4 AS.
15.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is TMP data (lane closure charts) available and was it considered? This is PA/ED effort. TMP will be prepared during PS&E.
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will there be nighttime paving? If so, provide lane closure hours: Lane closure hours will be provided during the PS&E stage.
16.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Was field Maintenance input considered?
17.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Were climate conditions (extreme temperature, rainfall, etc.) considered? If so, which ones do you anticipate affecting the pavement job? None
18.			Which stage construction requirements (matching adjacent sections, temporary paving, etc.) were considered? Project is in PA/ED phase so detailed construction packaging and staging concept has not been developed. With the significant increase in width of I-80, there will be opportunities to build new pavement on the outside, shift traffic over and then build new sections on top of the existing pavement

	Yes	No	Question
19.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is this a large-scale project? Explain all quantity take-off: Quantities are calculated based on area of different pavement sections.
20.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is there Open-Graded Hot-Mix Asphalt (OGHMA) on the existing pavement?
21.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Was environmental impact considered? Explain: A significant environmental review (EIR/EIS) process is underway, comments were received in the fall of 2010 and the Record of Decision is expected in April 2011.
22.			What is the proposed pavement design life? A. I-80 mainline, east of the primary connectors with I-680: 40-year design life. AADT 250,000 in 2035 B. I-80 mainline, west of the primary connectors with I-680: 40-year design life. AADT 145,000 in 2035 C. I-680 new alignment: 40 year design life. AADT 85,000 in 2035 D. SR12 West mainlanes: 20-year design life, AADT 53,000 E. SR12 East widening-outside lanes: 40-year design life, AADT 79,000
23.			What is the final lane line configuration? See the Project Report: 1 lane ramps and connectors up to 10 mainlanes in one direction. Lane configurations will change over time due to phased construction of fundable alternatives.
24.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are there vertical clearance issues? If yes, explain:
25.			What is the traffic index? I-80 west of I-680/SR12: TI = 13.75 I-80 east of I-680/SR12: TI = 14.75 I-680: TI = 12.50 SR 12: TI = 14.00
26.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are there existing retrofit edge drains? Most I-80 and I-680 work will be on new alignments.
27.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will shoulders be used as detours?
28.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is there settlement at bridge approaches? Settlement could occur, particularly with the tall embankments associated with the new alignment of I-680 for Alternative C and C-1 and the connector embankments with either alternative.
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are bridge approach slabs being replaced? Does such replacement include shoulders? Consulted with structures maintenance representative on _____.

	Yes	No	Question
29.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is there a minimum standard (2% or 1.5%) cross-slope? If not standard, provide date of design exception approval:_____
30.			Provide the pavement condition report.
31	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other factors? Explain:

ATTACHMENT L

Oversight Agreement for I-80/I-680/SR12 Interchange

FEDERAL HIGHWAY ADMINISTRATION
Major Project Oversight Agreement for
I-80/I-680/SR-12 Interchange
Fed Project No. / EA: 04-609101
June 30, 2008

On September 4, 2007, a new Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) Stewardship and Oversight (Stewardship/Oversight) Agreement was signed. Under the new Stewardship/Oversight Agreement, the FHWA and Caltrans will utilize a risk-based approach to project-level management that no longer uses the \$1,000,000 threshold on the interstate to determine FHWA stewardship and oversight. This risk-based approach to project oversight will be conducted in two steps: 1) selecting the projects that traditionally pose a risk to the health of the Federal-aid Highway Program (High Profile projects) and 2) within the High Profile projects, further delegating approval authorities in activities that pose a low risk to the individual projects.

A Major Project is defined as having a total project cost of greater than \$500 million. Under the Stewardship/Oversight Agreement, all Major Projects are considered "High Profile" Projects. Each "High Profile" project will have an Oversight Agreement which includes a Project Responsibilities List developed to define which approval actions are to be handled by FHWA or Caltrans/Local Agency. The I-80/I-680/SR-12 Interchange project has been determined to be a Major Project with an estimated total project cost of approximately \$1.5 Billion (2007\$) (NOTE: Costs are currently being updated); therefore, this Oversight Agreement along with a Project Responsibilities List which is attached is being developed. Other areas of Federal involvement and/or approval actions for this project are summarized in this agreement, i.e., attending meetings, design reviews, conducting project inspections, etc. The I-80/I-680/SR-12 Interchange project is in Project Approval/Environmental Document (PA/ED) and will be developed in phases; therefore, this agreement will need to be revisited as each phase is added and moves towards construction.

Furthermore, this agreement covers those projects which may be split under a separate project number but falls in the footprint/purview of the I-80/I-680/SR-12 Interchange project. This includes current and future projects which may evolve from or be separated out of this major project. Currently, there are two such projects: I-80 EB Truck Scales Relocation (EA: 04-0A535) which received Proposition 1B and Bridge Toll funds allowing it to progress faster than the major project, and the I-80 Ramp Metering project (EA: 04-0A532). A separate Financial Plan has been completed and approved by the California Transportation Commission (CTC), Caltrans and STA for these two projects as part of the Proposition 1B Corridor Mobility Improvement Account (CMIA) and the Trade Corridor Improvement Fund (TCIF) programs. The already approved Financial Plans for these two projects will be used as an equivalent Financial Plan that may be required by this agreement and therefore will require a new Financial Plan to be developed.

FHWA Project Personnel and Resources for Oversight:

A FHWA Project Oversight Manager (POM) has been assigned for the oversight of this project. The POM will be responsible for all project actions and approvals, with the guidance of the FHWA Division Office management and the assistance of other FHWA personnel. Division Office specialists will be available to the POM for project reviews and technical assistance in order to provide expeditious reviews and approvals of project actions. Oversight will be conducted through project inspections, review of project data and various other means. The United States Department of Transportation (US DOT) Office of Inspector General may also perform audits of project costs and other financial data as required.

Reporting Requirements:

The FHWA POM will be responsible for providing periodic updates of the costs and schedules of the project to FHWA Headquarters and the US DOT – Office of the Secretary. Briefings will also be provided to assist various agencies with tracking information. The I-80/I-680/SR-12 Interchange Project Management team will provide the POM with quarterly updates at a minimum (using all available information) with respect to project scope, cost, and scheduling to assist with this task. Along with the quarterly updates, the FHWA POM will attend regular meetings to discuss the project's progress including any unforeseen circumstances.

PROJECT DESCRIPTION

This project consists of improvements to freeway-to-freeway connections between I-80 and I-680, I-80 and SR-12 West, and I-80 and SR-12 East in Fairfield, Solano County. The project also includes improvements to several interchanges providing access to local roadways and land use and truck scale facilities along I-80. The total project cost is estimated to be \$1.5 Billion (2007\$) (NOTE: Costs are currently being updated).

PROJECT-SPECIFIC REQUIREMENTS

Oversight activities specific to this project are detailed in Attachment A. Items not addressed by the Project Responsibilities List that pertain to this project are discussed below.

Since this project has not yet completed PA/ED, the approval actions to be taken by FHWA, as indicated in Attachment A under Right-of-Way and Construction, may be delegated to Caltrans when the project has advanced enough to more accurately determine low-risk activities in later phases. Should a decision be made after NEPA but prior to construction that significantly changes the project's risks, i.e., a change to design-sequencing or design-build, another evaluation of FHWA approvals and involvement may be necessary.

Planning:

FHWA has ensured that a portion of Phase I (\$491-523M) of the I-80/I-680/SR12 Project is included in a conforming Transportation Improvement Plan. The plan will be adjusted to accommodate the Phase I project estimate as more information becomes available. As subsequent project phases come online, the FHWA will ensure that they are included in the Transportation Improvement Plan.

Environment:

Caltrans has assumed responsibility for the NEPA process under Section 6004 and 6005 Memorandum of Understandings. The FHWA will reassume responsibility should any of the applicable agreements be terminated or expire.

Design:

The FHWA will provide a "Determination of Engineering and Operations Acceptability" for this project after reviewing a completed Concept Acceptance Report which provides all necessary documentation for FHWA's decision. For the New/Modified Interstate Access Control Change – Final Approval, Caltrans must provide FHWA with proof of NEPA completion. Other areas of design where FHWA approval actions are needed may be found in Attachment A.

Right of Way:

Since this project has not yet completed the NEPA phase, the approval actions to be taken by FHWA, as indicated in Attachment A under Right-of-Way and Construction, may be delegated to Caltrans when the project has advanced enough to more accurately determine low-risk activities in later phases.

Construction:

Due to the magnitude of the I-80/I-680/SR 12 Interchange project, it will be delivered in phases and each phase will consist of one or more construction packages. Currently, Construction Package 1 of Phase 1 of this project is estimated to begin construction in 2012. The level of construction oversight will vary depending upon the complexity of the construction activities. The FHWA POM is responsible for FHWA construction oversight. This oversight may include routine inspections throughout the life of the project. If FHWA approval for Major Contract change orders is retained, it will be implemented per the Caltrans Construction Manual Procedure 5-308B (1) Federal Highway Administration Involvement Requirements – Major Contract Change Orders. However, since this project has not yet completed the NEPA phase, the approval actions to be taken by FHWA, as indicated in Attachment A under Right-of-Way and Construction, may be delegated to Caltrans when the project has advanced enough to more accurately determine low-risk activities in later phases.

Finance Plan

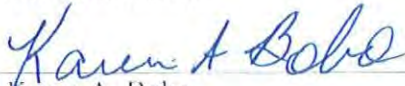
The initial Finance Plan will cover Phase 1 and will be submitted to FHWA as early as possible but no later than ninety days prior to authorization of funds for construction. Updates to the initial plan will be provided to the FHWA Division Office and the FHWA Major Projects Team by the annual submission date established in the Initial Finance Plan for each subsequent year until all construction is completed.

A Cost Estimate Verification Review will be conducted by a multi-agency, multi-functional team that will consist of FHWA, Caltrans, Solano County Transportation, and consultant personnel. The team will review all aspect of the cost estimate for accuracy and reasonableness and identify major cost items and estimate issues. At a minimum this would include structures, roadway elements, right-of-way, utilities, environmental mitigation, preliminary engineering, construction engineering, contract administration, contingencies, and inflation rates. The initial cost estimate review, along with the initial finance plan, will serve as a baseline in which any future project cost changes will be

measured against. The cost estimate verification review should be conducted prior to completion of the NEPA process and before construction.

Project Management Plan

A draft Project Management Plan (PMP) will be submitted to FHWA prior to finalization of the NEPA decision document. The final PMP will be due 90 days after completion of NEPA. The final PMP will be approved by the FHWA California Division, in concurrence with the FHWA Headquarters Major Projects Team. Updates to the PMP will be completed and submitted if significant changes occur to the project scope, cost, and/or schedule.



Karen A. Bobo
Sr. Transportation Engineer,
Team Leader (North)
FHWA – CA Division



Nicolas Endrawos
Regional Project Manager
Caltrans



Janet Adams
Director of Projects
Solano Transportation Authority

ATTACHMENT A

Overview

The Project Responsibility List identifies the responsible agency for project level actions. It is organized by columns listed as High Profile and Delegated Projects. Within each column, activities are listed and the appropriate Approval Authority (FHWA or Caltrans) is identified. The FHWA will maintain approval authority for activities that cannot be delegated and activities that may pose a risk to individual projects. The activities with highlighted () cells under the High Profile projects column, which show FHWA, may be delegated to Caltrans if the particular activity is of low risk to the project or the FAHP. The activities which have been agreed upon with this version of the agreement are bold.

APPROVAL ACTION	APPROVAL AUTHORITY
	High Profile Projects
ADMINISTRATION	
Financial Management	
All Vouchers (progress payments and final)	FHWA
Federal-aid Project Agreement and Modification—Preliminary Engineering through Construction [23 CFR 630.110]	FHWA
Funding Eligibility Determinations	FHWA
Obligate funds	FHWA
Section 1.9 Waiver [23 CFR Section 1.9]	FHWA
PROJECT DEVELOPMENT	
ROW	
Accept ROW certificate 3 as a condition of PS&E approval [23 CFR 635.309(c)(3)]	FHWA
Accept ROW certificates 1 and 2 as a condition of PS&E approval [23 CFR 635.309(c)(1)&(2)]	FHWA
Air space agreements / Non-highway use and occupancy not on the Interstate [23 CFR 710.405]	FHWA
Air space agreements / Non-highway use and occupancy on the Interstate [23 CFR 710.405]	FHWA
Control of Access [23 CFR 620.203(h)]	FHWA
Functional Replacement [23 CFR 710.509]	FHWA
Junkyard Control [23 CFR 751.25]	FHWA
Outdoor Advertising Sign Removal Projects [23 CFR 750.307]	FHWA
Protective Buying and Hardship Acquisition [23 CFR 710.307, 503]	FHWA
Public Interest Finding (PIF) - Disposal of federally funded ROW [23 CFR 710.403, 409]	FHWA
Railroad Agreement [23 CFR 646.216 (3)(d)]	FHWA
Relinquishment of a Highway Facility for continued highway purposes [23 CFR 620.201, 202, 203]	FHWA
Request for Credits for Early Acquisition of ROW [23 CFR 710.501]	FHWA

APPROVAL ACTION	APPROVAL AUTHORITY
	High Profile Projects
Request for Direct Federal Acquisition [23 CFR 710.603]	FHWA
Request for Federal Land Transfer [23 CFR 710.601]	FHWA
Request for Waivers [49 CFR 24.204(b)]	FHWA
Utility Agreement [23 CFR 645.113, 119]	Caltrans
Utility Relocation [23 CFR 645 subparts A and B]	FHWA
Withholding of Payments [23 CFR 710.203(c), 23 CFR 1.36]	FHWA
Environment	
Categorical Exclusion (CE) [23 CFR 771.117 (c) and (d); SAFETEA-LU 6004; 23 CFR 771.117 all other CEs: SAFETEA-LU 6005]	Caltrans (1)
Certification of Public Hearing [23 CFR 771.111(h)(2)(vi)]	Caltrans
Draft Environmental Impact Statement (DEIS) [23 CFR 771.123; 23 CFR 771.123 (e); SAFETEA-LU 6005]	Caltrans (1)
Environmental Assessment (EA) Availability to the Public [23 CFR 771.1199(c); SAFETEA-LU 6005]	Caltrans (1)
Final Environmental Impact Statement (FEIS) [23 CFR 771.125; 23 CFR 771.125(c); SAFETEA-LU 6005]	Caltrans (1)
FEIS Legal Sufficiency [23 CFR 771.125(b); SAFETEA-LU 6005]	Caltrans (1)
Finding of No Significant Impact [23 CFR 771.121; SAFETEA-LU 6005]	Caltrans (1)
Noise Abatement [23 CFR 772]	Caltrans
Project-Level Transportation Conformity for CE processed under SAFETEA-LU 6004 MOU [40 CFR 93]	Caltrans (1)
Project-Level Transportation Conformity for CE, EA and Environmental Impact Statement (EIS) processed under SAFETEA-LU 6005 MOU [40 CFR 93]	FHWA
Record of Decision [23 CFR 771.127; SAFETEA-LU 6005]	Caltrans (1)
Re-evaluation on Approved Environmental Documents [23 CFR 771.129; SAFETEA-LU 6004 & 6005]	Caltrans (1)
Section 4(f) <i>De Minimis</i> Determination [SAFETEA-LU 6004, 6005 & 6009, 49 USC 303]	Caltrans (1)
Section 4(f) Individual [23 CFR 771.135; SAFETEA-LU 6004 & 6005]	Caltrans (1)
Section 4(f) Programmatic [23 CFR 771.135; SAFETEA-LU 6004 & 6005]	Caltrans (1)
Supplemental EIS [23 CFR 771.130; SAFETEA-LU 6005]	Caltrans (1)
Preliminary Design	
Consultant Selection [23 CFR 172.5]	FHWA
Financial Plans for projects from \$100M to \$499M [SAFETEA-LU 1904]	Caltrans
Major ITS Project Development [23 CFR 940.11]	FHWA
Major Projects and TIFIA Loan Projects - Project Management Plan and Financial Plan Approval [SAFETEA-LU 1904]	FHWA
Minor ITS Project Development [23 CFR 940.11]	Caltrans

APPROVAL ACTION	APPROVAL AUTHORITY
	High Profile Projects
New/Modified Interstate Access Determination of Engineering and Operations Acceptability [Feb 1998 Federal Register, Vol#28 - (minor access changes delegated to Caltrans, see letter dated September 15, 1994)]	FHWA (Caltrans)
PIF – Airspace Clearance FAA [CFR 620.104]	FHWA
PIF - Use of Negotiated Consultant Contracts [23 CFR 172.5(3)]	Caltrans
Detailed Design	
Approve preliminary plans for major and unusual structures	FHWA
Design Exceptions, non-Interstate (all other projects) [23 CFR 625.3]	Caltrans
Design Exceptions on the Interstate (13 controlling Criteria) [23 CFR 625.3]	FHWA
Experimental Features (Pilot and Demo) aka CEWP, design/sequencing	FHWA
New/Modified Interstate Access Control Change - Final Approval [Feb 1998 Federal Register, Vol#28]	FHWA
PIF – Statewide and project specific use of proprietary products and processes [23 CFR 635.411]. If statewide, FHWA approval.	Caltrans
PIF and Cost Justification Letter - Statewide and Project Specific - Concur in use of publicly furnished materials and expenses [23 CFR 635.407]. If statewide, FHWA approval.	Caltrans
ROW encroachments - Use and occupancy of acquired ROW [23 CFR 710.401, HDM 504.8]	FHWA
Value Engineering [23 CFR 627, SAFETEA-LU 1904]	Caltrans
PS&E and Advertising	
Authorize advertising for bids [23 CFR 635.112]	FHWA
Authorize utility or railroad force account work [23 CFR 645.113 & 646.216]	FHWA
Bid Analysis (Engineer Estimates)	FHWA
Consultant Agreements [23 CFR 172.7 - 172.9]	Caltrans
Exempt bridge from Coast Guard permit requirements [23 CFR 650.805]	FHWA
Hiring of consultant to serve in a "management" role [23 CFR 172.9(d)]	Caltrans
Noise - Reasonable and Feasible Determination for PS&E approval [23 CFR 772.11(g)]	Caltrans (1)
PIF - Advertising period less than three weeks [23 CFR 635.112]	Caltrans
PIF - Use of contracting method other than competitive bidding [23 CFR 635.104 & 204]	Caltrans
PIF - Use of Force Account [23 CFR 635.204, 205]	Caltrans
PIF - Use of Mandatory Borrow/Disposal Sites [23 CFR 635.407]	Caltrans
PIF - Use of Publicly Owned Equipment [23 CFR 635.106]	Caltrans
PS&E [23 CFR 630.205, 23 USC 106]	FHWA
Supplemental Work Item Justification	FHWA

APPROVAL ACTION	APPROVAL AUTHORITY
	High Profile Projects
Utility and railroad agreements [23 CFR 645.113 & 646.216]	FHWA
Warranties [23 CFR 635.413]	FHWA
Construction	
Accept Materials Certification [23 CFR 637.207]	FHWA
Addenda during advertising period [23 CFR 635.112(c)]	FHWA
Buy America Waiver [23 CFR 635.410, ISTE A Sec. 1041(a) & 1048(a), 41 CFR 101 (a-d)] Submit to HQ if >\$50K.	FHWA
Concur in award of contract [23 CFR 635.114]	FHWA
Concur in rejection of all bids [23 CFR 635.114]	FHWA
Concur in settlement of contract claims [23 CFR 635.124; C&M Manual, Chapter 2]	FHWA
Concur in termination of contracts [23 CFR 635.125]	FHWA
Construction engineering by local agency [23 CFR 635.105]	FHWA
Contract time extensions [23 CFR 635.120 & 121]	FHWA
Final inspection/acceptance of completed work [23 USC 114(a)]	FHWA
Incentive/Disincentive Amount Justification [23 CFR 635.127]	FHWA
Innovative Contracting Requirements [SEP 14 & 15]	FHWA
Liquidated Damages (rates subject to FHWA approval) [23 CFR 635.127]	FHWA
Major changes and extra work [23 CFR 635.120]	FHWA
Minor changes and extra work [23 CFR 635.120]	FHWA
Subcontracting Requirements [23 CFR 635.116(b)]	FHWA
Research	
Experimental Features [FAPG Ch. 6, Sect G 6042.4]	FHWA
Emergency Relief	
ER Damage Assessments and Reports on the SHS [23 CFR 668, 23 USC 120 and 125]	N/A
ER Damage Assessments and Reports off the SHS [23 CFR 668; 23 USC 120 and 125; ER Q&A, Question #5 Revised DAF and #8 Coordination with Other Agencies]	N/A
(1) Caltrans has assumed responsibility for these items under the Section 6004 and 6005 MOUs. The FHWA will reassume responsibility should any of the applicable agreements be terminated or expire. Additionally, the FHWA remains responsible for several projects that have been excluded from the assumption of NEPA responsibilities by Caltrans.	

ATTACHMENT M

FHWA Approval of
Supplemental Fact Sheets and
Final Engineering Operational Acceptability



U.S. Department
of Transportation
**Federal Highway
Administration**

California Division

October 25, 2012

650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
(916) 498-5001
(916) 498-5008 (fax)

In Reply Refer To:

HDA-CA

04-SOL-80/680/12 Interchange

PM 10.8-17.0/10.0-13.1/

SR 12 (West) R1.7-R2.8/

SR 12 (East) L1.8-R4.8

EA 04-0A5300

Mr. Bijan Sartipi
Director, District 4
California Department of Transportation
P.O. Box 23660
Oakland, CA 94623-0660

Attention: Ms. Helena (Lenka) Culik-Caro, Deputy District Director, Design

Dear Mr. Sartipi:

This letter is in response to the California Department of Transportation (Caltrans)'s letter dated September 18, 2012, received by our office on September 25, 2012. The letter requested the Federal Highway Administration (FHWA) approval of a Supplemental Exception to Mandatory Design Standards Fact Sheet (Supplemental Fact Sheet) for the proposed modification of access at the Interstate (I)-80/I-680/SR 12 Interchange project, in the vicinity of the City of Fairfield, Solano County. FHWA approved the project's Fact Sheet on March 17, 2011. The letter also requested for FHWA's confirmation that final approval of the interchange modification be issued after the FEIS/FEIR has been approved.

The Supplemental Fact Sheet describes and requests the following exceptions to the mandatory design standards:

1. A proposed superelevation of the westbound on-ramp from Old Red Top Road, at Red Top Road/I-80 Interchange, is 8% which is less than 12% required by Caltrans Highway Design Manual (HDM).
2. A proposed weaving distance along westbound I-80 between Suisun Valley Road on-ramp and the Green Valley Road exit ramp is approximately 1290 feet which is less than 2000 feet required by the HDM.
3. A proposed weaving distance along eastbound I-80 between Red Top Road on-ramp and I-680 South exit ramp is approximately 750 feet which is less than 5000 feet between freeway to freeway interchanges and other interchanges required by the HDM.

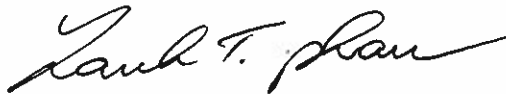
Based on the supporting information and justification provided in the Supplemental Fact Sheet, your request for the above noted exception to the mandatory design standard is approved.

FHWA issued the project's Engineering and Operational Acceptability (EOA) on September 20, 2011. The approved EOA was for a locally preferred alternative, Alternative C – Phase 1. This alternative would include a direct connection between SR 12 west and I-680, an I-80/I-680 Interchange with all movements, a new interchange at Red Top Road/I-680 Interchange, and modification to the existing Red Top Road/I-80 Interchange. The proposed project also includes modifications to local access interchanges of I-80 at Red Top Road, I-80 at Green Valley Road, and I-680 at Red Top Road. The EOA approval also states: "If the build alternative is ultimately selected in the environmental process, and there are no major changes in the proposed design, final "approval" may be given upon completion of the environmental process by Caltrans. At that time, FHWA shall issue a formal letter of approval on the selected option." Based upon our review of the unsigned Project report, which was provided on October, 10, 2012, there has been no "major changes" identified.

Regarding Caltrans request for the FHWA's final approval of access modification after the FEIS/EIR approval but prior to the Record of Decision (ROD), FHWA's policy requires that the final FHWA approval of requests for new or revised access cannot precede the completion of the NEPA process and the approved ROD is the completion of the NEPA process. Therefore, we would like to defer our final approval until the ROD is executed.

If you have any questions, please contact Lanh Phan, Senior Transportation Engineer, at (916) 498-5046 or email at lanh.phan@dot.gov

Sincerely,

A handwritten signature in black ink, appearing to read "Lanh T. Phan". The signature is fluid and cursive, with the first name "Lanh" being the most prominent.

For
Vincent P. Mammano
Division Administrator

Mr. Bijan Sartipi, Director
October 25, 2012

3

Cc: (by email)

Helena Lenka Culik-Caro [helena_lenka_culik-caro@dot.ca.gov], Caltrans
Roni F Boukhalil, Caltrans
Nicolas Endrawos, Caltrans
Naga Adibhatla, Caltrans
Lanh Phan, FHWA
Jeff Holm, FHWA
Steve Pyburn, FHWA

LPHAN/mb

ATTACHMENT N

FHWA Approval of Design Exception Fact Sheets



U.S. Department
of Transportation
**Federal Highway
Administration**

California Division

March 17, 2011

650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
(916) 498-5001

In Reply Refer To:
HDA-CA

File #: 04-SOL-80/680/12 Interchange
PM I-80 10.8-17.0
PM I-680 10.0-13.1
PM SR12 (West) R1.7-R2.8
PM SR12 (East) L1.8-R4.8
EA #: 04-0A5300

Mr. Bijan Sartipi, District Director
California Department of Transportation
District 4
P. O. Box 23660
Oakland, CA 94623-0660

Attention: Ms. Helena Culik-Caro, Deputy District Director, Design

Dear: Mr. Sartipi,

SUBJECT: DESIGN EXCEPTION FOR I-80/I-680/SR-12 INTERCHANGE PROJECT

We have reviewed the Exception to Mandatory Design Standards Fact Sheet (Fact Sheet) for the I-80/I-680/SR-12 Interchange Project submitted on March 02, 2011. The project proposes to construct a new interchange, reconstruct or modify interchanges, and widen I-80, I-680 & State Route (SR) 12 main lines. The Fact Sheet describes and requests the following exceptions to the mandatory design standards:

1. Design Exception Feature # 1 - Stopping Sight Distance (SSD) is less than standard SSD required by the Caltrans Highway Design Manual (HDM) for the locations identified on Page 3 of 20 of the Fact Sheet.
2. Design Exception Feature # 2 - Superelevation rate is less than standard required by the HDM for a westbound I-80 on ramp at Suisun Valley Road as it conforms to existing roadway at Neitzel Road.
3. Design Exception Feature # 3 - Traveled way width is less than standard required by the HDM for the locations identified on Page 6 of the Fact Sheet. This design exception is under Alternative C, Phase 1.
4. Design Exception Feature # 4 - Cross slopes is greater than standard required by the HDM for the locations identified on Page 7 of the Fact Sheet.

5. Design Exception Feature # 5 – median width is less than standard required by the HDM located on State Route 12 (W) within the project limits.
6. Design Exception Feature # 6 – interchange spacing is less than standard required by the HDM for the locations identified on Page 8 & 9 of the Fact Sheet. This design exception is under Alternative C, Phase 1.

Based on the supporting information and justification provided in the Fact Sheet, your request for the above noted exception to the mandatory design standard is approved.

If you have any questions regarding these comments, please call Lanh Phan, North Team Leader, at (916) 498-5046 or via e-mail at lanh.phan@dot.gov.

Sincerely,



For
Walter C. Waidelich, Jr.
Division Administrator



Mr. Bijan Sartipi, District Director
March 17, 2011

3

Cc: (via e-mail)
Roni Boukhalil, Caltrans
Nicolas Endrawos, Caltrans
Tim Crothers, FHWA
Jeff Holm, FHWA
Lanh Phan, FHWA

LPhan/Mb